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November 3, 2017

Mr. Brent J. Fields
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: *Supplemental Comments on Investment Company Liquidity Risk Management Programs; Request for Delay (File No. S7-16-15)*

Dear Mr. Fields:

The Investment Company Institute[1] is writing to request that the Securities and Exchange Commission delay the compliance date of, and ease compliance with, the liquidity risk management program rule and its related reporting requirements. This letter supplements our prior letter to SEC Chairman Clayton[2] and provides additional support for our request. In particular, we request that the SEC adjust the compliance schedule for the liquidity rule's asset classification and related requirements as soon as possible, for the amount of time the SEC needs to ease compliance with the rule's bucketing

[1] The Investment Company Institute (ICI) is the leading association representing regulated funds globally, including mutual funds, exchange-traded funds (ETFs), closed-end funds, and unit investment trusts (UITs) in the United States, and similar funds offered to investors in jurisdictions worldwide. ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. ICI's members manage total assets of US$20.9 trillion in the United States, serving more than 100 million US shareholders, and US$6.6 trillion in assets in other jurisdictions. ICI carries out its international work through ICI Global, with offices in London, Hong Kong, and Washington, DC.

[2] This letter is attached as Appendix A. Letter from Paul Schott Stevens, President and CEO, Investment Company Institute, to The Honorable Jay Clayton, Chairman, Securities and Exchange Commission, dated July 20, 2017 ("2017 ICI Letter"), available at www.ici.org/pdf/liquidity_sec_clayton_ltr.pdf.

requirements, including through targeted rule amendments.[3] At a minimum, the SEC should delay these requirements by at least one year, even if the SEC determines not to amend the rule.[4]

The requested compliance adjustments are justified and reasonable and well within the SEC's discretion given (i) the lack of a statutory deadline for implementation of any aspect or component of the liquidity rule or any of its related reporting requirements; (ii) the limited nature of the requested compliance adjustments and absence of any risk of harm to the public from those adjustments; (iii) the impracticability of complying with the bucketing and related reporting requirements by December 1, 2018 (the relevant compliance date for most funds); and (iv) the public interest in reexamining the requirements in light of their associated compliance burdens and limited utility.

I. Evidence Supporting One-Year Delay

The final liquidity rule is complex, and has no real antecedent in industry practice or regulation, either in the US or globally. The rule's asset classification, or "bucketing," requirements have proven to be—by far—the most costly and vexing piece of the rule to implement, for the following reasons.

- The rule would require funds to consider a number of complex and interrelated fund-, market-, trading-, and investment-specific factors and make judgment calls.

- The rule would require funds to generate uniform output from these inputs, for reporting purposes.

[3] For example, we continue to support the SEC amending Form N-PORT to eliminate public reporting, a topic we have discussed at length in our prior submissions. *See, e.g.*, 2017 ICI Letter at 3; Letter from David W. Blass, General Counsel, Investment Company Institute, to Brent J. Fields, Secretary, Securities and Exchange Commission, dated May 17, 2016, at 6-7, available at www.sec.gov/comments/s7-16-15/s71615-141.pdf; and Letter from David W. Blass, General Counsel, Investment Company Institute, to Brent J. Fields, Secretary, Securities and Exchange Commission, dated January 13, 2016, at 26-29, available at www.sec.gov/comments/s7-16-15/s71615-54.pdf. We also recognize that the SEC staff's FAQ process may be another productive means of making certain of the rule's bucketing and reporting requirements less burdensome. If this avenue for relief is chosen with respect to certain aspects of the bucketing requirements, the fund industry still would need additional time to implement the rule.

[4] Our recommendations are consistent with those in the Treasury Department's recent report entitled *A Financial System That Creates Economic Opportunities: Asset Management and Insurance*, available at www.treasury.gov/press-center/press-releases/Documents/A-Financial-System-That-Creates-Economic-Opportunities-Asset_Management-Insurance.pdf. With respect to the liquidity rule, the report states, "Treasury supports robust liquidity risk management programs and believes they are imperative to effective fund management and the health of the financial markets. For this reason, Treasury supports the 15 percent limitation on illiquid assets. However, Treasury rejects any highly prescriptive regulatory approach to liquidity risk management, such as the bucketing requirement. Instead, Treasury supports the SEC adopting a principles-based approach to liquidity risk management rulemaking and any associated bucketing requirements. Consistent with these recommendations, the SEC should take appropriate action to postpone the currently scheduled December 2018 implementation of Rule 22e-4's bucketing requirement."

- Bucketing systems capable of doing these things are far from complete.

- Systems likely will require several more months before they are mature enough for meaningful evaluation, testing, and all other necessary product- and firm-specific due diligence (which itself is a time-consuming process).

- Fully integrating a multi-disciplinary rule of this nature (which affects and likely will require engagement of the portfolio management, risk, trading, compliance, legal, information technology, and operations functions) is an often overlooked, but vital, aspect to implementation.

We have had extensive engagement with members on rule implementation, which has clearly demonstrated that a compliance delay is appropriate, for the reasons set forth below.

First, in late September we surveyed members to learn more about (i) their ability to comply with the rule by the current compliance dates, and (ii) the one-time and ongoing costs they expect to incur to comply with the rule's bucketing and reporting requirements. The results from that survey provide a strong foundation for the Commission to determine that a delay is necessary and appropriate.[5] According to the survey:

- The large majority of respondents (91 percent) are considering working with vendors, and most will seek help with bucketing in particular.

- The majority of respondents cited multiple areas in which vendors need to do additional work, including addressing gaps in asset coverage (90 percent); improving the quality of underlying methodologies (75 percent); improving the depth, breadth, and quality of data (72 percent); and improving the user interface/delivery of data (55 percent).

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[5] Survey results (together with a summary of the reasons for delay) are attached as Appendix B. Simply walking through these survey results and Appendix B materials clearly demonstrates the need for and appropriateness of this delay. Beyond the survey results, additional factors suggesting that even more time would be necessary and appropriate include: the unforeseeable challenges that will no doubt emerge in the coming months, given that hundreds of fund complexes will be performing due diligence on, and attempting to onboard, the same handful of vendors, at exactly the same time; the fund industry's experience with onboarding vendors generally (see Appendix E); and the additional complications that sub-advised funds face in implementing the rule.

- The large majority of respondents (73 percent) do not believe vendors' offerings will be sufficiently mature to make an informed selection until 2018, with a substantial number believing this will occur in the second quarter of 2018 or beyond (37 percent).[6]

Gaps in vendors' asset coverage is a significant concern for fund complexes in selecting vendors. Collectively, the fund industry invests in millions of different investments, with some fund complexes investing in tens of thousands. If a vendor does not provide full asset coverage for a fund complex, that fund complex either must hire multiple vendors to ensure coverage, or assume complete responsibility for uncovered, "hard to bucket" investments (under the rule each investment—no matter how small—must be bucketed). For instance, we understand that some vendors do not presently cover certain derivatives.[7] This poses a major challenge for funds because the rule's adopting release states that "bespoke complex derivatives or complex structured securities [ ] have such a range of liquidity characteristics that each position would need to be classified individually."[8] Thus, funds may not be able to avail themselves of the so-called "asset class" classification method for those investments where the practical need may be greatest.

These delays are predictable, given the unique nature of the rule and its requirements. Moreover, the rule adopted in October 2016 (and its accompanying adopting release) was materially different from that proposed in 2015, making it hard for even the most creative and resourceful of vendors to get much of a "head start."[9] Both vendors and the fund industry are doing the best they can under an overly ambitious compliance timeline. Therefore, our survey's findings should not be interpreted as criticisms of vendors' ultimate ability to assist the industry, or their commitment to doing so.

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[6] We recognize that, to some extent, "readiness" is in the eye of the beholder, and that vendors and the fund industry may have different assessments of whether and when vendors are or will be "ready." Appendix D contains questions the Commission and staff may wish to consider exploring with vendors, as you evaluate vendor readiness.

[7] Other investment types that we understand are currently uncovered by one or more vendors include asset-backed securities, mortgage-backed securities, preferred securities, bank loans, and to-be-announced (TBA) securities.

[8] *Investment Company Liquidity Risk Management Programs*, SEC Release No. IC–32315, 81 Fed. Reg. 82142 (Nov. 18, 2016), at 82180, available at www.gpo.gov/fdsys/pkg/FR-2016-11-18/pdf/2016-25348.pdf. The inclusion of asset class classification in the final rule was a welcome addition, but Commission statements like this point to limitations on its practical application.

[9] See *Open-End Fund Liquidity Risk Management Programs; Swing Pricing; Re-Opening of Comment Period for Investment Company Reporting Modernization Release,* SEC Release No. IC-31835, 80 Fed. Reg. 62274 (Oct. 15, 2015), available at www.gpo.gov/fdsys/pkg/FR-2015-10-15/pdf/2015-24507.pdf. Unlike the final rule, the proposed rule included six buckets; did not permit asset class classification; included nine prescribed bucketing factors; contained a different price impact standard; and would have required a fund to assume liquidation of its entire portfolio, splitting individual investments across buckets if necessary. We generally regard these changes in the final rule as positive, but they did require vendors to change course.

The survey also powerfully demonstrates that "vendor readiness" and "fund readiness" are not one and the same. Rather, they are sequential—the former must precede the latter. And as explained below, vendor readiness is but one factor for the Commission to consider in its deliberations regarding delay.

From the point at which vendors' offerings are sufficiently mature for fund complexes to make informed hiring decisions, it will take several months for fund complexes to select a vendor (most respondents (68 percent) believe this will take between 2 and 6 months), and several more months to fully "onboard" their vendors (most respondents (80 percent) believe this will take between 3 and 9 months).[10] And even when a fund complex fully has "onboarded" its vendor(s), its work still will not be complete. Bucketing is integral to the rule's architecture. As the survey makes clear, fund complexes will not be in position to complete other critical implementation work (*e.g.*, initial liquidity risk assessments for all funds, determining whether a fund qualifies as a "primarily highly liquid fund," and determining an appropriate highly liquid investment minimum for applicable funds) until they have established, tested, and obtained a high degree of confidence in their bucketing methodologies. This bucketing-contingent work also will take several months.

Finally, only when all of the above is complete will fund complexes be in position to present substantially complete liquidity risk management programs to their boards for approval. Proper board engagement, education, and oversight are key components of the implementation process. Many fund boards likely will receive presentations about implementation plans over multiple board meetings,[11] with final approval occurring after the program is substantially complete. Consequently, the board approval process could add some months to the overall implementation process.

The consequence is that regardless of whether the SEC and its staff opt to facilitate compliance through rule amendments or FAQs, a delay of at least one year would be appropriate.

II. Evidence in Support of Delay to Enhance the Utility of Classification Information

We believe the classification information that the SEC will receive will be of limited utility and yet generating it will be extremely costly.[12] As noted above, our September member survey contains

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[10] Appendix E contains a detailed discussion of registered funds' process for selecting, onboarding, and overseeing vendors generally.

[11] In April 2017, ICI surveyed its members to better understand their progress in implementing the liquidity rule. Fifty ICI member firms responded, representing 78 percent of US registered open-end fund assets as of March 31, 2017. This survey indicated that 83 percent of respondents with a view anticipated at least two board meetings that would include specific and substantive discussions and/or materials about liquidity programs, with 31 percent anticipating four or more meetings.

[12] Our conceptual concerns with the rule's bucketing and reporting requirements, as outlined in our prior letters, remain. Despite that, we are writing this letter based on the assumption that the SEC's current view is to retain the rule's classification requirements. Therefore, our letter focuses on the need for delay and facilitating compliance with the classification and reporting requirements.

information about anticipated one-time and ongoing costs associated with these requirements. Most respondents (74 percent) anticipate the rule's bucketing and related reporting requirements will account for more than half of overall initial compliance costs, and 35 percent of respondents expect to spend more than $1 million initially to comply with the rule's bucketing and related reporting requirements. Thereafter, most respondents (60 percent) anticipate the rule's bucketing and related reporting requirements will account for more than half of overall ongoing compliance costs, and 56 percent of respondents expect to spend more than $500,000 annually to comply with the rule's bucketing and related reporting requirements. In addition, 66 percent of respondents expect to add staff to implement and administer their liquidity programs.

Since submitting the 2017 ICI Letter, we have evaluated sample output from vendors' current offerings. As part of the September in-person meeting of our Member Working Group, we invited five vendors (as chosen by members) to present about the status of their products and solutions. In advance of the meeting, we provided each vendor with three sample portfolios (a municipal bond portfolio, a high yield bond portfolio, and a small cap equity portfolio) and asked that they "bucket" them (*i.e.*, identify aggregate percentages of portfolio investments in each of the four buckets) as part of their presentations. We asked each vendor to bucket each portfolio using varying portfolio sizes (*i.e.*, $100 million, $1 billion, and $10 billion) and "reasonably anticipated trading size," or position size (*i.e.*, 1, 2, 5, and 10 percent for each holding) assumptions. Other key assumptions (*e.g.*, price impact) were left to vendors' discretion.[13]

The results of the analysis demonstrated:

- *Uniformity of results for small (i.e., $100 million) portfolios*: The vendors' output for the three portfolios at $100 million (using all position size assumptions) showed a high degree of uniformity, with all scenarios having greater than 90 percent of portfolio holdings in the "highly liquid" bucket.

- *Modest dispersion of results for mid-size (i.e., $1 billion) portfolios*: The vendors' output for the three portfolios at $1 billion (using all position size assumptions) still showed a fair amount of concentration in the "highly liquid" bucket (most results were still well over 50 percent in this bucket).

- *More pronounced dispersion of vendor results and percentages across buckets for large (i.e., $10 billion) portfolios*: The vendors' output for the three portfolios at $10 billion (using all position size assumptions) showed much more pronounced dispersion of results across buckets (for each vendor) and across vendors. In one scenario (*i.e.*, the high yield bond

[13] Appendix C contains more information about this exercise.

portfolio, assuming position size of 5 percent), vendor results for the "highly liquid" bucket ranged from 7 percent to 95 percent.

