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Invested in America

| asset management group

September 12, 2017

Chairman Jay Clayton
Commissioner Kara Stein
Commissioner Michael Piwowar
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Open-End Fund Liquidity Risk Management Programs Rule – Request for Extension of Compliance Date, Interpretive Guidance, and Consideration of Targeted Changes to the Rule

Dear Chairman Clayton, Commissioner Stein, and Commissioner Piwowar:

We are writing to express our sincere appreciation of your willingness to hear and respond to the concerns that have arisen in the course of our Members' efforts to implement the Commission's new Rule 22e-4 over the eleven-month period since the Rule was adopted last October, and which we described during our meetings at the Commission in July. We would also like to explain further our reasons for requesting an extension of the compliance deadline for the rule, in response to your questions and observations during those meetings.[1]

Our Members support the Commission's goal of raising standards for liquidity risk management across the industry, and have been working diligently toward compliance since the rule's adoption. However, as we hoped to convey during our meetings, they have encountered significant and fundamental difficulties in their efforts to achieve compliance with the classification requirement of the rule by December 1, 2018, the current deadline. As a result, on behalf of our Members, we respectfully request prompt Commission action to delay the compliance date for the classification requirement for at least six months.

This extension period would serve three important purposes.

i. It would allow our Members the time to build and adequately test the complex systems necessary to develop their classification infrastructure.

[1] AMG's members represent U.S. asset management firms whose combined global assets under management exceed $34 trillion. The clients of SIFMA AMG member firms include, among others, tens of millions of individual investors, registered investment companies, endowments, public and private pension funds, UCITS and private funds such as hedge funds and private equity funds.

ii. It would allow time for the Commission and its staff to consider and address the industry's requests for interpretive guidance, many of which could significantly affect how the infrastructure should be built.

iii. Finally, the extension would provide the Commission time to consider targeted changes to the rule, in particular the classification requirement, in light of the lessons learned during the implementation process about the rule's operation in practice.

In the meantime, our Members will continue to work diligently toward complying with the core requirement of the rule – adopting formal liquidity risk management programs designed to prevent investors from suffering significant dilution from redemptions – in time for the Commission's original December 1, 2018, deadline.

I. Summary of Implementation Challenges Encountered by Our Members

The open-end fund management industry in the U.S. is highly diverse, and the challenges faced by firms in complying with the new classification requirement prescribed by Rule 22e-4 reflect that diversity. Components of diversity in fund groups include, among others, a wide spectrum of asset classes, investment methods and strategies, size and culture of the management firm, and allocation of advisory responsibilities (for example, by use of sub-advisers). Our Members believe that this diversity, which enriches the options available for fund investors, is one of the great strengths of the U.S. fund industry.

Given this diversity, firms have historically taken different approaches to managing liquidity risk, including different approaches to assessing and classifying liquidity. The Rule 22e-4 classification requirement, by contrast, imposes a single, newly created classification methodology on all funds. As can be expected, the distance that different firms must travel to arrive at the Rule 22e-4 methodology, and the means of getting there, will thus differ widely.

However, while our Members' experiences in implementing the new classification requirement have varied, and not all of them have experienced the same challenges to the same extent, the consensus is strong that an extension of the deadline is necessary. The implementation challenges most commonly described to us include the following:

- The classification methodology prescribed by Rule 22e-4 in its final form is more complex in practice than was apparent from the face of the rule and, we believe, more complex than the Commission intended. It has proven difficult in practice to build classification models that incorporate the numerous objective and subjective factors dictated by the new Rule 22e-4 methodology.

- The Rule 22e-4 classification methodology contemplates the use of data that is currently not readily available for many important asset classes, most notably fixed income securities.

- For these and other reasons, vendors, who were expected to provide classification products and services to facilitate fund compliance, are themselves delayed in being able to offer these products and services and are yet to be in a position to have complete and operational products ready for funds to evaluate. This lack of vendor readiness is both an impediment in itself – funds deciding whether to "build or buy" a classification system cannot yet make that decision – and a bellwether indicating the difficulty of the task.

- If the December 1, 2018 compliance date remains unchanged, the difficulties and delays described above will shorten the time for model validation, testing, service provider oversight, and implementation of cybersecurity and disaster recovery protections, all critical components of building an effective and lasting technology-dependent infrastructure. They will also shorten the period for Board review and approval.

- Members that manage funds by engaging unaffiliated sub-advisers have additional difficulties and time pressures relating to sharing of information and reconciling classifications across sub-advisers and with their own programs, while the sub-advisers must coordinate with the programs and different requirements of numerous advisers and their chosen vendors. These coordination efforts cannot make significant progress until vendors can be evaluated and selected and other threshold issues have been resolved.

- The classification requirement raises fundamental interpretive issues that must be addressed before systems can be built in an efficient and effective manner. The industry, both through trade groups and individual firms, is in the process of requesting guidance to resolve those issues through formulation and submission of frequently asked questions ("FAQs"). In this letter, we describe three areas where guidance will be critical to orderly implementation of the rule: (1) furthering the Commission's goals of simplifying and standardizing the Rule 22e-4 classification methodology; (2) clarifying responsibility for different elements of Rule 22e-4 compliance in multi-manager and other sub-advised fund structures; and (3) providing a meaningful definition of the term "in-kind ETFs," which are exempt from the classification and highly liquid investment minimum requirements of Rule 22e-4.[2]

- The Commission has stated its intention to make the Rule 22e-4 classifications publicly available, on a quarterly basis, at the portfolio level. Our Members believe that public dissemination of this information will be confusing and misleading for investors. These concerns are heightened in a compliance scenario that shortens testing periods and truncates time available for other normal data protection protocols, and thus support the need for an extension of the compliance deadline. For the same reasons, we further believe that any public reporting of the classifications should be subject to an additional testing period of at least six months following the extended compliance date. More fundamentally, for the reasons addressed at the end of this letter, we urge the Commission to reconsider its decision to make the classification information public and instead to require reporting of this information to the Commission on a non-public basis only.

A prompt extension of the compliance date for the classification requirement will provide the industry with the breathing room it needs to build, implement and test the necessary systems in an orderly and prudent manner that will, in the long term, achieve a better infrastructure for complying with Rule 22e-4 and better stand the test of time. The extension will also give the Commission and staff time to provide the guidance necessary to ensure that systems are built to reflect the rule and classification requirement as intended. We ask for prompt action because our Members are concerned that if the Commission waits to extend the compliance date until after the interpretive guidance is provided, the risk is that much of the effort and expense of implementation will have to be incurred twice.

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2 Rule 22e-4 includes a highly liquid investment minimum requirement, and funds subject to this requirement must set a percentage of the fund's net assets that are invested in highly liquid investments and must have policies and procedures for responding to a shortfall.

Finally, we believe that in reviewing these matters, and considering the requests for interpretive guidance, the Commission will recognize that concerns raised by certain aspects of Rule 22e-4 present are fundamental and cannot be cured by delay and interpretive guidance alone. Extension of the compliance date will provide the Commission with an opportunity to consider changing those aspects of the rule before additional resources are expended.

II. Discussion of Implementation Challenges Raised by the Classification Requirement

A. Unanticipated Complexity of the Rule 22e-4 Classification Methodology

1. Purpose of the Rule 22e-4 Classification Requirement

As the Commission's release accompanying the adoption of Rule 22e-4 (the "Adopting Release") makes clear, the goal of the classification requirement is to provide a simplified and workable classification system that will provide meaningful liquidity data to the Commission and the public, in order to help the Commission perform its regulatory functions and to help investors make better investment decisions by comparing liquidity across funds.[3] To that end, liquidity classifications for each holding are to be reported to the Commission on a monthly basis, on new Form N-PORT, 30 days after month end, and portfolio level liquidity (the percentage of a fund's portfolio in each category) is to be made public for investors on a quarterly basis, 60 days after the end of the quarter.

In our view, therefore, the classification requirement is best understood as primarily a data collection, reporting, and disclosure requirement, and not in itself a liquidity risk management tool.[4] Accordingly, our discussion of the Rule 22e-4 methodology focuses on whether the data reported can, in fact, be meaningful, reliable, and comparable across funds.

2. The Classification Methodology in Practice

In the final rule, the Commission, to its great credit, sought to respond to the virtually universal opposition to the classification system as originally proposed that was expressed during the comment process. These comments expressed a consensus that, among other objections, the multiple bucket "days-to-liquidate" classification requirement for each portfolio holding at a moment in time, as originally proposed, would create a false sense of precision in liquidity assessment, which is by nature dynamic and subjective; the requirement, which involved imposing a single novel classification methodology on all funds, would require massive initial and ongoing expenditures of money and resources; and, due to the subjective nature of the components of the methodology, the data produced and reported on Form N-PORT would not be standardized and comparable across funds and thus would not achieve the primary goal of liquidity classification and reporting. In connection with this last objection, the greatest concern was that retail investors, who lack the context and sophistication to understand the limits of the point-in-time classification scoring system, would be confused or even misled by

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[3] Investment Company Liquidity Risk Management Programs, Release Nos. 33-10233, IC-32315 (Oct. 13, 2016), 81 Fed. Reg. 82142, 82169 (Nov. 18, 2016).

[4] Fund groups commented during the rulemaking process that although they had developed their own tailored classification systems for liquidity risk management, they were not likely to use a "one-size-fits-all" classification system designed for Commission reporting for that purpose.

using this information to make investment decisions, instead of relying on the fund prospectus, which the Commission has designed, over the course of decades, for exactly that purpose.

In the process of implementing the classification requirement, however, and despite the Commission's intent to simplify the classification methodology, our Members have found that many of the concerns raised in the comment process persist and were not solved by the changes adopted. In practice, the Rule 22e-4 classification methodology is far more complex and subjective than is at first evident from reading the words on the page and, we believe, than the Commission intended.[5] The following "walk-through" of the rule is intended to provide a foundation for understanding the challenges that have emerged from the terms of the rule during the implementation process.

Overview

Under the specific requirements of Rule 22e-4, liquidity classification is a multi-step and multi-factor process, requiring the accumulation and analysis of both objective data and highly subjective judgments from a variety of sources. To highlight a few of the main sources of complexity and subjectivity: (1) the asset mapping exception requirement could impose an ongoing, perhaps daily, investment-by-investment monitoring obligation; (2) the "likely trade size" component requires individualized fund-by-fund classification of the same investment by funds within the same complex; and (3) the "significant value impact" and "market depth" components require subjective judgments on the future impact of hypothetical trades, in particular in fixed income and other markets where objective market data, such as trading volume, are not readily available. In addition, the reporting requirements adopted in conjunction with Rule 22e-4 appear to contemplate that this complex process will be conducted daily and, at least in some instances, on a pre-trade basis.

Components of the Rule 22e-4 Classification Methodology

The basic outline of the requirement is that each fund must classify each of its portfolio investments into one of the four categories listed below, based on the number of days reasonably expected to convert the investment to cash, or in some cases sell the investment, without the conversion to cash or sale significantly changing the investment's market value, under current market conditions.

> **Highly liquid** – cash or convertible into cash in three business days or less, without the conversion to cash significantly changing the market value of the investment;
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> **Moderately liquid** – convertible into cash in four to seven calendar days, without the conversion to cash significantly changing the market value of the investment;
>
> **Less liquid** – can be sold or disposed of, but not settled, in seven calendar days or less without the sale or disposition significantly changing the market value of the investment;
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> **Illiquid** – cannot be sold or disposed of in seven calendar days or less without the sale or disposition significantly changing the market value of the investment.