From a policy perspective, this bucketing data preview demonstrates its limited utility, as explained below:

- Bucketing information for small and mid-size funds likely will not be very instructive for the SEC or the public. Even examining asset classes that some might regard as somewhat less liquid on a relative basis (*i.e*., high yield bonds, municipal bonds, and small cap stocks), several current models are showing a high degree of portfolio liquidity. For these funds in particular, compliance costs will far exceed any possible informational benefits to funds, shareholders, the public, or the SEC.

- Bucketing information for larger funds also likely will not be very instructive for the SEC or the public, albeit for slightly different reasons. The key drivers of results are overall portfolio size, the position size and price impact assumptions, and vendors' volume- or capacity-driven proprietary models. Thus, simply by assumption, it is highly likely that as overall portfolio size or fund position size scales up, liquidity will appear to diminish, even if the fund were to invest primarily or entirely in investments that market participants view as highly liquid. Moreover, because vendors will employ differing models and default assumptions with different sensitivities to certain factors, we can expect to see more dispersion across buckets and vendors as sizes increase. A fund's liquidity classifications, when run through multiple vendors' models, may differ widely. These kinds of outcomes would be highly confusing for the public and might cause the SEC to question larger funds regarding variations in their bucketing output, when such variation is largely rule- and model-driven.

By delaying the compliance date, funds and vendors could use that time to learn more about how vendor models respond to variations in underlying assumptions (and varying market conditions, over a longer testing period). With this additional information, they also could make further refinements to their processes.

III. Conclusion

As we have repeatedly stated since its adoption, the rule has a number of sound elements that we recommend preserving, and that could proceed without delay. The SEC and its staff deserve considerable credit for the work they have devoted to this issue. The rule's bucketing and related reporting requirements, however, remain major concerns. With a delay and prudent revisions or guidance that preserve the rule's objectives while facilitating compliance, the rule can be further improved, and better serve the needs of funds, investors, the public, and the SEC.

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We stand ready to assist the SEC in any way that we can. If you have any questions, please contact me at ([redacted].

Sincerely,

/s/ Dorothy Donohue
Acting General Counsel

cc: The Honorable Jay Clayton
The Honorable Kara M. Stein
The Honorable Michael S. Piwowar

John Cook, Senior Advisor to the Chairman

Dalia Blass, Director
Division of Investment Management

Appendix A: Letter from Paul Schott Stevens, President and CEO, Investment Company Institute, to The Honorable Jay Clayton, Chairman, Securities and Exchange Commission, dated July 20, 2017

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Paul Schott Stevens, PRESIDENT AND CEO

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July 20, 2017

The Honorable Jay Clayton
Chairman
Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549

Re: *ICI's Recommendations Related to the Liquidity Risk Management and Fund Reporting Requirements*

Dear Chairman Clayton:

I am sending this letter to follow up on our June meeting at which we discussed issues of importance to the fund industry. As highlighted at our meeting, I respectfully request that you take action very soon to refine and phase in discrete yet impactful elements of two sets of recently adopted rules: the liquidity risk management program and the fund reporting rules.

The Commission adopted both sets of rules in October 2016, and the compliance dates for each are approaching. Based on our work with members in implementing these rules, we have deep concerns about the industry's ability to meet the compliance deadlines. More fundamentally, efforts to implement the rules have reinforced our belief that the Commission needs to re-examine the asset classification element of the liquidity rule and the required frequency of portfolio holdings reporting. We therefore request that the Commission take the actions summarized immediately below.

- Adjust the compliance schedule for the liquidity rule's asset classification and related requirements as soon as possible, providing the SEC with time to propose and finalize targeted rule amendments. Rule amendments should permit each fund to formulate its own policies and procedures to determine how to classify the liquidity of its investments.

- Even if the SEC determines not to pursue the recommended amendments, adjust the compliance schedule for the current liquidity rule and related reporting requirements by at least one year.

- Require quarterly (instead of monthly) reporting of portfolio holdings on Form N-PORT until the SEC can address information security concerns adequately.

- Even if the SEC determines to retain the monthly reporting requirement for portfolio holdings, delay the compliance dates for the Form N-PORT and Form N-CEN filing requirements for at least six months.

Each of these points is described in more detail below.

I. Recommendations Related to the Liquidity Risk Management Program Rule

The SEC should adjust the compliance schedule for the rule's asset classification and related requirements as soon as possible. Quick and decisive action—with respect to delaying the rule's asset classification requirements—is critical to avoid a repeat of the industry's difficult, costly, and confusing experience implementing the Department of Labor's fiduciary rule. Delay would provide the SEC time to propose and finalize targeted amendments, and would permit the industry to pause its work on implementing the most costly and challenging part of the rule (*i.e.*, asset classification) and focus on implementing the remaining elements.[1] The industry stands ready to assist the SEC in quickly developing and finalizing such targeted amendments.

In particular, the SEC should re-examine the rule's asset classification, or "bucketing," requirement via a request for additional comments that incorporates a delay in implementation commensurate with the Commission's re-examination. While the final rule improved the proposed asset classification methodology, in practice it still will overshadow the rest of the rule in ways the SEC likely did not contemplate or intend. This has proven to be—by far—the most costly and vexing piece of the rule to implement. The SEC's own economic analysis assumes that the costs of this classification requirement constitute approximately 75 percent of a fund's total cost to comply with the rule (industrywide, the SEC estimates the one-time implementation cost of the classification requirement alone to be more than $640 million).[2] The rule would require funds to consider a number of complex

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[1] This approach would stand in stark contrast to the tortured history of the DOL fiduciary rule. Despite the fact that DOL still is re-examining the fiduciary rule, the rule already has caused significant and widely reported dislocations and disruptions within the retirement services industry, including causing many investors to lose access to advice (due to both changes in intermediaries' service offerings and to intermediaries "orphaning" hundreds of thousands of investor accounts). DOL finalized the rule on April 8, 2016, with an effective date of June 7, 2016 and an applicability, or compliance, date of April 10, 2017. President Trump then issued a memorandum to the Secretary of Labor on February 3, 2017 directing DOL to prepare an updated analysis of the likely impact of the fiduciary rule on access to retirement information and financial advice and, depending on the outcome of that re-examination, to propose rescission or modification of the rule. On March 2, 2017, DOL proposed to delay the compliance date by 60 days, and finalized a partial delay of the compliance date on April 7, 2017—a mere 3 days before the scheduled compliance date—which allowed part of the rule to become applicable on June 9, 2017 and postponed required compliance with the rest of the rule until January 1, 2018. Consequently, significant portions of the rule became applicable on June 9 even though DOL has not yet completed its analysis. Most recently, on July 6, 2017, DOL issued a request for information on potential changes to the rule, including a request for comments on a potential delay in the January 1, 2018 secondary compliance date—further evidence that DOL should not have permitted the rule to become applicable before completing its re-examination and working out any necessary changes.

[2] In April 2017, ICI surveyed its members to better understand their progress in implementing the liquidity rule (the "Liquidity Survey"). Fifty ICI member firms responded, representing 78 percent of US registered open-end fund assets as

and interrelated fund-, market-, trading-, and investment-specific factors and make judgment calls. Presently, systems that will allow funds to synthesize this disparate information and generate outputs in accordance with the rule are far from complete. Although funds and vendors are working on solutions, these solutions will be costly for funds to implement and use on an ongoing basis, and likely will require several more months before they are mature enough for meaningful evaluation and testing. These costs simply cannot be justified, because maintaining a uniform asset classification requirement is not essential to a strong liquidity risk management program rule.

Moreover, when these systems are finalized, the liquidity classifications these systems generate for a given security either will differ (in which case the classifications will be subject to second-guessing, and potentially confuse regulators and the public) or be largely identical (creating the potential for crowded trades and herding). ICI submitted a comment letter on the proposal, which among other things discussed how the proposal risked creating more correlated portfolios and trades across funds if funds gravitate toward investments perceived (by third parties, regulators, or the public) as "more liquid." This herding in turn could increase dislocations and volatility in financial markets by contributing to cliff events in liquidity (similar to those arising from credit rating agencies downgrading certain investments during the financial crisis).[3]

These concerns remain even though the final rule and reporting requirements were not as draconian as the proposed requirements. We understand the SEC's desire for uniformity and consistency in liquidity classification of portfolio assets and the reporting that will follow from it (which the public would see in aggregated form periodically), and the surface appeal of such uniformity. But the more a regulator insists upon uniformity and consistency in this area, the greater the likelihood of correlation, herding, and cliff events.

In addition to these potentially adverse market-wide effects, there is substantial risk that the SEC and other regulators will overemphasize and be misled by this limited, subjective, and forward-looking classification information. In theory, regulators may acknowledge these limitations, but in practice, they will be hard-pressed to resist latching on to these conclusory measures in monitoring market and fund activity and making policy. In time the associated caveats and need for cautious reliance (at most) will be forgotten. Our concerns surrounding public reporting are even greater, because the public is even more likely to be misled by (or fail to fully understand the inherent limitations of) this information.

Nor are the potential benefits to uniform classification and reporting requirements clear and substantial. The SEC will receive a wealth of objective information from funds through Form N-

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of March 31, 2017. The Liquidity Survey indicated that 75 percent of respondents with a view believed that the SEC's 75 percent estimate was either "about right" or "too low." More generally, one member preliminarily estimates that its one-time costs to comply with the liquidity rule will range from $5 to 10 million, with annual ongoing costs in the low millions. Another member estimates that its one-time costs to comply with the rule will be approximately $7 million.

[3] *See* Letter from Brian K. Reid, Chief Economist, ICI, to Brent J. Fields, Secretary, SEC, dated January 13, 2016, *available at* www.sec.gov/comments/s7-16-15/s71615-56.pdf.

PORT filings, which will require funds to report portfolio holdings and other information (*e.g.*, information about fund flows and return information). With this information, the SEC will be well-positioned to monitor developments at the macro level (*e.g.*, deterioration of the performance or liquidity of a particular asset class such as high yield debt, and its effect on funds) or micro level (*e.g.*, whether a particular fund is under liquidity pressure, based on its monthly flows, performance, and/or the composition of its portfolio). This would greatly elevate the SEC's ability to effectively monitor the fund industry and share information with other interested regulators. Subjective and limited classification information would add little to this picture, and as outlined above, could very well detract from it.

Instead, the rule's real benefits in enhancing liquidity risk management practices and investor protection will be derived from its requirements related to assessing, managing, and reviewing (with periodic board reporting) liquidity risk. Liquidity risk is a very broad concept, and it encompasses much more than classifying every portfolio asset using a uniform "days to cash" framework. At most, a reasonable approach to asset classification contributes to a fund's overall understanding of its liquidity risk. And the contributions from a uniform methodology implemented solely for regulatory purposes —especially if it is run parallel to the fund's preferred methodologies—will be more modest still.

Instead of the rule's current complex, costly, and uniform approach to asset classification, the SEC should require each fund, as part of its liquidity risk management program, to formulate its own policies and procedures to determine how to classify the liquidity of its investments. Asset classification, while not an end in itself, is a useful internal discipline that helps funds assess and manage liquidity risk, and it has a place in any comprehensive liquidity risk management program. Approaching asset classification in this way would respect the diversity of practices that have emerged in the industry and their validity; focus funds' attention on comprehensive liquidity risk assessment, management, and review; and greatly reduce the cost and complexity of implementing and administering the rule.

The rule has a number of sound elements that we recommend preserving, and that could proceed without delay. Most notably, the Commission should keep the rule's definition of "liquidity risk" and its broad and practical set of related factors and guidance. The rule's framework for assessing, managing, and reviewing liquidity risk—which appropriately appears as the rule's first required program element—should be the heart of the rule. Adoption of liquidity risk-centered programs will enhance the formality, discipline, and rigor of the industry's current liquidity risk management practices. Additionally, the Commission should maintain other elements of the rule, such as its 15 percent limit on illiquid investments and related reporting requirements to fund boards and the SEC when a fund exceeds this limit; general board oversight of the program, including annual reporting to the board; establishment of redemption in-kind policies and procedures; and the recordkeeping requirements. Finally, we support retaining the new prospectus disclosure requirements that have taken effect and the liquidity-related disclosure items on Form N-CEN.

Even if the SEC ultimately determines not to propose rule amendments, it must act quickly to delay the compliance dates of the current rule and related requirements for at least one year. Given the complexity of the asset classification function, we anticipate that most fund complexes will engage third parties to assist with it, and those third parties will not have mature products to evaluate for several more months. Moreover, firms effectively must complete their liquidity programs prior to obtaining requisite board approvals, and we anticipate many fund complexes educating their boards about their programs over multiple board meetings and obtaining final approvals by fall 2018. Consequently, many fund complexes will be left with a relatively short period of time to conduct all of the work that is necessary to ensure a smooth and successful implementation.

II. Recommendations Related to New Fund Reporting Requirements

The SEC should require quarterly, instead of monthly, reporting of portfolio holdings until it addresses information security concerns. In addition, the SEC should provide adequate time to implement the Form N-PORT and Form N-CEN filing requirements. For reasons similar to those we outline above with respect to the liquidity rule, we urge the SEC to address these issues quickly and decisively. Each of these points is explained in more detail below.

We are extremely concerned about the SEC's ability to protect the valuable and sensitive portfolio holdings information that funds will be required to report monthly under the SEC's fund reporting rules. As detailed in our earlier letter, a breach of the Commission's data security would cause irreparable harm to funds.[4] The SEC's collection of immense volumes of fund data will create a vast, unique, trove of structured data—data that reflects the intellectual capital and very lifeblood of the fund business—and a potential single point of failure that undoubtedly will attract the attention of cybercriminals. A hack of Form N-PORT data could expose the entire universe of funds to predatory trading practices, including front-running of fund trades, "free riding" of fund investment research, and reverse engineering or "copycatting" of fund investment strategies—all at the expense of fund shareholders.

Under the SEC's fund reporting rules, the Commission will make public only the holdings reported for the third month of each fiscal quarter after a 60-day lag. However, regardless of the length of the time lag between when the data is transmitted to the SEC and posted publicly, reporting of data on a monthly basis to the Commission increases the challenge of securing the information and heightens the risks of hacking. Recent reports by the Commission's own inspector general, as well as the Government Accountability Office (GAO) raise serious concerns about the SEC's current ability to maintain the security of monthly portfolio holdings information.[5] The GAO Report, for example,

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[4] *See* Letter from David W. Blass, General Counsel, ICI, to Brent J. Fields, Secretary, SEC, dated August 11, 2015, *available at* www.sec.gov/comments/s7-08-15/s70815-315.pdf.

[5] *See* US Securities and Exchange Commission, Office of Inspector General, *Audit of the SEC's Compliance with the Federal Information Security Modernization Act for Fiscal Year 2015* (Jun. 2, 2016), summary available at www.sec.gov/oig/reportspubs/Audit-of-the-SECs-Compliance-with-the-Federal-Information-Security-Modernization-Act-for-Fiscal-Year-2015.pdf (Inspector General Report); United States Government Accountability Office, *Information*

noted that the SEC "did not consistently protect its network from possible intrusions" or "restrict physical access to sensitive assets."[6] This Report recommended that the Commission take six steps to improve its information security program. The Inspector General Report found numerous weaknesses in the SEC's information security program, including outdated policies and procedures, and recommended that the SEC address these areas of potential risk.

In addition to thoroughly addressing these weaknesses, we recommend that the SEC implement aggressive measures to protect Form N-PORT data, including independent third-party testing and verification of its information security programs, prior to requiring firms to commence monthly filing of portfolio holdings. Other entities have delayed reporting of sensitive industry information until data security concerns could be adequately addressed. For example, FINRA's Comprehensive Automated Risk Data System ("CARDS") proposal, which would have required certain firms to periodically submit in an automated, standardized format specific information relating to their securities accounts, recently was put on hold so that FINRA could first conduct additional analyses and engage third-party experts to analyze potential threats to the security of the information being collected.[7] We strongly urge the SEC to take responsible steps similar to those that FINRA outlined.

To adequately protect sensitive portfolio holdings data, we recommend that the SEC require that funds report this Form N-PORT information to the Commission quarterly, 30 days after the end of the reporting period, until the Commission has implemented the recommendations of a third-party expert.[8] Meanwhile, the SEC could, as currently required, continue to collect other Form N-PORT data on a monthly basis. Staging reporting in this manner would enhance significantly the Commission's ability to oversee the fund industry while ensuring that the Commission is appropriately prepared to protect confidential fund information.

We recognize that the Commission ultimately might determine to require reporting of portfolio holdings information on a monthly basis. Separate and apart from this determination, however, we request that the Commission provide at least an additional six months—until December 2018—for funds to comply with the Form N-PORT and Form N-CEN filing requirements.[9] While

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Security: Opportunities Exist for SEC to Improve Its Controls over Financial Systems and Data (Apr. 2016), *available at* www.gao.gov/assets/680/676876.pdf (GAO Report).

[6] GAO Report at 5-6.

[7] *See* Testimony of Richard G. Ketchum, Chairman and CEO, FINRA, Before the Committee on Financial Services, US House of Representatives (May 1, 2015), *available at* financialservices.house.gov/uploadedfiles/hhrg-114-ba16-wstate-rketchum-20150501.pdf.

[8] The Commission would make this portfolio holdings information (Part C of Form N-PORT) public 60 days after the end of the reporting period.

[9] We similarly ask that the Commission provide at least an additional six months—until December 2019—for funds that are part of a group of related investment companies that has net assets of less than $1 billion as of the end of the most recent fiscal year to comply with the Form N-PORT filing requirements.

ICI members have been working diligently to prepare for the new reporting requirements since the rules were adopted, our members face significant challenges in meeting the regulatory deadlines.

The vast amount of new data required for Forms N-PORT and N-CEN are not easily accessed, compiled, and reported. Funds will have to create new systems to source the data, assemble it in one place, and transform it into a form acceptable to the Commission. Once these significant undertakings are accomplished, funds will have to test their systems to ensure that the information is accurate and reliable.

Funds increasingly are concerned that they will not have adequate time under the current compliance dates to complete these requirements, as the timing is dependent on multiple third parties. We understand that most fund complexes will engage third parties to assist with the extrapolation, compilation, and reporting of the immense amounts of required data, and these third parties have not yet fully developed products for funds to evaluate—and likely will not have these products fully developed—for at least several more months. Many members have told us that they cannot even begin some of the most time-consuming endeavors associated with implementing the rule until these products are available.

Anecdotally, our members have expressed concern that third-party vendors may not have products ready even by the end of the third quarter of 2017, despite optimistic forecasts for product availability. In addition, we have heard that there are specific item requirements that funds are having trouble preparing for, even with third-party assistance. For example, many funds currently do not compute the portfolio-level risk metrics that the new rules require, and tell us that many third-party vendors they have consulted do not anticipate calculating those metrics as part of their product offerings. Even if a fund finds a third party to provide the information, it will need time to fully vet the calculations, to ensure that the information can be determined on a monthly basis, and to ensure that the information is reported accurately.

We, therefore, recommend delaying for at least six months the compliance dates for the initial Form N-PORT and Form N-CEN filings to provide funds with sufficient time to appropriately implement and address the sheer amount of data that must be collected and reported under the new fund reporting rules. The six-month delay for the Form N-PORT and N-CEN filing requirements should provide funds with sufficient time to:

- develop new technologies to compile vast amounts of data on a monthly basis;
- assess the sources for the data elements from several different systems;
- determine whether to build or enhance their own systems or use third-party vendors to assist in the process;
- if they use third-party vendors, upload their data to vendor platforms;
- test their systems to ensure that the data is of sufficient quality; and

- design processes and controls to ensure the accuracy of the data.

In connection with this recommendation, we also recommend that the Commission maintain as non-public all reports filed on Form N-PORT for the first six months following the compliance dates. This would allow funds sufficient time to work out any issues they have with filing the forms in the required XML format and is consistent with the Commission's approach under the current compliance schedule.

* * *

We appreciate the opportunity to provide these additional recommendations to you. If you have any questions regarding this letter or would like additional information, please feel free to contact me at [redacted] or Dorothy Donohue, Acting General Counsel, at [redacted].

Sincerely,

/s/ Paul Schott Stevens

President and CEO
Investment Company Institute

cc: The Honorable Kara M. Stein
The Honorable Michael S. Piwowar

David Grim, Director
Division of Investment Management

Appendix B: ICI Survey Results on Liquidity Rule Implementation (October 2, 2017)

October 2, 2017

ICI Survey Results on Liquidity Rule Implementation

Presentation to SEC's Division of Investment Management

Key Points

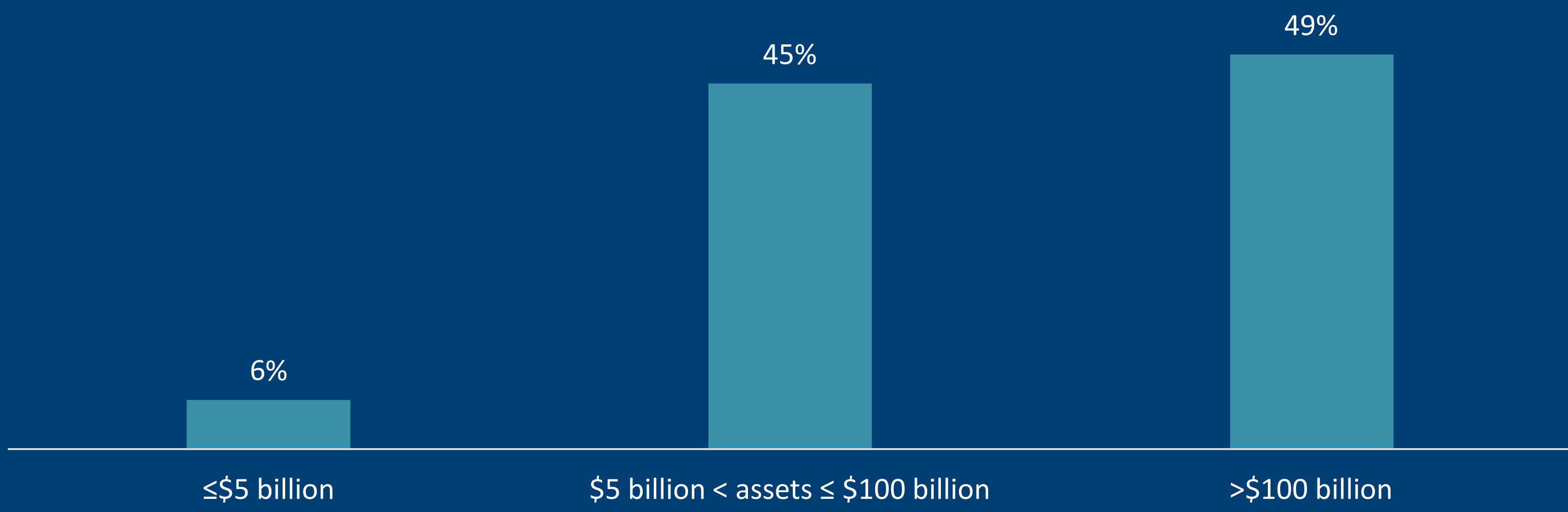
- » Sept 19-29 ICI member survey provides update on vendor and industry readiness and costs
- » Vendors and industry need more time:
  - » Vendor offerings not currently mature; gaps in coverage
  - » Industry needs time to pick and onboard vendors; complete bucketing-contingent work; and seek board approval
  - » Results suggest strong case for delay
- » Costs of bucketing are high:
  - » Bucketing constitutes majority of initial and ongoing compliance costs
  - » Amounts funds pay to pricing vendors provide useful comparison

Survey Coverage

- 66 respondents
  - 4,498 funds, representing 48% of the total number of long-term mutual funds and ETFs
  - Assets of $13.3 trillion, representing 73% of long-term mutual funds and ETF total net assets
- Not all respondents answered every question
  - The number of respondents is indicated on each slide

About Half of Sample Is Comprised of Firms with Greater Than $100 Billion in Assets

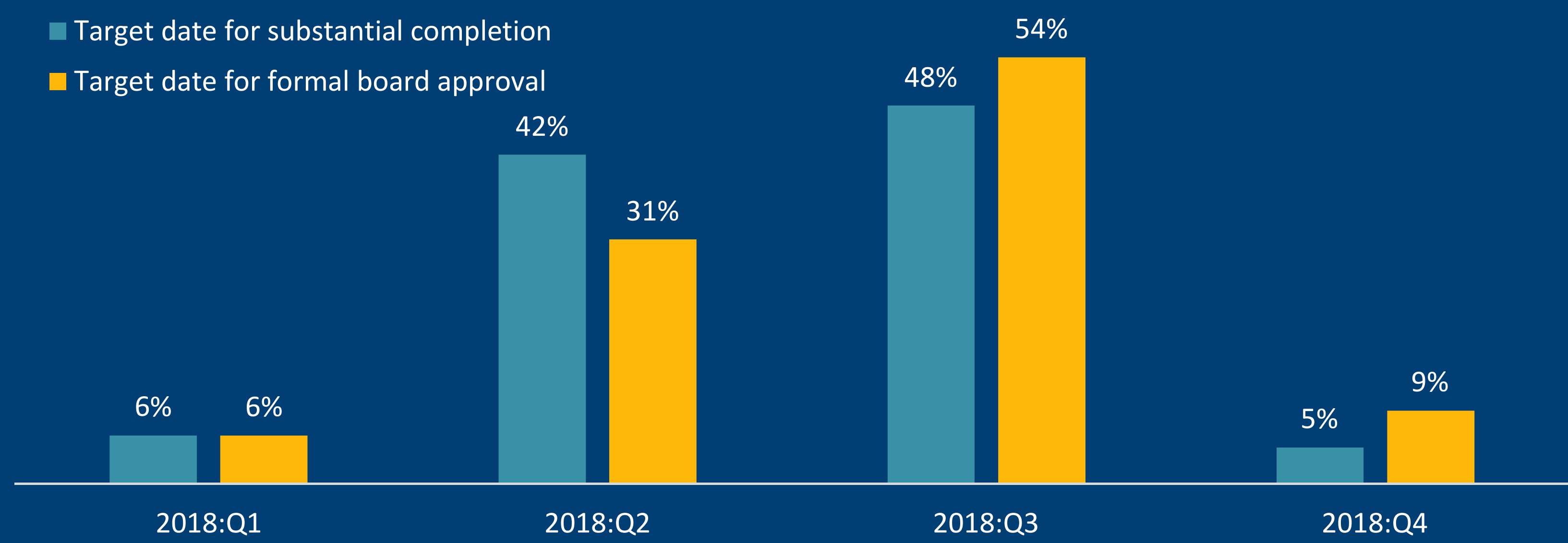
Percent of 66 respondents



Readiness of Vendors and Firms

Roughly Half of Respondents Are *Targeting* 2018:Q3 to Substantially Complete Implementing Liquidity Rule Requirements and Obtain Board Approval But…