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5 The words "simplified," "simpler," and similar terms appear over a dozen times in the Adopting Release with reference to the Commission's goal in modifying the rule from the proposal.

Each fund must make this determination – choosing one of the four categories for each investment – using information obtained after reasonable inquiry and taking into account "relevant market, trading, and investment-specific considerations." The considerations that the Commission believes may be relevant to this process are not in the rule itself; however, the rule refers readers to the Adopting Release, which sets forth seven factors to be considered, as applicable: (a) existence of an active market/exchange trading; (b) frequency of trades or quotes/average daily trading volume; (c) volatility of trading prices; (d) bid-ask spreads; (e) standardization and simplicity of structure; (f) maturity and date of issue of fixed income securities; and (g) restrictions on trading/transfer.

The rule states that funds may generally classify and review investments according to their asset class, taking into consideration the factors listed above relative to the asset class (this is referred to as "asset class mapping"), and generally the process must be conducted on a monthly basis, in connection with reporting the liquidity classification for each investment on Form N-PORT, 30 days after the end of each month. However, despite the general instruction that funds may classify investments based on asset class, a proviso to the asset mapping instruction creates an exception process, which requires that each fund must *separately* classify and review any investment within an asset class if the fund or adviser has information about any market, trading, or investment-specific considerations that are reasonably expected to significantly affect the liquidity characteristics of that investment as compared to the fund's other portfolio holdings within that asset class. And despite the provision for monthly reporting, the same provision requires a fund to review classifications more frequently "if changes in relevant market, trading, and investment-specific considerations are reasonably expected to materially affect one or more of its investments' classifications."

Finally, Rule 22e-4 requires consideration of "market depth" in connection with the size of the position that the fund is likely to trade, both for asset class mapping and the exception process. As described in the Adopting Release, "Rule 22e-4 directs a fund to consider sizes that the fund would reasonably anticipate trading in assessing the impact of market depth on an investment's liquidity."[6] This means that the fund must base the "days to cash/sale" classification determination on whether the likely trade size for the investment is likely to have a significant market impact, and if so, change the liquidity classification accordingly.

3. Key Complexities and Subjective Elements

Taken as a whole, a number of components of the classification methodology substantially undermine the Commission's goal of achieving a simplified process that produces standardized liquidity data. The following are some of the most salient components that introduce complexity and subjectivity into the classification determination:

Exceptions to Asset Class Mapping. Asset class mapping, which was strongly urged in the comment process as a means of simplification and standardization and, we believe, was

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6 The rule itself does not use the term "market depth." Market depth is the term used in the Adopting Release to describe the following requirement of Rule 22e-4(b)(1)(ii)(B): "In classifying and reviewing its portfolio investments or asset classes (as applicable), the fund must determine whether trading varying portions of a position in a particular portfolio investment or asset class, in sizes that the fund would reasonably anticipate trading, is reasonably expected to significantly affect its liquidity, and if so, the fund must take this determination into account when classifying the liquidity of that investment or asset class."

adopted by the Commission in that spirit, is substantially undermined by the exception process. The exception requirement effectively takes away the simplicity and objectivity that asset class mapping was designed to provide, as it requires the fund or adviser to decide, on a holding-by-holding (CUSIP-by-CUSIP) basis, whether an exception is necessary.

Market and Trading Factors. The factors discussed in the Adopting Release rely heavily on market data. However, objective market data is not available for many asset classes, notably fixed income securities. This leaves the need for inferences, qualitative judgments, and statistical analyses in order to classify investments in those asset classes, leading to both subjectivity rather than standardization and a highly complex analytical process rather than simplification. Moreover, even when market data is available, there is currently no consensus on the methodology for using the data to arrive at the "days-to-cash/sale" determination required by the Rule 22e-2 methodology.

Significant Value Impact. Even the basic asset class mapping approach incorporates a substantial element of subjectivity, in that the "days to cash/sale" determination must assess whether there will be a "significant value impact." "Significant" is a subjective term that is not defined in the rule; moreover, impact on value requires a predictive judgment on market behavior that is inherently hypothetical, and thus will vary among managers (or others making the assessment).[7]

Intra-Month Review. The simplification that would be achieved by monthly determinations is undermined in two respects. First, the rule expressly requires more frequent classification "if changes in relevant market, trading, and investment-specific considerations are reasonably expected to materially affect one or more of its investments' classifications." Second, the exception process proviso to the asset class mapping instruction has the same effect. An investment's asset class will not change within the month, but specific considerations relating to the investment could, implying some obligation to keep interim classification tabs on each investment.

Likely Trade Size/Market Depth. This determination alone involves a number of subjective judgments made by personnel from a range of divisions and service providers performing different functions in or for a management organization.

First, the fund must determine, for each investment, what amount of that investment the fund is likely to sell (likely trade size). This, in turn, requires the fund to assess both redemption expectations (based on an analysis of both historical and anticipated net investor flow and redemption experience) and how such expected redemptions would be expected to be met (*e.g.,* by using cash or selling highly liquid investments first, by selling a pro rata "slice" of the portfolio, or by employing another optimization technique determined by the portfolio manager). A determination of the likely trade size, therefore, would require involvement of the fund's transfer agent and distribution functions (to evaluate fund flows) and the portfolio management team (which would determine how the portfolio would best be deployed to meet the request). These judgments would need to be combined to come up with the likely trade

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7 There are also other embedded elements of subjectivity in the basic requirement. For example, one of the considerations involves addressing the complexity of the investment's "structure." This will involve individual and subjective judgments both in (1) identifying the key attributes of the investment's structure and (2) analyzing how those attributes relate to liquidity.

size number, which would, given the assumptions about future events implicit in the exercise, necessarily be a hypothetical estimate.