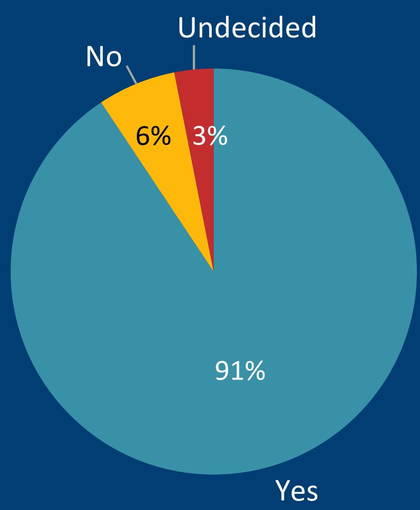
Percent of 65 respondents



Most Firms Expect to Work With a Vendor

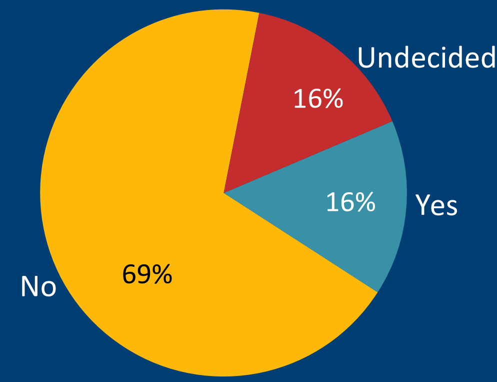
Percent of 64 respondents

Considering working with vendor



Percent of 58 respondents

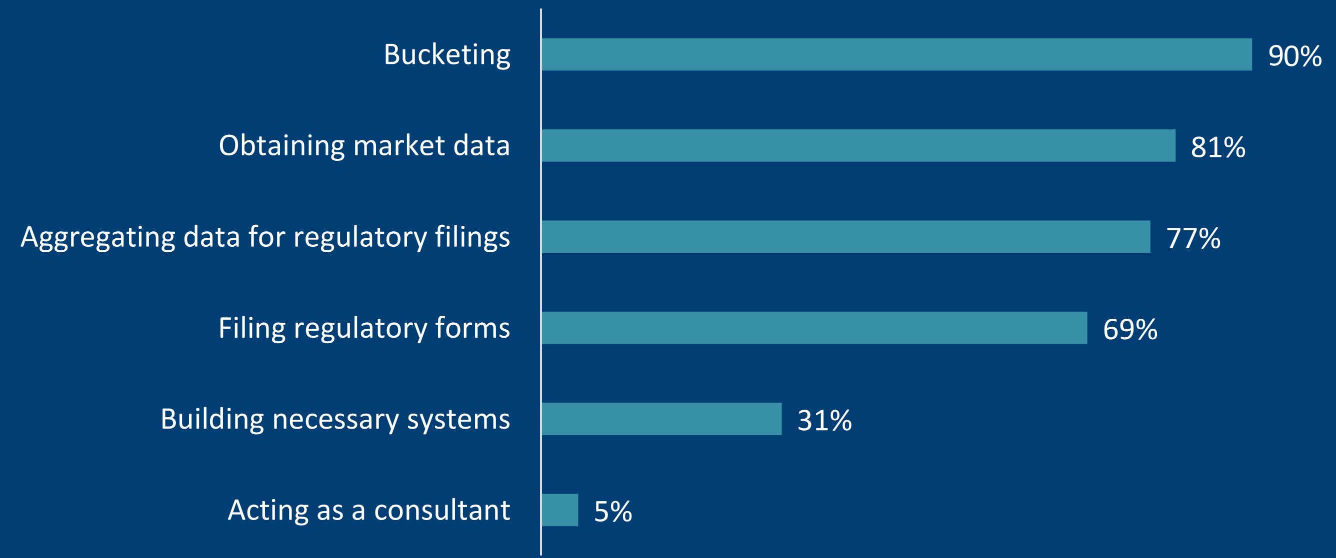
If yes, do you expect to use more than one?



Average, if more than one = 2.4

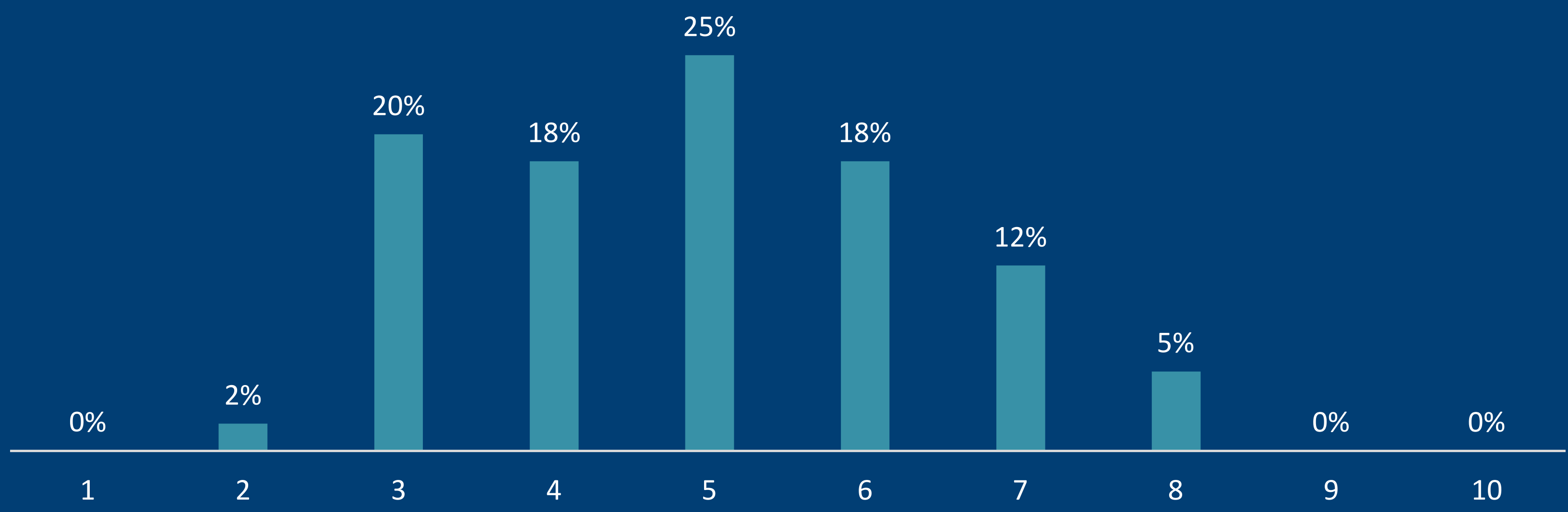
Firms Will Rely Heavily on Vendors for Complying with Liquidity Rule

For what functions will you hire vendors; percent of 62 respondents



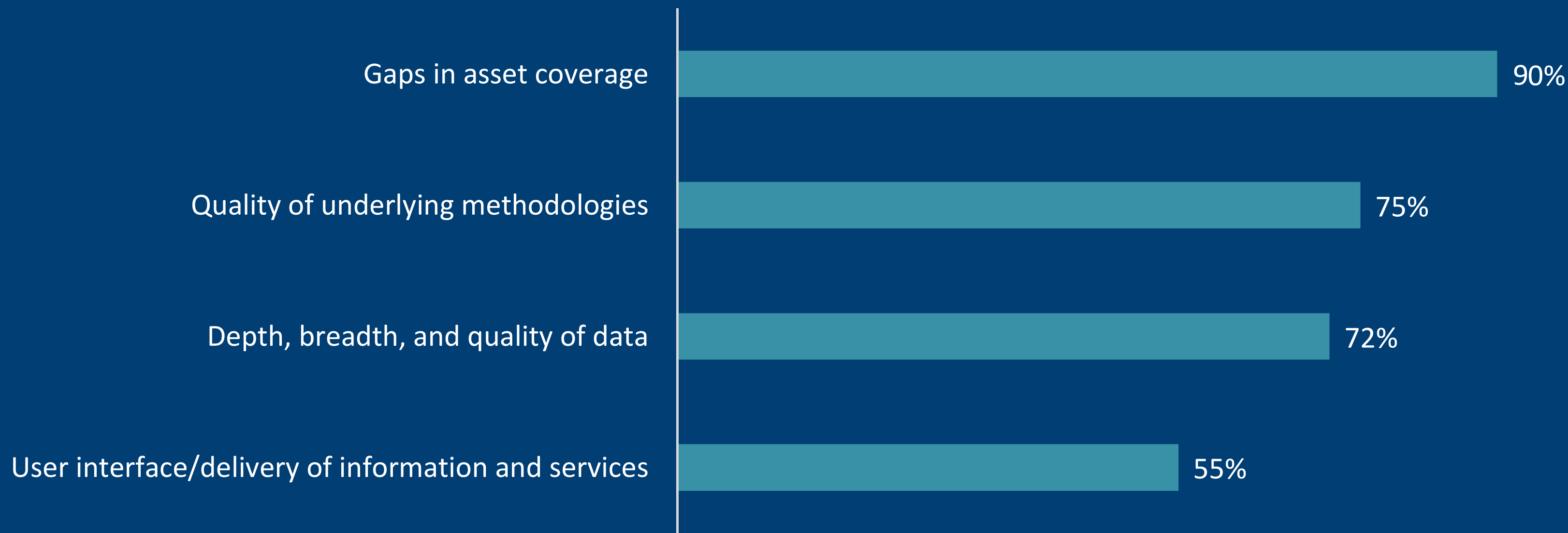
Firms Believe Current Vendor Readiness is Relatively Low

How ready are vendors on a scale of 1 to 10 with 10 being fully ready; percent of 60 respondents



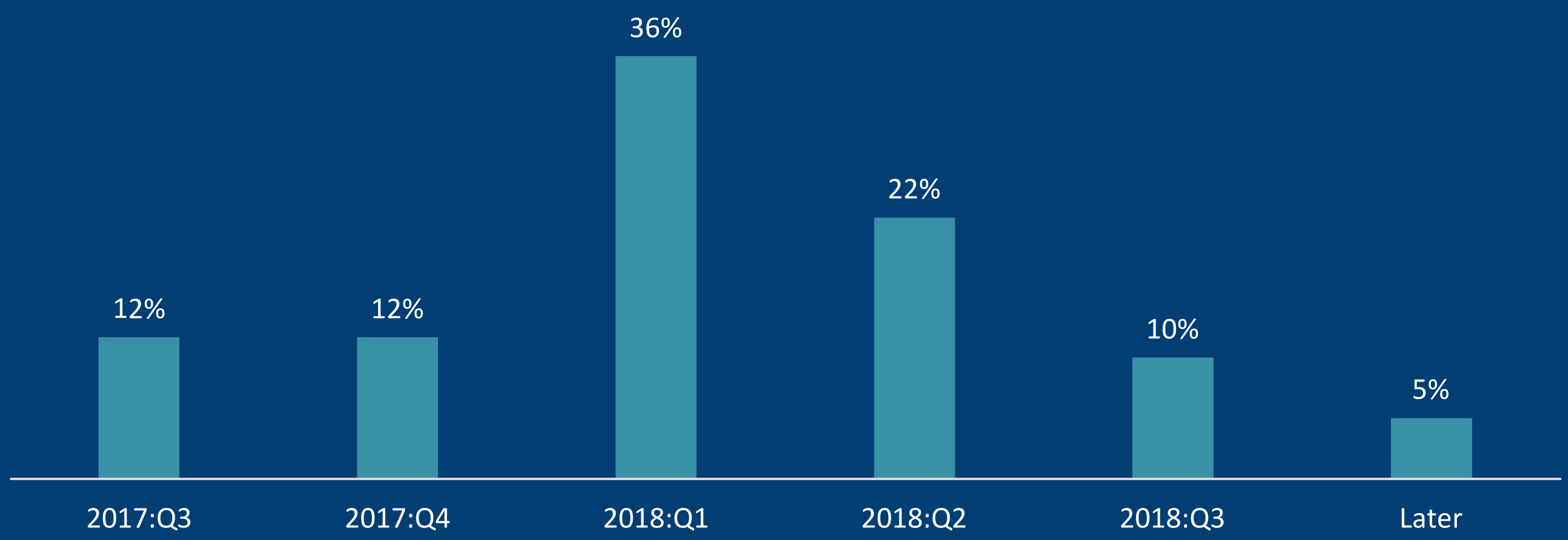
Firms Identify Several Areas Where Additional Vendor Work Is Needed

In what areas do vendors need to do additional work, percent of 60 respondents



When Do Firms Expect Vendor Offerings To Be Mature Enough to Make An Informed Selection?

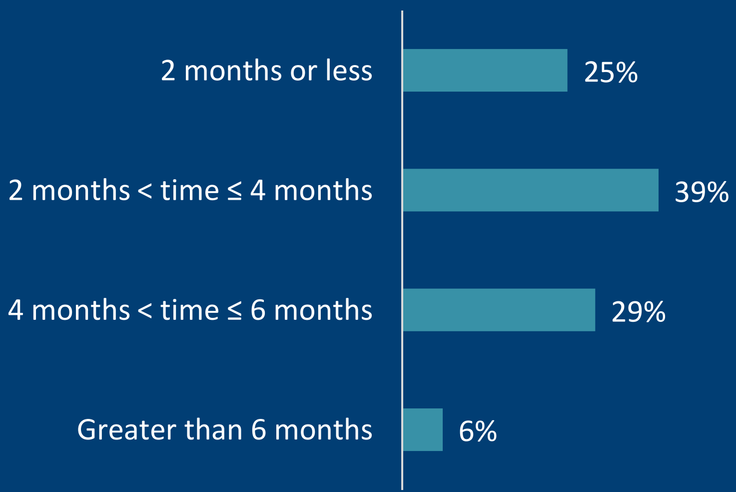
Percent of 59 respondents



Even When Vendors Are Ready, Firms Need Time to Pick and Onboard Them

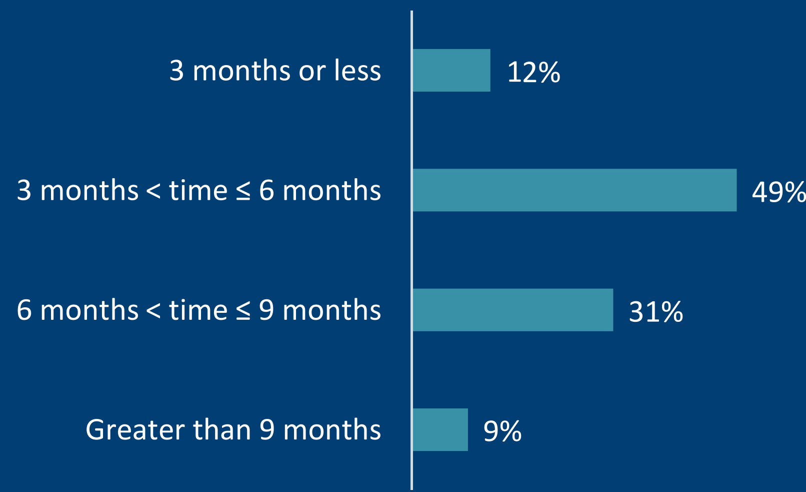
Percent of 48 respondents

How long to pick vendor once they're ready?