Second, the hypothetical expected trade size must be evaluated for market impact based on market depth. As explained in the Adopting Release, this requires an evaluation of whether the market depth for an investment specifically in that trade size is reasonably expected to significantly affect its liquidity. If so, the fund is required to take this into account in classifying the liquidity of that investment.

The requirement to factor in market depth in relation to likely trade size greatly complicates, individualizes, and injects subjectivity into the classification process. First, it makes classification fund-specific, since for each fund the redemption patterns and portfolio manager determination of how to meet them (essential components of the likely trade size estimate) will differ. Second, for asset classes (such as fixed income securities) where the trading and market data that underlie a market depth determination are not readily available, gaps in the available data require inferences to be drawn on how the market will respond to different trade sizes (absence of market depth visibility in these asset classes is discussed further in the next section). While the market depth component appropriately recognizes the role played by portfolio management judgment in assessing and managing liquidity, this is not a mechanical process that can easily (if at all) be translated into an objective and scalable automated process.

B. Lack of Full Market Data Availability

Market data plays a critical role in the Rule 22e-4 classification methodology at key junctures throughout the multi-factor process. As a starting point, the classification requirement involves taking into account, as applicable, relevant market, trading, and investment-specific considerations, the majority of which, as explained in the Adopting Release, involve looking at market data – market activity, frequency of trades or quotes, average daily trading volume, trading price volatility, and bid-ask spreads. The ability to determine value impact, a key factor built into each of the four liquidity categories, is also dependent on the availability of relevant market data. Finally, trading volume history in the relevant market, or an appropriate analogue or substitute, is the starting point for factoring in the market depth component of the classification process.

These data points, in particular volume data, are currently not available for all asset classes, and tend to be least available where liquidity determinations may be most important. Significantly, trading and market volume data are not readily available for many fixed income securities, and currently there is no standard independent source for this data.[8] This poses a

[8] FINRA and the Commission have undertaken commendable efforts to improve the availability of data in the U.S. fixed income markets. However these efforts underscore the current absence of such information. FINRA is reducing the delay period applicable to certain historical transaction-level data for corporate bonds and agency debt, including Rule 144A transactions in such securities, from 18 months to six months, and the SEC recently approved a FINRA rule change that will provide aggregated statistics by security for TRACE-Eligible Securities that are corporate or agency bonds, with a 90-day delay. *See* FINRA Regulatory Notice 17-23 (July 2017); Self-Regulatory Organizations; Financial Industry Regulatory Authority, Inc.; Order Approving Proposed Rule Change To Make Available a New TRACE Security Activity Report, Release No. 34-81318 (Aug. 4, 2017), 82 Fed. Reg. 37484 (Aug. 10, 2017). While these changes will improve the timeliness and availability of fixed income trade data, there remain many fixed-income instruments, such as foreign debt securities and securities that are not Rule 144A securities, which are not TRACE-Eligible Securities. In addition, while there are

threshold challenge for performing a reliable "days to cash/sale" estimation for fixed income securities, in contrast to exchange-traded equities, where average daily trading volume can provide a foothold for such an estimation.

Because of the absence of market data for these asset classes, market depth, a critical factor in the Rule 22e-4 methodology, is not visible. In these markets, advanced statistical work needs to be done to infer what the liquidity is for these securities. In the absence of objective and readily available market data, our Members report using a variety of inputs to estimate the liquidity of fixed income securities, such as relying on spreads, option markets, and other reference data. However, to date the "science" of quantitative liquidity classification for fixed income securities is still developing and no consensus approach or standardized methodology has emerged.

As a result, applying the Rule 22e-4 classification system to fixed income securities, and other asset classes where trading and volume data are not readily available, must be based on more complex analyses, subjective judgments, and inferences, which will differ among managers and require more time to develop. Classifications based on such data and methodologies, or the lack thereof, necessarily will be subjective, inconsistent, and possibly unreliable.[9]

C. Technology Challenges

1. Need for an Automated Process

While funds have successfully been managing liquidity risk for decades, and many of their existing programs include liquidity classification systems tailored to their circumstances, the specific, highly prescriptive Rule 22e-4 liquidity classification methodology designed by the Commission is unique, novel, and untested. Fund complexes subject to the December 1, 2018, deadline may have dozens or hundreds of funds, each with at least dozens and sometimes thousands of individual portfolio holdings for which liquidity classifications must be determined under the new Rule 22e-4 methodology. Accordingly, even if classification were only a monthly, rather than an ongoing, exercise, a manual process is simply not feasible, and an automated, scalable, and repeatable process for classification is a pre-requisite for a workable compliance plan.

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excellent reasons for the six-month and 90-day delays, the fact remains that the delays will leave funds without needed current information even in TRACE-Eligible Securities.

In the European Union, the revised Markets in Financial Instruments Directive, commonly known as "MiFID II," will create a new data source for market data. However, that regulation has not yet taken effect and data resulting from the new regulations has not yet been assessed.

[9] Modelling approaches that incorporate "business rules" using qualitative risk factors may in some instances more accurately reflect the practical experience of liquidity for an individual trading desk, particularly in less observable markets such as fixed income. This will result in a more localized, idiosyncratic estimate of liquidity which may vary greatly from a given quantitative approach or, indeed, from another trading desk's perspective on the same position, simply based on anecdotal experience. In areas of the market lacking the depth of information readily available for publicly traded equity and corporate debt, this model dispersion may lead to a high degree of variance and ultimately diminish any attempts at normalization, aggregation, or multi-manager trend analysis.