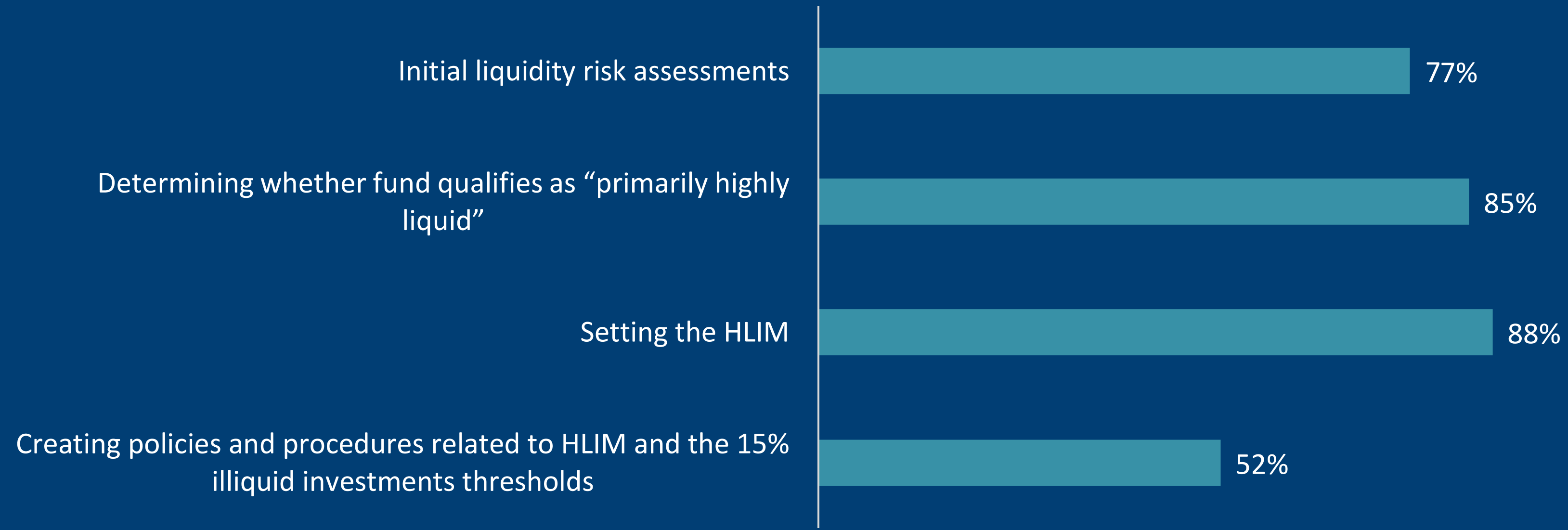
Percent of 59 respondents

How long to onboard chosen vendor?



Fully Onboarding Vendors and Completing Bucketing Must Precede Other Implementation Work

Which of the following rule requirements require you to first complete your bucketing methodology?; Percent of respondents[1]

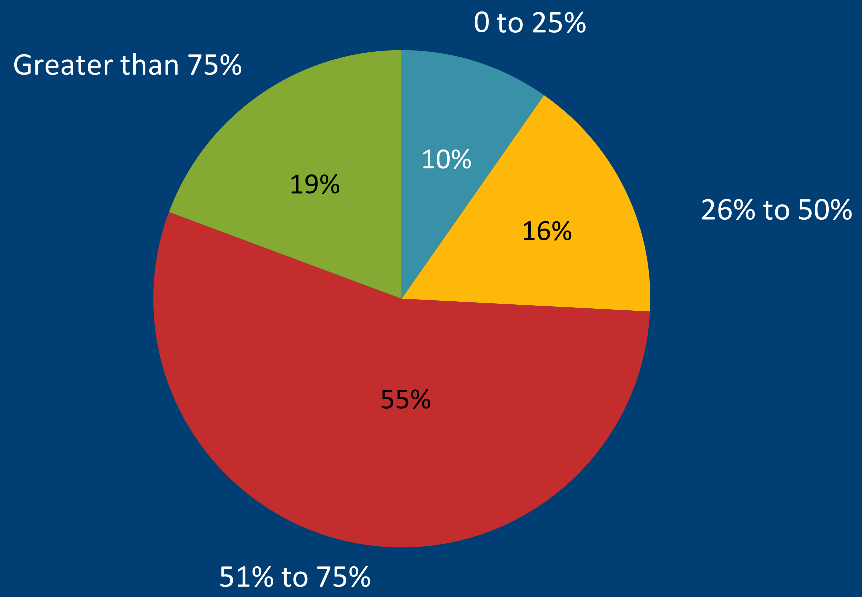


[1] Note: multiple responses allowed

IMPLEMENTATION AND ONGOING COSTS

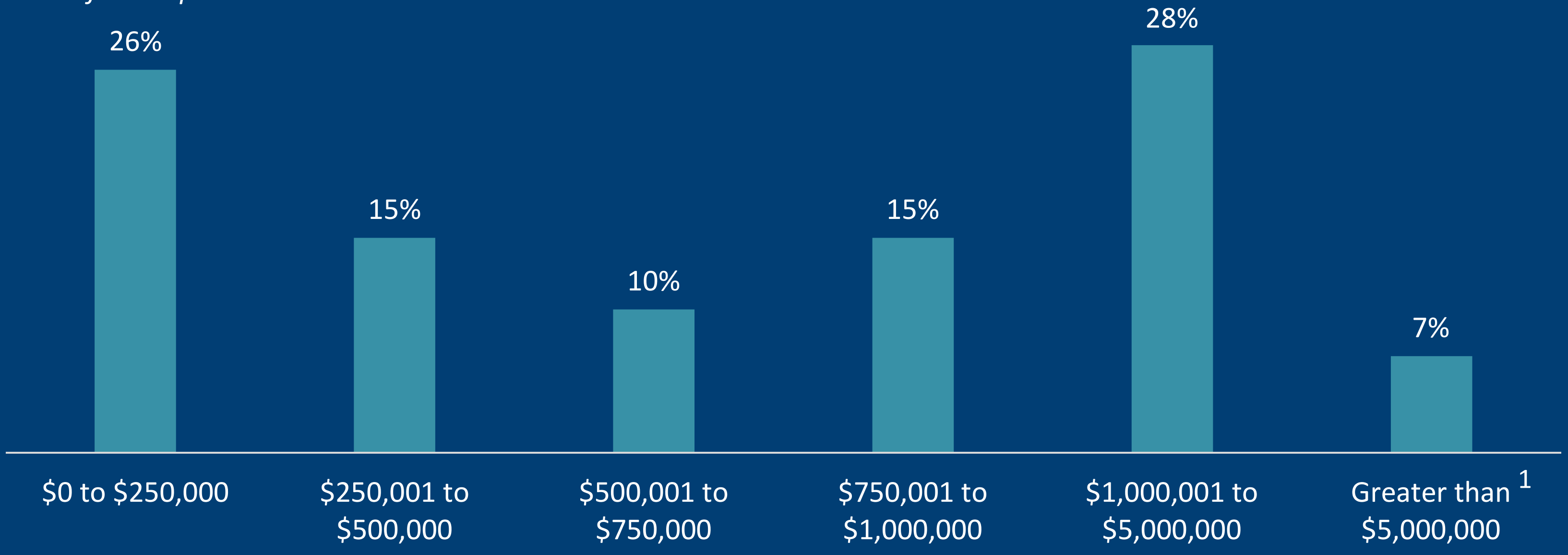
For Most Firms, Bucketing and Related Reporting Requirements Expected to Account for More Than Half of Initial Compliance Costs

How much of expected initial costs attributable to bucketing and reporting requirements; percent of 61 respondents



35% of Respondents Expect to Spend More Than $1 Million in Initial Costs to Comply With Bucketing and Related Reporting Requirements

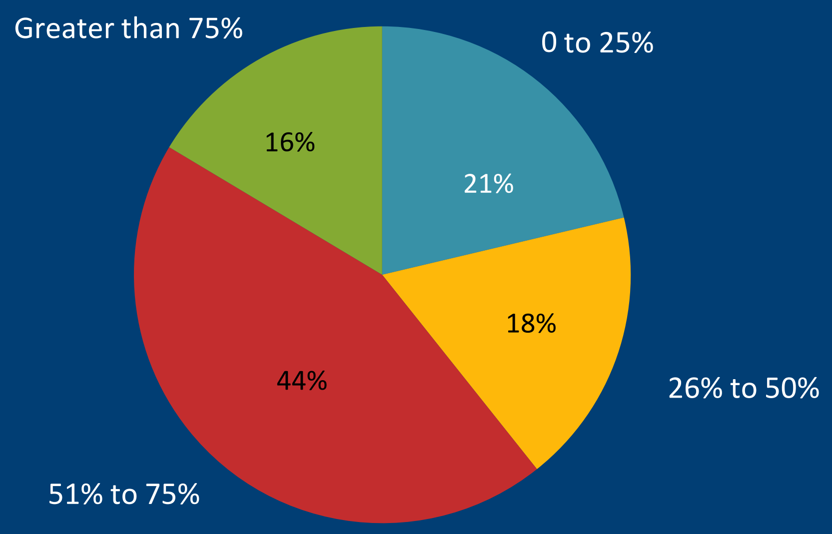
Percent of 61 respondents



[1] Note: One respondent indicated that its initial compliance costs would exceed $10 million.

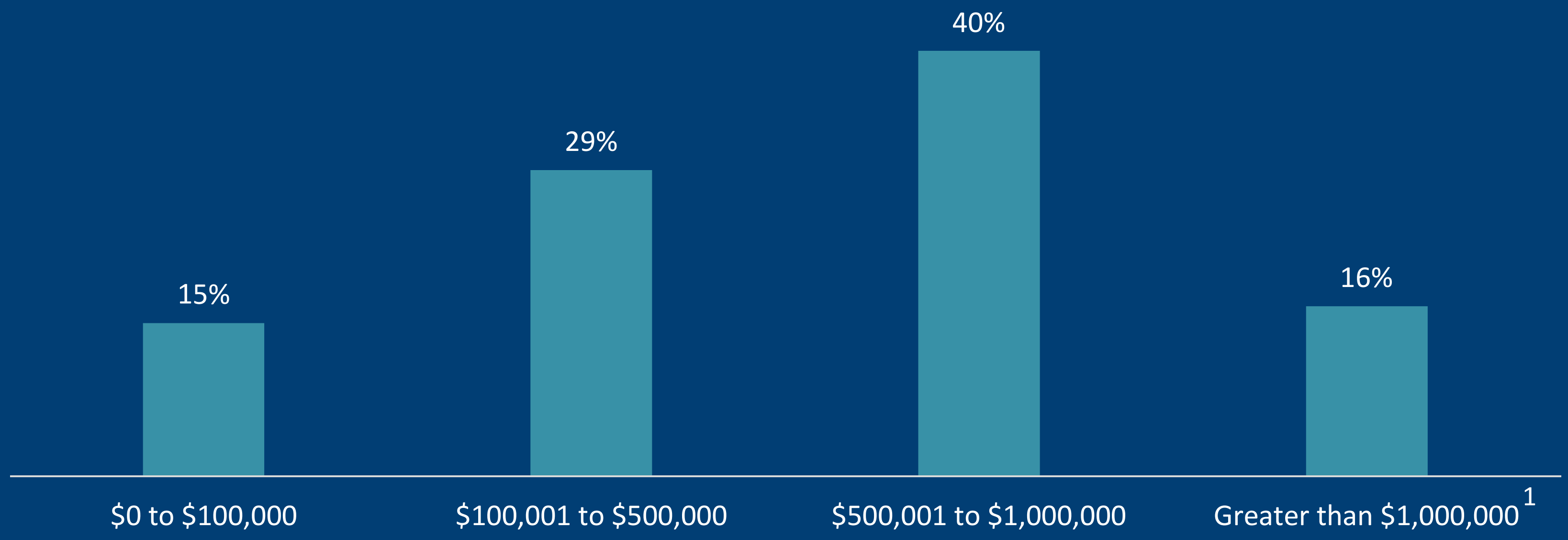
Most Firms Expect Bucketing and Related Reporting Requirements to Account for More Than Half of Annual Ongoing Compliance Costs

How much of expected initial costs attributable to bucketing and reporting requirements; percent of 62 respondents



56% of Firms Expect to Spend More Than $500,000 Annually to Comply with Bucketing and Reporting Requirements