The rule, therefore, requires building a new information technology ("IT") infrastructure to meet its unique specifications and to operationalize the many complexities, input channels, factors, judgments, and interactive components embedded in the rule.

2. Description of IT Challenges and Timeline Compression

Building the necessary infrastructure for automating the Rule 22e-4 classification methodology is a massive, highly sophisticated, multi-step IT undertaking that involves designing, constructing, connecting, and integrating systems across multiple entities.

Automation of the classification methodology requires, as a first step, designing and building (or purchasing from a vendor) one or more models that can aggregate the relevant data and factor in all of the considerations applicable to each of the fund's investments in accordance with the specifications of Rule 22e-4. Arguably, building the model correctly is the most critical step in determining compliance with the rule, because the classifications produced by the model will only be as "good" – defined as in accordance with the requirements of the rule – as the model itself. Accordingly, appropriate model validation, to evaluate the model's performance in producing Rule 22e-4 compliant classifications, is critical.[10] Firms will have varying levels of professionals with the requisite training to understand and evaluate the models, and they will need time to hire or retain qualified experts.[11] Model validation is especially critical for fixed income securities. Managers that build their own classification models for fixed income securities will need to perform this work themselves, and managers that hire vendors will need to understand and assess the statistical inference process used by the vendors.

Once the model is determined, through the validation process, to correctly reflect the Rule 22e-4 methodology, the infrastructure requires development of one or more algorithms to implement each model, followed by building the application programming interface to feed the relevant inputs into the algorithms from the various sources and ultimately to provide a path for directing the outcomes to the appropriate users (*e.g.*, portfolio managers and reporting systems). This involves building compatible data storage and transfer systems at each source, as well as establishing the connections. These data connections often must be built across separate entities with separate operations, involving both affiliated and unaffiliated service providers.

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10 As the National Institute of Standards and Technology has noted, model validation is possibly the most important step in the model building sequence, and it is also one of the most overlooked. National Institute of Standards and Technology, *NIST/SEMATECH e-Handbook of Statistical Methods*, § 4.4.4, http://www.itl.nist.gov/div898/handbook/pmd/section4/pmd44.htm (last visited Sept. 3, 2017). Model validation has been defined as the set of processes and activities intended to verify that models are performing as expected, in line with their design objectives and business uses. Effective model validation helps reduce model risk by identifying model errors, corrective actions, and appropriate use, and it provides an assessment of the reliability of a given model, based on its underlying assumptions, theory, and methods. Board of Governors of the Federal Reserve System and Office of the Comptroller of the Currency, Supervisory Guidance on Model Risk Management (Apr. 4, 2011), https://www.federalreserve.gov/supervisionreg/srletters/sr1107a1.pdf.

11 As discussed above, reflecting the subjective components of the methodology in the model is especially challenging when market data is not available. However, even where market data is available, there are different judgments made depending on the individual fund, asset class, and particular security involved.

Each component of the infrastructure introduces operational risk and requires adequate testing, both on a standalone and on an integrated basis. For example, in addition to the model validation process, the software must go through adequate validation testing, first for basic functionality (whether the algorithm correctly reflects the model so that the model functions as designed), and then beta testing over a sufficient period to determine whether the model's outputs match the predictions consistent with the rule's requirements. Once a fund group evaluates and selects the model, the system requires a custom installation that establishes the interface and integrates the necessary data feeds from each source of data. The system, as installed, must then be tested for functionality of the integrated data feeds. Finally, the fund must satisfy itself that the installation adequately addresses cybersecurity and disaster recovery risks. At every step of the way, given the newness and complexity of the undertaking, it can be expected that errors or failures will be detected and that adjustments will be necessary.

As described below, even specialists in the field (the vendors) have not yet succeeded in completing the first stage of this challenge – designing and building the necessary models. Evaluation of the models by funds, the IT build out (including data transfers between advisers and sub-advisers), testing, and implementation, accompanied by cybersecurity and disaster recovery risk protections, cannot begin until viable models are developed and are available to funds.

Further compressing the building and testing timeline is the requirement for Board approval. Implementation of the classification methodology and reporting requirements under the current rules involves significant expenditures, some of which will be borne by the funds, and exposure of the funds to liability for incorrect data. These are both areas that Boards will treat with the utmost seriousness, and on which they are likely to request substantial education and preparation before granting their approval. Based on our Members' experience, decisions of this complexity and magnitude take more than one Board meeting, and preparation of the Board for making the decision can span months. While schedules will vary, this means that management must have viable solutions in a relatively advanced phase of development, for presentation to the fund Board, long before December 1, 2018.

D. Lack of Vendor Readiness

In adopting the rule, the Commission assumed the existence of viable "vendor-based solutions" and discussed ways in which vendor assistance in the classification process could reduce the costs and resource strain that funds would otherwise bear in building the necessary Rule 22e-4 specific classification systems on their own.[12] At the time the rule was adopted, it was widely expected that third party vendors would be able to build models for aggregating relevant data and applying the Rule 22e-4 methodology, and these models would be available to assist funds in implementing the rule's classification methodology on a timely and relatively cost-efficient basis. A number of vendors encouraged expectations that this would be the case, and funds have awaited completion of the models to make the critical "build or buy" decision for their Rule 22e-4 compliance programs.

The reality at this point is that, for reasons beyond the control of our Members, the vendor models are not yet fully ready and available. There are no vendor products that adequately

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[12] Adopting Release, *supra* note 3, at 82240 (discussing vendor costs and stating that "we would expect the cost of a vendor-based solution, which would be partially amortized across all of its clients, to be lower").

cover all of the various asset classes in which open-end funds invest. Funds are unable to fully conduct diligence, select a provider or providers, run validation tests, address information security and business resilience needs, and obtain Board approval until those products are ready. In other words, for many funds, the implementation timeline is inherently dependent on the timeline of vendor solutions.