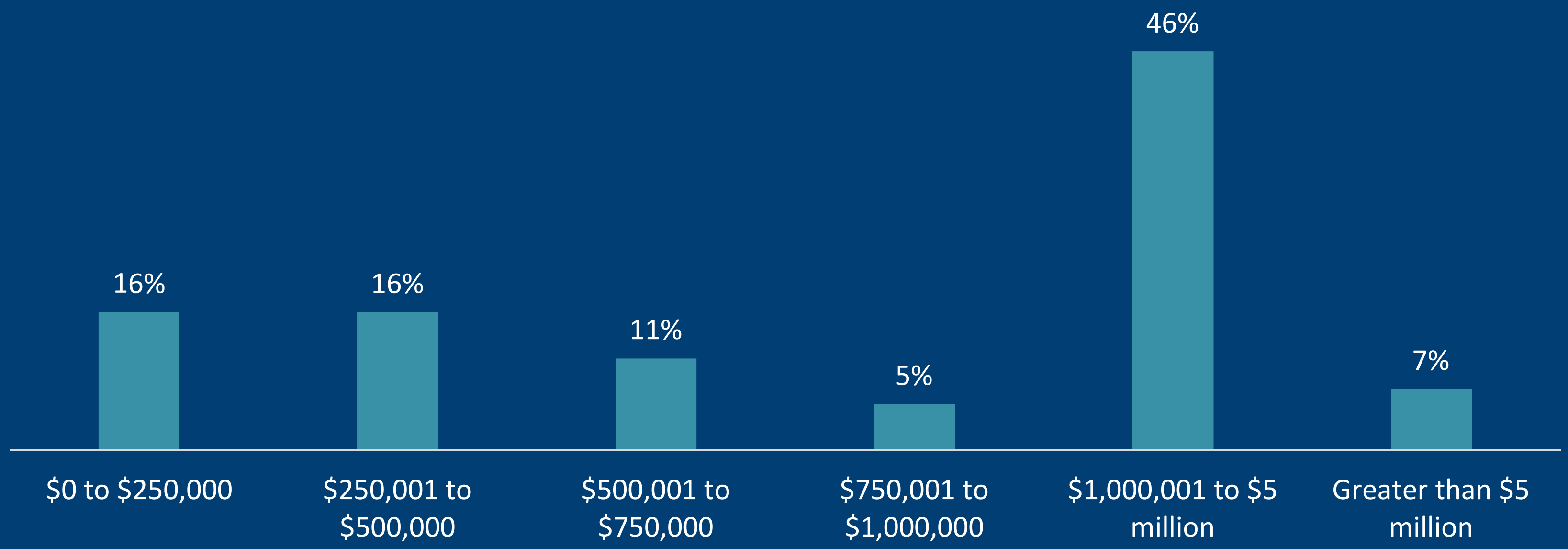
Percent of 62 respondents



[1] Note: one respondent indicated that it expected to spend $2 to $3 million annually to comply with bucketing and reporting requirements.

In Comparison -- Over Half of Respondents Pay Pricing Vendors More Than $1 Million Annually

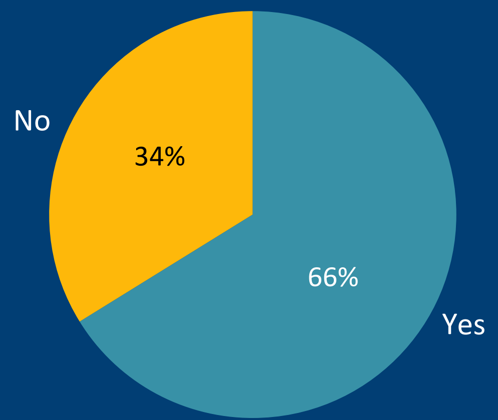
Percent of 57 respondents



Beyond External Costs, Two-Thirds of Respondents Expect to Add Staff to Implement and Administer Liquidity Programs

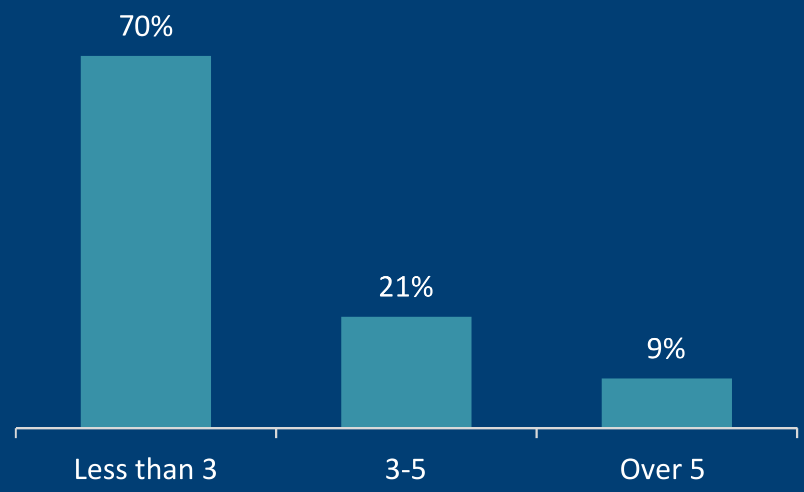
Percent of 65 respondents

Do you expect to add staff?



Percent of 43 respondents

If yes, how many new staff?



Reasons Supporting Liquidity Rule Delay Based on ICI Survey Results

- Most respondents to ICI's September 2017 survey do not see vendors being ready until at least the first or second quarter of 2018. Taking the midpoint of these two responses, we estimate vendors being ready in April 2018.

- At that point, fund complexes will be able to fully and fairly evaluate them.

- Vendor due diligence is not a quick and easy process, particularly where vendors are offering a new product related to a new rule about which neither they nor fund complexes have had any experience to date. Per the survey, the two most popular responses indicate that selecting a vendor could take between 2 and 6 months. The midpoint would be 4 months, so we estimate that fund complexes will have selected a vendor by August 2018.

- The vendor-related work would not end there. Fund complexes then would need to work with vendors to "onboard" them, so that they are ready to dependably provide the services that they are hired to provide. Per the survey, the two most popular responses indicate that this could take between 3 and 9 months. The midpoint would be 6 months, meaning that fund complexes would have fully onboarded chosen vendors by early February 2019.

- At this point, fund complexes would be in position to complete work on the other bucketing-contingent elements of the rule (see slide 12). Fund complexes might have dozens or even hundreds of funds for which they must: complete initial liquidity risk assessments; determine whether they qualify as "primarily highly liquid;" and if not, set their highly liquid investment minimums. A conservative estimate for this is 3 months, taking fund complexes to early May 2019.

- By this point, fund complexes would be substantially complete with implementation, and could begin presenting their programs to their boards in earnest (and making any final adjustments). Assuming boards will want to cover proposed liquidity programs over at least two meetings, this would put the approval of the programs in late summer/early fall 2019.

- Funds then could begin complying with the rule shortly thereafter.

- None of the above assumes the use of sub-advisers within a fund complex. That will require separate workstreams for each individual sub-adviser (and some ICI members have dozens of sub-advisers). This is a daunting additional task for this subset of fund complexes (and those advisers that are affiliated with their own fund families and also serve as sub-advisers for other fund families). This complicating factor suggests that more time still would be appropriate.

Appendix C: Takeaways from Vendors' Bucketing of ICI Sample Portfolios

October 2, 2017

INVESTMENT COMPANY INSTITUTE

Takeaways from Vendors' Bucketing of ICI Sample Portfolios

Presentation to SEC's Division of Investment Management

ICI's September 2017 Vendor Bucketing Exercise

» 3 portfolios: small cap stocks, municipal bonds, and high yield bonds

» Each portfolio bucketed using varying asset ($100 million, $1 billion, $10 billion) and position size assumptions (1, 2, 5, and 10% for each holding, *i.e.* pro rata selling assumption); 12 scenarios each

» Other key assumptions (including price impact) were left to vendors' discretion

» Output for each scenario was aggregated and put into 4 buckets

» See Appendix for portfolios and additional information

Key Takeaways

» $100 million: 3 portfolios are almost entirely "highly liquid" (≥ 90%)

» $1 billion: 3 portfolios are concentrated in "highly liquid" bucket, with modest migration to other 3 buckets

» $10 billion:

  » Pronounced dispersion across all 4 buckets

  » Breaches of 15% illiquid limit (with some vendors' numbers well in excess of 15%)

» Vendors' results vary widely for certain scenarios (e.g., 95% vs. 7% in "highly liquid" bucket for $10 billion/5% HY scenario)

» Disparities between vendors' and members' results

» Key drivers: Portfolio size, position size and price impact assumptions, asset class, vendors' use of models that tie price impacts to daily trading volume

Appendix

Below, in slightly modified form, are the instructions we gave to the vendors that bucketed 3 sample portfolios and presented findings at ICI's September 14, 2017 Working Group meeting.

Appendix: General Instructions

Attached are the three sample portfolios we would like you to bucket as part of your presentation: a municipal bond portfolio, a high yield bond portfolio, and a small cap equity portfolio. (These samples do not represent actual portfolios.) In doing so, please note the following:

1. The attached spreadsheets contain the holdings and their weightings.
2. You will have to bucket each holding, and put your aggregated "bucketing output" in the sample grids below. Each portfolio should have its own set of completed grids. Each portfolio will have to be run multiple times (12) to account for different portfolio size assumptions ($100 million, $1 billion, and $10 billion; individual holding values can be calculated using the spreadsheet weightings) and different position size assumptions for each holding (1, 2, 5, and 10%; we're assuming pro rata selling of holdings to arrive at this "reasonably anticipated trading size" assumption). The grids provide for aggregated reporting of holdings in the 4 buckets—there's no need to disclose how you bucketed each holding, unless you'd like to do so.

Appendix: General Instructions (cont.)

3. We’re leaving the determination of the price impact assumption (i.e., what constitutes a “significant change in market value”) to you. Please specify the assumption used as part of your presentation, and also describe any other key assumptions you made in conducting your analysis.
4. The grid output below, key assumptions, key methodological choices, key takeaways, etc. should be part of your written presentation and covered to some extent in your oral presentation.

	Highly Liquid				Moderately Liquid				Less Liquid				Illiquid			
	1%	2%	5%	10%	1%	2%	5%	10%	1%	2%	5%	10%	1%	2%	5%	10%
100M																
1B																
10B																

Appendix: Municipal Bond Portfolio

Description	Weight	Description	Weight
FLORIDA ST	1.0101	DIST OF COLUMBIA	1.0101
MASSACHUSETTS ST HLTH & EDUCT	1.0101	NEW YORK NY	1.0101
WILLIAMSON CNTY TX	1.0101	ARAPAHOE CNTY CO SCH DIST #5	1.0101
OKLAHOMA CITY OK WTR UTILITIE	1.0101	NEW YORK ST DORM AUTH REVENUE	1.0101
GWINNETT CNTY GA SCH DIST	1.0101	UNIV OF NORTH CAROLINA NC SYS	1.0101
GEORGIA ST	1.0101	CALIFORNIA ST	1.0101
ARIZONA ST TRANSPRTN BRD HIGH	1.0101	ORANGE CNTY CA ARPT REVENUE	1.0101
MET WTR DIST OF STHRN CALIFOR	1.0101	COLORADO ST HLTH FACS AUTH RE	1.0101
CALIFORNIA ST INFRASTRUCTURE	1.0101	MET WASHINGTON DC ARPTS AUTH	1.0101
FAIRFAX CNTY VA	1.0101	FRANKLIN CNTY OH REVENUE	1.0101
NEW HAMPSHIRE ST MUNI BOND BA	1.0101	JACKSONVILLE FL TRANSIT REVEN	1.0101
SAN FRANCISCO CITY & CNTY CA	1.0101	LOS ANGELES CA DEPT OF ARPTS	1.0101
WISCONSIN ST TRANSPRTN REVENU	1.0101	MILPITAS CA REDEV AGY SUCCESS	1.0101
SAN DIEGO CA CMNTY CLG DIST	1.0101	CALIFORNIA ST	1.0101
DALLAS TX AREA RAPID TRANSIT	1.0101	ILLINOIS ST SALES TAX REVENUE	1.0101
MICHIGAN ST TRUNK LINE	1.0101	STHRN MINNESOTA ST MUNI PWR A	1.0101
BOULDER VLY CO SCH DIST #RE-2	1.0101	NEW YORK ST DORM AUTH REVENUE	1.0101
WASHINGTON ST	1.0101	CHARLESTON CNTY SC ARPT DIST	1.0101
WISCONSIN ST TRANSPRTN REVENU	1.0101	HILLSBOROUGH CNTY FL AVIATION	1.0101
SANTA CLARA CNTY CA FING AUTH	1.0101	NASSAU CNTY NY	1.0101
AUSTIN TX CMNTY CLG DIST PUBL	1.0101	CALIFORNIA ST PUBLIC WKS BRD	1.0101
MISSISSIPPI ST	1.0101	SOUTH CAROLINA ST TRANSPRTN I	1.0101
RHODE ISLAND ST & PROVIDENCE	1.0101	CORPUS CHRISTI TX UTILITY SYS	1.0101
WISCONSIN ST	1.0101	CONNECTICUT ST	1.0101
NEW YORK CITY NY TRUST FOR CU	1.0101		

Appendix: Municipal Bond Portfolio (cont.)

Description	Weight	Description	Weight
NASSAU CNTY NY	1.0101	MASSACHUSETTS ST DEV FIN AGY	1.0101
PIEDMONT SC MUNI PWR AGY ELEC	1.0101	NEW JERSEY ST ECON DEV AUTH R	1.0101
LOUISIANA ST PUBLIC FACS AUTH	1.0101	NEW JERSEY ST ECON DEV AUTH R	1.0101
CHICAGO IL MIDWAY ARPT REVENU	1.0101	CHICAGO IL	1.0101
MISSOURI JT MUNI ELEC UTILITY	1.0101	WEST VIRGINIA ST HOSP FIN AUT	1.0101
OHIO ST HOSP REVENUE	1.0101	KENTUCKY ST ECON DEV FIN AUTH	1.0101
CHICAGO IL O'HARE INTERNATION	1.0101	SAN ANTONIO TX CONVENTION HOT	1.0101
CHICAGO IL BRD OF EDU	1.0101	SAN JOAQUIN HILLS CA TRANSPRT	1.0101
JACKSONVILLE FL HLTH FACS AUT	1.0101	KENTUCKY ST ECON DEV FIN AUTH	1.0101
GUAM GOVT BUSINESS PRIVILEGE	1.0101	GUAM INTERNATIONAL ARPT AUTH	1.0101
WAYNE CNTY MI ARPT AUTH REVEN	1.0101	NEW HAMPSHIRE ST HLTH & EDU F	1.0101
TOBACCO SETTLEMENT FING CORP	1.0101	MASSACHUSETTS ST DEV FIN AGY	1.0101
SACRAMENTO CNTY CA ARPT SYS R	1.0101	NEW YORK CITY NY INDL DEV AGY	1.0101
SUFFOLK CNTY NY	1.0101	COOK CNTY IL CMNTY CLG DIST #	1.0101
VERMONT ST EDUCTNL & HLTH BLD	1.0101	PENNSYLVANIA ST HGR EDUCTNL F	1.0101
DUTCHESS CNTY NY LOCAL DEV CO	1.0101	CUYAHOGA CNTY OH HOSP REVENUE	1.0101
NEW YORK ST DORM AUTH REVENUE	1.0101	TEXAS ST PRIV ACTIVITY BOND S	1.0101
UNIV OF ILLINOIS IL	1.0101	ILLINOIS ST	1.0101
NEW YORK ST DORM AUTH REVENUE	1.0101	AUSTIN CONVENTION ENTERPRISES	1.0101
NEW YORK ST THRUWAY AUTH GEN	1.0101	ILLINOIS ST	1.0101
NEW JERSEY ST ECON DEV AUTH R	1.0101	ILLINOIS ST	1.0101
SOUTH CAROLINA ST JOBS-ECON D	1.0101	CALIFORNIA ST MUNI FIN AUTH R	1.0101
NEW JERSEY ST ECON DEV AUTH R	1.0101	ILLINOIS ST	1.0101
NEW JERSEY ST TRANSPRTN TRUST	1.0101	ILLINOIS ST	1.0101
CULVER CITY CA REDEV AGY	1.0101	ILLINOIS ST	1.0101

Appendix: High Yield Bond Portfolio

Description	Weight	Description	Weight
ALLY FINANCIAL INC	1	POLYONE CORP	1
1011778 BC ULC / NEW RED FI	1	CSC HOLDINGS INC	1
T-MOBILE USA INC	1	VALEANT PHARMACEUTICALS INT	1
NAVIENT CORP	1	LENNAR CORP	1
COMMUNITY HEALTH SYSTEMS	1	AIRCASTLE LTD	1
WESTERN DIGITAL CORP	1	FELCOR LODGING LP	1
CDK GLOBAL INC	1	AES CORP	1
CSC HOLDINGS INC	1	CAESARS ENT RESORT PROP	1
TENET HEALTHCARE CORP	1	DONNELLEY R.R. & SONS CO	1
REYNOLDS GROUP	1	VALEANT PHARMACEUTICALS INT	1
CENTURY LINK	1	GRAY TELEVISION INC	1
ENDEAVOR ENERGY RESOURCES	1	CBS OUTDOOR AMERICAS CAPITAL	1
SINCLAIR TELEVISION GROUP	1	KB HOME	1
CLEAN HARBORS INC	1	NSG HOLDINGS II LLC	1
INVERNESS MEDICAL INNOV	1	NBTY INC	1
TENET HEALTHCARE CORP	1	ROCKIES EXPRESS PIPELINE	1
GOODYEAR TIRE & RUBBER	1	PARK AEROSPACE HOLDINGS LTD	1
CDW LLC CDW FINANCE	1	ENERGIZER HOLDINGS INC	1
NUMERICABLE GROUP SA	1	ISTAR FINANCIAL INC	1
RYLAND GROUP INC	1	ARDAGH PACKAGING FINANCE PL	1
INGLES MARKETS INC	1	MOOG INC	1
MHGE PARENT LLC / MHGE PARE	1	GROUP 1 AUTOMOTIVE INC	1
ARAMARK SERVICES INC	1	ZIGGO BOND FINANCE BV	1
EQUINIX INC	1	PBF HOLDING CO LLC	1
T-MOBILE USA INC	1	BLUELINE RENTAL FINANCE COR	1

Appendix: High Yield Bond Portfolio

Description	Weight	Description	Weight
LSC COMMUNICATIONS INC	1	ANGLO AMERICAN CAPITAL PLC	1
WOLVERINE WORLD WIDE INC	1	WEATHERFORD INTL LTD	1
SIMMONS FOODS INC	1	MARTIN MIDSTREAM PARTNERS	1
FREEPORT-MCMORAN C & G	1	ECLIPSE RESOURCES CORP	1
CVR REFINING LLC	1	NABORS INDUSTRIES INC	1
CLIFFS NATURAL RESOURCES	1	PRECISION DRILLING CORP	1
CALPINE CORP	1	EURAMAX INTERNATIONAL INC	1
MALLINCKRODT INTL FIN	1	SUBURBAN PROPANE PARTNERS	1
SPECTRUM BRANDS INC	1	SEALED AIR CORP	1
TIME INC	1	IPALCO ENTERPRISES INC	1
JLL/DELTA DUTCH NEWCO BV	1	TRIUMPH GROUP INC	1
BROOKFIELD RESIDENTIAL PROP	1	TRIUMPH GROUP INC	1
PRESTIGE BRANDS INC	1	JO-ANN STORES HOLDINGS INC	1
TECK COMINCO LIMITED	1	SAFEWAY STORES INC	1
ABENGOA YIELD PLC	1	HILCORP ENERGY/FINANCE	1
GULFPORT ENERGY CORP	1	DIAMOND OFFSHORE DRILLING	1
BOISE CASCADE LLC	1	BON-TON STORES INC	1
DCP MIDSTREAM LLC	1	CNF INC	1
SABRE INC	1	DENBURY RESOURCES INC	1
CONSOL ENERGY INC	1	VIRGIN AUSTRALIA HOLDINGS L	1
TRANSOCEAN INC	1	HCA - THE HEALTHCARE CO	1
VALVOLINE FINCO TWO LLC	1	EV ENERGY PARTNER LP	1
PARTY CITY HOLDINGS INC	1	JONES ENERGY HOLDINGS LLC	1
PILGRIMS PRIDE CORP	1	ARCELORMITTAL	1
STERIGENICS-NORDION TOPCO	1	SUNGARD AVAILABILITY SERVIC	1

Appendix: Small Cap Equity Portfolio

Ticker	Name	Weight	Ticker	Name	Weight
MBFI	MB FINANCIAL INC	2.679	HSKA	HESKA CORP	1.103
ATW	ATWOOD OCEANICS INC	1.998	ICD	INDEPENDENCE CONTRACT DRILLI	1.065
SRPT	SAREPTA THERAPEUTICS INC	1.899	AXON	AXOVANT SCIENCES LTD	1.06
GOGO	GOGO INC	1.896	CCOI	COGENT COMMUNICATIONS HOLDIN	1.047
TRUE	TRUECAR INC	1.872	EBS	EMERGENT BIOSOLUTIONS INC	1.046
WTW	WEIGHT WATCHERS INTL INC	1.615	MGEE	MGE ENERGY INC	1.043
IESC	IES HOLDINGS INC	1.547	KVHI	KVH INDUSTRIES INC	1.028
IRBT	IROBOT CORP	1.503	ZAGG	ZAGG INC	1.027
LORL	LORAL SPACE & COMMUNICATIONS	1.501	FIBK	FIRST INTERSTATE BANCSYS-A	0.975
PEN	PENUMBRA INC	1.474	GNW	GENWORTH FINANCIAL INC-CL A	0.953
GAIA	GAIA INC	1.474	THC	TENET HEALTHCARE CORP	0.923
FCN	FTI CONSULTING INC	1.463	TGTX	TG THERAPEUTICS INC	0.922
SBGI	SINCLAIR BROADCAST GROUP -A	1.459	OB	ONEBEACON INSURANCE GROUP-A	0.912
KBR	KBR INC	1.455	DHIL	DIAMOND HILL INVESTMENT GRP	0.912
DDD	3D SYSTEMS CORP	1.432	HCI	HCI GROUP INC	0.888
EARN	ELLINGTON RESIDENTIAL MORTGA	1.401	TDOC	TELADOC INC	0.886
UCBI	UNITED COMMUNITY BANKS/GA	1.346	HALO	HALOZYME THERAPEUTICS INC	0.847
EDR	EDUCATION REALTY TRUST INC	1.259	RCII	RENT-A-CENTER INC	0.836
GPX	GP STRATEGIES CORP	1.252	UBNT	UBIQUITI NETWORKS INC	0.824
IART	INTEGRA LIFESCIENCES HOLDING	1.251	CMT	CORE MOLDING TECHNOLOGIES IN	0.809
GTY	GETTY REALTY CORP	1.235	BATRK	LIBERTY MEDIA CORP-BRAVES C	0.805
CDE	COEUR MINING INC	1.224	KODK	EASTMAN KODAK CO	0.799
AEO	AMERICAN EAGLE OUTFITTERS	1.207	FLXS	FLEXSTEEL INDS	0.772
DPLO	DIPLOMAT PHARMACY INC	1.184	MDSO	MEDIDATA SOLUTIONS INC	0.771
MNR	MONMOUTH REAL ESTATE INV COR	1.169	MBCN	MIDDLEFIELD BANC CORP	0.763

Appendix: Small Cap Equity Portfolio (cont.)

Ticker	Name	Weight	Ticker	Name	Weight
ESCA	ESCALADE INC	0.763	ICUI	ICU MEDICAL INC	0.486
MPAA	MOTORCAR PARTS OF AMERICA IN	0.753	LFGR	LEAF GROUP LTD	0.485
RTEC	RUDOLPH TECHNOLOGIES INC	0.744	MOFG	MIDWESTONE FINANCIAL GROUP I	0.46
RRR	RED ROCK RESORTS INC-CLASS A	0.738	USPH	U.S. PHYSICAL THERAPY INC	0.457
LIND	LINDBLAD EXPEDITIONS HOLDING	0.727	PIR	PIER 1 IMPORTS INC	0.451
EVH	EVOLENT HEALTH INC - A	0.724	TLYS	TILLY'S INC-CLASS A SHRS	0.447
KPTI	KARYOPHARM THERAPEUTICS INC	0.705	SNC	STATE NATIONAL COS INC	0.434
AZPN	ASPEN TECHNOLOGY INC	0.696	FONR	FONAR CORP	0.426
NR	NEWPARK RESOURCES INC	0.693	CPS	COOPER-STANDARD HOLDING	0.421
AGX	ARGAN INC	0.682	BOLD	AUDENTES THERAPEUTICS INC	0.416
VICR	VICOR CORP	0.662	IXYS	IXYS CORPORATION	0.4
SXT	SENSIENT TECHNOLOGIES CORP	0.631	AMKR	AMKOR TECHNOLOGY INC	0.378
DVAX	DYNAVAX TECHNOLOGIES CORP	0.626	VSI	VITAMIN SHOPPE INC	0.377
FSS	FEDERAL SIGNAL CORP	0.593	TERP	TERRAFORM POWER INC - A	0.363
FPO	FIRST POTOMAC REALTY TRUST	0.578	PAY	VERIFONE SYSTEMS INC	0.362
WAIR	WESCO AIRCRAFT HOLDINGS INC	0.572	PEGA	PEGASYSTEMS INC	0.353
FMBH	FIRST MID-ILLINOIS BNCSHS	0.569	DCO	DUCOMMUN INC	0.353
VEC	VECTRUS INC	0.559	AFI	ARMSTRONG FLOORING INC	0.343
NUTR	NUTRACEUTICAL INTL CORP	0.553	BNFT	BENEFITFOCUS INC	0.336
OKTA	OKTA INC	0.518	VRNS	VARONIS SYSTEMS INC	0.328
XOXO	XO GROUP INC	0.505	ENT	GLOBAL EAGLE ENTERTAINMENT I	0.327
GLRE	GREENLIGHT CAPITAL RE LTD-A	0.503	SND	SMART SAND INC	0.322
EFSC	ENTERPRISE FINANCIAL SERVICE	0.496	INAP	INTERNAP CORP	0.322
WMC	WESTERN ASSET MORTGAGE CAPIT	0.493	CSFL	CENTERSTATE BANKS INC	0.316
HMHC	HOUGHTON MIFFLIN HARCOURT CO	0.487	TIPT	TIPTREE INC	0.315

Appendix: Small Cap Equity Portfolio (cont.)