The earliest time frame now predicted for the availability of vendor models (for all but the most straightforward asset classes, such as exchange-traded equities) is the first quarter of 2018. For a variety of fixed income asset classes, where vendors face fundamental issues regarding how and where to source underlying market data, there is even less clarity on when the models will be ready. In those asset classes, funds evaluating the models will face additional challenges in that there may be little if any visibility into the vendors' methodology either for sourcing this critical data or for reflecting it in the model. In some cases vendors have built models but in fact do not have data sourcing solutions, and will be relying on data provided by asset manager users or their own affiliated pricing vendors.

The absence of vendor readiness at this point radically changes expectations for both the cost and speed of implementation. First, it delays one of the critical decision points in the compliance effort, which is determining whether to "build or buy" a classification system. This decision is stalled until viable solutions are available for evaluation and have been adequately tested. Funds that reasonably believed, based on vendor representations and the Commission's expectations, that vendor solutions would be available in time, are now caught in both a time and budget bind.

Second, the vendor experience shows that the "build or buy" decision itself is more complicated and fragmented than expected, since no vendor will cover all asset classes and financial instruments and each vendor product raises different issues for evaluation. Funds will have to evaluate multiple systems, and many will have to hire multiple vendors or fill substantial gaps in vendor coverage on their own.

Third, as described above, model design and validation, which is where the vendor process is still being held up, is only the first phase of building the infrastructure. Funds will need sufficient time following the initial design for their own satisfactory evaluation of the models, software development, building the interface, integrating the components, and testing the system as installed.

These vendors will play a pivotal role in generating information that will be reported to the Commission and, unless the rules are changed, to the general public. Funds and Boards will want to adhere strictly to, and not shortcut, their usual due diligence process for understanding the operational and other risks presented by their service providers.[13] In the same vein,

[13] As described by the Commission in its 2016 proposal to adopt rules requiring funds to adopt formal business continuity planning procedures, such due diligence could include: reviewing a summary of a service provider's business continuity plan; requiring the use of due diligence questionnaires; requiring the use of assurance reports on controls by an independent party; requesting certifications or other information regarding a provider's operational resiliency or implementation of compliance policies, procedures, and controls relating to its systems; reviewing results of any testing; and conducting onsite visits. While AMG opposed the proposed rule, we mention the proposal as an indication of how seriously the Commission normally treats the vetting of service providers for critical functions. *See* Adviser Business Continuity and Transition Plans, Release No. IA-4439 (June 28, 2016), 81 Fed. Reg. 43530, 43541 (July 5, 2016).

because of the importance and extent of fund information that will be held by these vendors, and transmitted between and among different entities, funds and Boards will not want to minimize their due diligence regarding vendor cybersecurity defenses.[14]

Importantly, the delay in readiness of vendor models is not just an impediment in itself, but also a bellwether, indicating that modeling the Rule 22e-4 methodology is harder than expected. Market leaders in this field have encountered challenges that so far they have not resolved. This is a cautionary tale in terms of assessing the task ahead for fund groups that were hoping to buy, but may be forced, for reasons beyond their control, into the build option in the face of vendor delays.

E. Additional Challenges for Sub-Adviser Structures

A significant portion of the fund industry uses a two-tiered advisory structure that involves an investment adviser and one or more sub-advisers (depending on the specific structure, these funds are referred to as sub-advised, manager-of-manager, or multi-manager funds). In this structure, the adviser provides overall management, while the sub-adviser is responsible for day-to-day portfolio management. The use of sub-advisers facilitates the use of high level, sophisticated portfolio management capabilities in an efficient, lower cost structure. Some of the most sought-after and successful (from the investor's point of view) funds fall in this category. Many of our Members are on both sides of these arrangements (they serve as advisers for some funds and sub-advisers for others).

In the context of the liquidity classification requirement, the two-tiered advisory structure adds layers of complexity into the process. Neither the adviser nor the sub-adviser will have, in the ordinary course of business, all of the information necessary for the multi-factor process. At the most basic level, the adviser will be the repository of fund flow information, a necessary (although not sufficient) component for determining likely trade size. The adviser typically will also be responsible for complex-wide compliance and will be in control of the resources expended at the fund and adviser level. The sub-adviser, on the other hand, will have the overall sense of the portfolio's liquidity, the best way to meet redemptions, and depth of the relevant markets.

Accordingly, the classification process will require a finely tuned allocation of responsibility and extensive coordination between the adviser and sub-adviser, which is likely to differ for each relationship. For example, as explained above, the reasonably anticipated trade size is a critical input into position classification, but it relies on information concerning a fund's flows as well as portfolio liquidity. Thus, where a sub-adviser is performing the classifications, the sub-adviser and adviser will need to develop coordination procedures to ensure that the sub-adviser receives updated reasonably anticipated trade sizes for each fund. Because one adviser can use many sub-advisers in a fund complex (or even within a single fund), and each sub-adviser may be retained by many different advisers, the permutations of these different relationships – that is, the different ways responsibilities, tasks, and workflows are allocated – can be virtually without limit.

The shared responsibility for classification also adds substantial IT complexity. Systems permitting data storage, transfer, and connectivity must be built and installed between each

[14] Cybersecurity due diligence and protection is another concern that the Commission and staff have expressed in other contexts. *See* IM Guidance Update 2015-02, Cybersecurity Guidance (April 2015).

adviser and its multiple sub-advisers, and between each sub-adviser and the multiple advisers it serves. Each such system must recognize the specific relationship between the adviser/sub-adviser pair (in terms of the sub-adviser's inputs required by the models used by the adviser, the adviser's classifications that must be communicated to the sub-adviser, and the numerous other points of coordination needed for determining and monitoring classifications).

Coordination of the process typically will involve vendors and other fund service providers. All participants and events in this process are, to a significant extent, interdependent, and no one participant, whether the adviser or the sub-adviser, can control the timing or sequencing of the overall process. For example, the sub-adviser may wish to build its own IT infrastructure, but may need to customize its reporting structure to meet the needs of its adviser clients. As a result, the process of developing full connectivity is held up until funds and vendors coalesce around solutions.

It is important to understand that the Rule 22e-4 classification requirement imposes wholly new types of compliance burdens on sub-advisers as compared to existing compliance programs. At present, sub-adviser compliance systems typically use a single set of data to perform portfolio compliance tests. For example, they receive feeds from credit rating agencies or securities characteristic providers. Different clients may have different guidelines, but all are tested against a common set of data. Rule 22e-4 radically changes that formulation, because it will effectively require a sub-adviser to test portfolio compliance based on different underlying data for each of its mutual fund clients (and process results that may differ among funds that hold the same security). Because the classifications used by each mutual fund are used to determine compliance, the classification for each mutual fund client must be known in order for a sub-adviser to effectively confirm compliance with each mutual fund's guidelines. A sub-adviser will need to redesign its in-house portfolio compliance engines or engage with an external vendor to make systems changes to permit it to obtain unique data for each mutual fund client and run compliance checks for trades based on unique data for each client. There are no portfolio compliance systems in operation in the market today that are used or designed in this way.

Funds in structures with multiple unaffiliated sub-advisers will thus have significant additional operational challenges, involving more coordination among more market participants and the need for more complex connecting systems, that will further compress the timeline described above and put pressure on the testing and vendor due diligence functions. This additional time needed for adaptation of the rule by advisers and sub-advisers was not factored into the December 1, 2018 compliance date.

III. Need for Interpretive Guidance

The staff has acknowledged that certain aspects of the rule may require interpretive guidance or clarification and is now in the process of reviewing and responding to FAQs submitted by industry groups and individual firms. Many of the answers to those questions will have a direct impact on how classification systems are built, and more generally on the development of compliance programs. Compliance efforts will be better served, and duplicative implementation can be avoided, by extending the compliance date until these critical answers are forthcoming.

The following are three areas where interpretive guidance is warranted and is likely to have a significant impact on ongoing implementation.[15]

A. Simplification and Standardization of the Classification Process

As described above, the Rule 22e-4 classification requirement appears to be at war with itself. It was intended to be simplified, and to that end provides for asset class mapping and monthly review. On the other hand, the exception proviso and the requirement to determine likely trade size and market depth could be viewed as requiring holding-by-holding analysis. Similarly, the monthly review provision is undercut by the proviso that a fund must review its portfolio investments' classifications more frequently if changes in relevant market, trading, and investment-specific considerations are reasonably expected to materially affect one or more of its investments' classifications. Furthermore, certain reporting rules relating to the classification requirement could lead to daily reconsideration and even in some cases pre-trade classification compliance monitoring.[16] In that case, the asset class mapping provision, which factored into the Commission's cost-benefit analysis in adopting the rule, would in practice be a mirage. Finally, the requirement is intended to provide classifications that are standardized and comparable across funds, but the methodology incorporates many subjective judgments that will inevitably lead to inconsistent conclusions.

Interpretive guidance that clarifies certain aspects of the rule could provide valuable assistance in helping to reinstate the simplification goal for the classification and review requirements and avoid unnecessary costs in building in the compliance infrastructure.

First, we request that the Commission openly acknowledge the limits of the classifications that will be produced by the rule. Such open acknowledgment would provide a common framework for funds, advisers, boards, and vendors to approach classification from a realistic perspective about what can and cannot be achieved, and is necessary in light of the internal contradictions of the rule. This would include recognition that: (1) there is limited market data and no consensus on methodology currently available for classification of certain asset classes, including fixed income securities; (2) classifications will reflect many subjective and hypothetical judgments that will differ among funds and among sub-advisers within funds; and (3) funds required to make the liquidity classifications must do so for reporting purposes but are not required to use the classifications as a liquidity risk management tool and may develop their own tailored classification systems for that purpose.

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15 The selection of these requests for guidance is not intended to detract from the requests for guidance submitted by other industry groups and individual firms, which are also of considerable importance to our Members.

16 The specter of pre-trade monitoring arises from the reporting requirements in and related to Rule 22e-4, which, as adopted, will require (1) next business day reporting to the Commission on new Form N-LIQUID and to the Board if the fund's investments classified as illiquid, using the new classification methodology, exceeded 15% of the fund's net assets, without even a one day cure period; (2) reporting to the Commission on Form N-LIQUID and to the Board if the percentage of the fund's assets that are classified as highly liquid, under the Rule 22e-4 methodology, remained below a "highly liquid investment minimum" percentage set by the fund for seven calendar days; (3) in both cases, identifying on Form N-LIQUID the exact days on which the fund's assets exceeded or fell short of, respectively, the relevant level; and (4) reporting on Item B.7.b of Form N-PORT the number of days that the fund's holdings in highly liquid investments fell below the fund's highly liquid investment minimum during the reporting period, even if the shortfall was promptly cured within the seven-day cure period permitted before reporting to the Board or on Form N-LIQUID is triggered.

Second, we request that the Commission reaffirm that the default mode of classification is asset class mapping on a monthly basis. The exception process and intra-month classification would be expected only in situations where the fund reasonably believes there is a danger of entering into a transaction that would result in exceeding the 15% illiquid investments limit and that the excess could not be cured within the following business day.

Third, we request confirmation that the classification requirement does not contemplate or require pre-trade monitoring, other than in the situation described above with respect to the 15% illiquid investments limit.