Ticker	Name	Weight	Ticker	Name	Weight
TCX	TUCOWS INC-CLASS A	0.308	MDP	MEREDITH CORP	0.214
GPRE	GREEN PLAINS INC	0.307	CYBE	CYBEROPTICS CORP	0.214
PWOD	PENNS WOODS BANCORP INC	0.306	CLDT	CHATHAM LODGING TRUST	0.21
ARTNA	ARTESIAN RESOURCES CORP-CL A	0.298	BREW	CRAFT BREW ALLIANCE INC	0.209
RXDX	IGNYTA INC	0.296	SOI	SOLARIS OILFIELD INFRAST-A	0.196
MCF	CONTANGO OIL & GAS	0.295	CALX	CALIX INC	0.195
GABC	GERMAN AMERICAN BANCORP	0.292	KRG	KITE REALTY GROUP TRUST	0.192
GLNG	GOLAR LNG LTD	0.289	CLW	CLEARWATER PAPER CORP	0.19
KRO	KRONOS WORLDWIDE INC	0.288	LYTS	LSI INDUSTRIES INC	0.174
CMRX	CHIMERIX INC	0.28	NDLS	NOODLES & CO	0.172
PFS	PROVIDENT FINANCIAL SERVICES	0.279	NPO	ENPRO INDUSTRIES INC	0.171
BSTC	BIOSPECIFICS TECHNOLOGIES	0.269	WBMD	WEBMD HEALTH CORP	0.17
SONS	SONUS NETWORKS INC	0.263	NATH	NATHAN'S FAMOUS INC	0.169
HOME	AT HOME GROUP INC	0.251	NNA	NAVIOS MARITIME ACQUISITION	0.169
CUNB	CU BANCORP	0.251	CWT	CALIFORNIA WATER SERVICE GRP	0.163
NGHC	NATIONAL GENERAL HLDGS	0.241	KAMN	KAMAN CORP	0.162
STRP	STRAIGHT PATH COMM- B	0.239	APAM	ARTISAN PARTNERS ASSET MA -A	0.159
ORM	OWENS REALTY MORTGAGE INC	0.238	RECN	RESOURCES CONNECTION INC	0.153
QTS	QTS REALTY TRUST INC-CL A	0.235	EXA	EXA CORP	0.152
DEPO	DEPOMED INC	0.225	GNCA	GENOCEA BIOSCIENCES INC	0.149
MGRC	MCGRATH RENTCORP	0.224	DK	DELEK US HOLDINGS INC	0.145
NWPX	NORTHWEST PIPE CO	0.219	DIN	DINEEQUITY INC	0.142
MTH	MERITAGE HOMES CORP	0.217	AOSL	ALPHA & OMEGA SEMICONDUCTOR	0.14
LNCE	SNYDERS-LANCE INC	0.216	SAFT	SAFETY INSURANCE GROUP INC	0.139
SJW	SJW GROUP	0.215	WNEB	WESTERN NEW ENGLAND BANCORP	0.133

Appendix: Small Cap Equity Portfolio (cont.)

Ticker	Name	Weight	Ticker	Name	Weight
SKYW	SKYWEST INC	0.127	EXPR	EXPRESS INC	0.053
GRC	GORMAN-RUPP CO	0.118	RETA	REATA PHARMACEUTICALS INC-A	0.052
NX	QUANEX BUILDING PRODUCTS	0.115	DNR	DENBURY RESOURCES INC	0.052
FBIZ	FIRST BUSINESS FINANCIAL SER	0.113	IHC	INDEPENDENCE HOLDING CO	0.052
AXAS	ABRAXAS PETROLEUM CORP	0.112	TSBK	TIMBERLAND BANCORP INC	0.052
TROX	TRONOX LTD-CL A	0.1	ATLO	AMES NATIONAL CORP	0.051
KOP	KOPPERS HOLDINGS INC	0.099	ITIC	INVESTORS TITLE CO	0.048
KEM	KEMET CORP	0.098	BRKL	BROOKLINE BANCORP INC	0.045
DOOR	MASONITE INTERNATIONAL CORP	0.097	ESSA	ESSA BANCORP INC	0.045
NVRO	NEVRO CORP	0.095	CCS	CENTURY COMMUNITIES INC	0.045
ZOES	ZOE'S KITCHEN INC	0.095	MTNB	MATINAS BIOPHARMA HOLDINGS I	0.045
PMC	PHARMERICA CORP	0.087	KRNY	KEARNY FINANCIAL CORP/MD	0.042
LQDT	LIQUIDITY SERVICES INC	0.085	CRY	CRYOLIFE INC	0.04
NNI	NELNET INC-CL A	0.083	BBGI	BEASLEY BROADCAST GRP INC -A	0.038
KINS	KINGSTONE COS INC	0.083	RUTH	RUTH'S HOSPITALITY GROUP INC	0.038
ABCB	AMERIS BANCORP	0.081	PEBO	PEOPLES BANCORP INC	0.034
BXS	BANCORPSOUTH INC	0.078	PETX	ARATANA THERAPEUTICS INC	0.031
MYRG	MYR GROUP INC/DELAWARE	0.073	CTO	CONS TOMOKA LAND CO-FLORIDA	0.029
ASIX	ADVANSIX INC	0.072	CNTY	CENTURY CASINOS INC	0.029
INOV	INOVALON HOLDINGS INC - A	0.07	SIFI	SI FINANCIAL GROUP INC	0.024
AFSI	AMTRUST FINANCIAL SERVICES	0.068	NVLN	NOVELION THERAPEUTICS INC	0.021
TPHS	TRINITY PLACE HOLDINGS INC	0.068	GLDD	GREAT LAKES DREDGE & DOCK CO	0.018
RUSHB	RUSH ENTERPRISES INC - CL B	0.061	PICO	PICO HOLDINGS INC	0.017
GNRT	GENER8 MARITIME INC	0.059	PMTS	CPI CARD GROUP INC	0.015
CCXI	CHEMOCENTRYX INC	0.054	INBK	FIRST INTERNET BANCORP	0.011

<u>Appendix D: Sample Questions for the SEC's and Staff's Consideration in Exploring Vendor Readiness</u>

As the Commission and staff evaluate vendor readiness, you may wish to consider exploring the following questions with vendors:

- When do you anticipate your product being substantially complete? What is left to do? Once it is substantially complete, how do you see it evolving over the next few years?

- Do you presently have gaps in your asset coverage (*i.e.*, within the universe of instruments in which the fund industry invests)? If so, what are they, and how are you addressing them? Do you anticipate having full asset coverage in the future? If so, when? Assuming you anticipate having gaps when the compliance date arrives, what would you recommend that a fund client do to address those gaps?

- What do you regard as the most challenging aspects of developing solutions for this rule? What has surprised you?

- To what extent will your products be customizable? Which types of inputs do you anticipate needing from funds and their advisers to bucket assets? How does this make rule implementation harder?

- How do you intend to bucket assets for which trading data is limited (*e.g.*, OTC instruments)?

- Are there instruments that are posing particular challenges with respect to bucketing? If so, how are you dealing with them?

- Can you describe how fund advisers will interact with your products? For sub-advised funds, will sub-advisers be able to interact with your products, and if so, how?

- What is the nature of your interactions with prospective fund complex customers? To what extent does fund complex due diligence on your firm involve personnel from different functional areas of your firm?

- How have you prepared to handle the anticipated large volume of onboarding requests and development needs from numerous fund complexes? How, if at all, has your staffing changed to accommodate this?

- Do you have enough capacity systematically and personnel-wise to handle the large amount of work within the current compliance timeframe, and on an ongoing basis thereafter?

- Once a fund "hires" you, what kind of work will remain (*e.g.*, testing, conceptual modifications, systems builds), for both you and the fund complex, prior to the compliance date?

- What will be the nature of collaboration thereafter?

- What would be the benefits to your firm to a delay in the rule's compliance dates? What would be the costs?

Appendix E: Registered Funds' Use of Service Providers

Registered Funds' Use of Service Providers

Registered funds are typically externally managed. They have no employees in the traditional sense, and instead use affiliated and unaffiliated service providers to invest fund assets and carry out other business activities, under the oversight of the fund's board of directors. Selection and onboarding of a new vendor or a new service from an existing vendor requires extensive due diligence and oversight considerations by funds. The following discussion provides an overview of the typical activities fund management companies undertake when initiating or expanding a vendor relationship.

Selection, Onboarding, and Ongoing Oversight of Service Providers

Both the management company and the board of directors of a registered fund focus considerable time and attention on the selection of the fund's service providers and ongoing oversight of service providers as part of the regular day-to-day activities for operating the fund. They do this not only for regulatory compliance reasons but also to safeguard the interests of fund investors, ensure proper business functioning, and protect the investment adviser's reputation.

Selection of Service Providers

Selection of a key service provider for the fund (or, frequently, for several or all funds in a "fund complex") is an extensive and resource intensive undertaking generally beginning with a request for proposal (RFP) process. The RFP is used to gather information from service providers offering a specific service. Typically, the RFP gathers information related to:

- the service provider's history and reputation, including client references;
- the experiences of similar funds serviced by the provider, and the provider's history of client retention;
- the service provider's financial condition and ability to devote resources to the fund;
- the experience, quality and tenure of the service provider's staff;
- the services to be provided, including systems capabilities;
- the service provider's internal controls and compliance policies and procedures;
- the service provider's insurance coverage;
- the service provider's controls and procedures regarding information security and the protection of customer data;

- third party assurance reports on the service provider's controls and the implementation of its compliance policies and procedures; and

- details of the service provider's business continuity plans and capabilities.

Personnel tasked with the selection process will undertake a lengthy due diligence process that typically includes a review of the service provider's regulatory and disciplinary history, and includes site visits and other meetings to gain a better understanding of the service provider's capabilities and operating environment, testing and contingency planning.

The extent of the due diligence process typically varies depending on the internal risk categorization of the service provided. For high risk functions, or what is commonly referred to as category one (for example, a core function such as fund accounting), enhanced due diligence is required. We believe that service providers for the liquidity rule would fall under the high-risk category since the rule introduces significant multi-disciplinary day-to-day tasks and new regulatory reporting obligations.

Discussions with a potential service provider will include, among other things, negotiations with respect to contractual terms, various service level agreements,[1] penalties for failing to meet agreed-upon service levels, reporting or certification related to business continuity planning and tests, and expected servicing metrics and related reporting. The fund board may review and approve the final contract of a key service provider such as the provider chosen to assist the fund in complying with the liquidity rule.

Once the vendor is chosen, activities shift toward implementation of the services and building the governance structure— a lengthy process that involves implementation of vendor management procedures. These procedures allow for close monitoring of critical service provider functions ensuring sound business continuity and data security practices for both the new service and any related data exchange processes. Fund companies also must prepare to mitigate any disruptions or impacts to the service or the vendor's performance.

Governance also requires operationalizing contract provisions such as establishing key performance indicators and other performance metrics, determining the need for vendor updates to the management company and the board, and creating contingency plans, which includes establishing notification and escalation protocols in the case of a service disruption.

Since many of the requirements mandated by the liquidity rule are new, fund companies will need to develop and build out an entirely new process to connect the vendor feeds to their own systems to consume inputs and interpret data into the desired outputs. The integration process is highly technical, time consuming, and will vary in complexity from one fund company to the next depending

[1] A service level agreement is an agreement between parties that describes services to be provided including specified performance metrics (*e.g.*, processing quality, processing turnaround times, and system availability) and penalties for failure to meet those metrics.

on the internal systems and structure they use. Such integration will require cross-functional working groups to perform analyses and develop specifications to ensure that all touch points are considered, and appropriate systems are constructed, tested and fully integrated.

As discussed above, fund companies may be using multiple vendors to cover asset classes (or for other reasons), or creating internal capabilities for certain asset classes while using a vendor for the remainder. This combined approach adds additional complexity and time to the technical development and integration process, as additional testing routines are required to ensure accurate and timely integration between vendor and proprietary systems.

Depending on the complexity of the relationship with the vendor and the criticality of the service, the onboarding process can take from several months to more than a year to complete. Since much of the process depends on a clear and thorough understanding of what the service is and how it will be provided, completion of all the onboarding activity cannot occur until the service is ready for use. Contracts must be finalized. Systems and data feeds must be developed. Testing scenarios will need to be drafted and tailored to the investment strategy of each fund. Sub-advisers (if applicable) will need to be incorporated into testing routines. Staff will need training in using and troubleshooting the new system. Existing policies and procedures need to be reviewed and edited. New policies and procedures need to be drafted, reviewed and approved specific to the new service. Connections for data feeds between the vendor and the fund need to be established, tested and put into production.

Timely implementation may be impacted by the relatively few number of vendors offering liquidity management services. Since most of the fund industry must meet the current December 1, 2018 compliance date, there will be significant pressure on the vendors to onboard the funds as new clients onto their systems. With the large number of funds likely to use vendors in significant ways, vendors' onboarding resources will be stressed. This could lead to incomplete or inaccurate installation of services, causing additional delays to operationalize the new systems. Providing the requested delay will allow for a smoother onboarding of the new services for both funds and vendors.

<u>Ongoing Oversight of Service Providers</u>

Registered funds have comprehensive programs for oversight of their critical service providers. The contracts between a fund and its service providers include terms relating to such oversight, as well as escalation protocols and procedures.[2] Similar to the methods used for initial due diligence, oversight tools for existing service providers may include, but are not limited to:

- enforcement of service level agreements and corresponding reporting;

[2] Escalation protocols and procedures outline the process including timing for escalating an issue, concern, or failure to fund senior management and CCO as appropriate.

- third party assurance reports (*e.g.*, a SOC 1 Report, *Service Organization Controls Report*);[3]

- periodic site visits;

- regularly scheduled meetings to discuss issues, concerns, long-term strategies and ongoing projects;

- evaluations of daily interactions and processes, including whether the service provider has provided adequate cooperation and support regarding the resolution of any errors;

- reports regarding the departure of any key personnel at the service provider and whether such departure(s) has had, or is expected to have, an effect on the quality of services rendered to the fund;

- ongoing monitoring of regulators' websites and news media that may raise "red flags" about the service provider's ability to meet its contractual obligations;

- required reporting of specific metrics;

- periodic certifications or questionnaires;

- required reporting of business continuity tests and readiness; and

- regular reporting to the adviser's senior management and the fund board.

Although ongoing oversight occurs after a new service is in production, planning and preparation for oversight of the service provider must be completed before the service is in use. Because the liquidity rule is new, funds will need to complete an extensive assessment of their new services and how they will be incorporated into existing oversight programs (and possibly how those programs may need to be augmented to meet the oversight needs of the new liquidity service providers). This assessment and oversight program development may run concurrently with other due diligence efforts but as with all the other activities, the oversight program cannot be finalized until the service offering is complete and available for thorough review by the fund.

[3] SOC 1 reports are prepared by an independent public accountant in accordance with the AICPA's Auditing Standards Board's Statement on Standards for Attestation Engagements No. 18, *Attestation Standards: Clarification and Recodification*. Such reports are designed to meet the needs of the management of user entities and the user entities' auditors, as they evaluate the effect of the controls at the service provider on the user entities' financial statement assertions.