Absent such guidance, funds will inevitably draw different conclusions on the right balance, leading to inconsistent data. In addition, more risk-averse funds that take a relatively conservative approach may incur substantial compliance burdens that the Commission neither intended nor considered in its cost-benefit analysis.[17]

In addition, with respect to the second and third requests, we believe it is critical to obtain this clarification before proceeding further in building the classification compliance infrastructure. Uncertainty about the need for building daily classification review and pre-trade monitoring functionality into the IT systems has a pivotal impact and raises significant concerns, both in connection with building the IT infrastructure and ongoing portfolio management. With respect to the IT infrastructure, the need for a pre-trade monitoring capability would critically affect each planning stage, including making the "build or buy" decision, negotiating with vendors, and building the components of the IT structure described above. The systems and connections for a compliance program that involves daily determinations and pre-trade monitoring will be entirely different, and far more complex, than the infrastructure required to support only monthly classifications and post-trade monitoring. To give an example of the impact, vendor processing systems are typically built to operate on an end-of-day basis, through "batch processing" that is accomplished overnight. Where pre-trade testing is required, a vendor would need a data transfer system that could function on a real time basis, capable of sending and receiving millions of lines of code throughout the day. The same functionality would be required in a sub-adviser structure where the adviser, rather than the sub-adviser, makes the liquidity determinations. Where the adviser or sub-adviser also uses a vendor, that creates a three-way need for intra-day transfers. That is a substantially different undertaking.

With respect to pre-trade monitoring, the requested clarification would also help to reduce potential negative impact on the investment process. Pre-trade monitoring would require a portfolio manager to run liquidity determinations past a third party (whether a vendor or another adviser), instead of relying on the portfolio manager's own assessments. This requirement could result in portfolio managers needing to hesitate before making beneficial trades, and missing market opportunities. Some funds, in order to avoid either the increased system costs of pre-trade monitoring or the friction caused by communications while the markets are open, may consider instead imposing artificial liquidity limits or buffers. These limits would be imposed not for liquidity risk management, but because of excessive

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17 While the guidance we request could be helpful in simplifying implementation of the classification requirement, it would not, even if issued immediately, make the December 1, 2018, compliance date feasible. The industry (funds and vendors) would still need time to absorb the impact of the guidance, and to program and incorporate the guidance and its implications into the systems currently being built. Moreover, as discussed below, we believe a long term solution to these issues requires targeted changes to the rule and the related reporting provisions.

compliance costs that would be imposed by a more finely tuned approach. We do not believe these consequences are what the Commission intended.

B. Allocation of Responsibilities Among Advisers and Sub-advisers

As discussed above, Rule 22e-4 presents special implementation challenges for sub-advised funds, which affect both the advisers and the sub-advisers in these arrangements. While any interpretive guidance necessarily will leave open many issues, the following points are of particular concern to our Members that act as advisers or sub-advisers to sub-advised funds.

1. Delegation of classification responsibility to sub-advisers.

The rule and the Adopting Release are clear that funds should have considerable flexibility in selecting the person(s) designated to administer the program, and in particular that a fund's sub-adviser could be designated as the administrator of the program if appropriate.[18] In spite of this flexibility, statements in the Adopting Release complicate the task of classifying investments in a sub-advised structure. As discussed above, the exception proviso to the asset mapping instruction requires a fund to separately classify and review any investment if the fund or adviser has information about any market, trading, or investment-specific considerations that are reasonably expected to significantly affect the liquidity characteristics of that investment as compared to the fund's other portfolio holdings within that asset class. The Adopting Release indicates that, for this purpose, "adviser" generally refers to any person, including a sub-adviser, that is an investment adviser of a fund.[19] As a result, both the adviser and the sub-adviser could be viewed as responsible for the same determination.

We seek interpretive guidance that a sub-advised fund generally may (although it is not required to) delegate authority to classify asset classes and individual investments to one or more sub-advisers. We recognize that some investment advisers may still maintain their own classifications for oversight and other purposes. In such a case, even where the primary adviser maintains its own classification system, the fund's compliance with the Rule 22e-4 investment limits (either the 15% illiquid limit or the highly liquid investment minimum) may be tested against the sub-adviser's classifications. The guidance should also clarify that where a fund generally relies on the primary adviser's classification system, the fund may reasonably rely on the sub-adviser's good faith pre-trade classification determination (without the need for pre-trade clearance of the classification determination). In the event of a post-trade difference that would otherwise result in a breach of one of the limits, the sub-adviser would have a reasonable cure period to bring the portfolio back into compliance based on the adviser's classifications, without the trade being considered a breach or triggering a reporting requirement.

2. Treatment of sleeves with separate sub-advisers.

Many funds are structured as multi-manager funds, with a number of different unaffiliated sub-advisers responsible for managing different portfolios or sleeves within the fund. In order to comply with the exemption provided by Rule 17a-10, the advisory agreements of the sub-advisers generally prohibit them from consulting with each other concerning transactions for

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[18] Adopting Release, *supra* note 3, at 82213 n.810.

[19] *Id.* at 82168 n.279.

the fund in securities or other assets.[20] It is impracticable, therefore, for the sub-advisers to consult with each other on classification when the same investment is held in more than one sleeve.[21]

We request interpretive guidance that a fund may delegate authority for classification to a sub-adviser with respect to that sub-adviser's sleeve, and that the resulting classification of investments may be different from the classifications produced by a different sub-adviser with respect to that sub-adviser's sleeve. This may occur, for example, because the different sleeves may hold different amounts of an investment and the sub-advisers may anticipate different trading sizes.

C. In-Kind ETFs

Rule 22e-4 defines an In-Kind ETF as "an ETF that meets redemptions through in-kind transfers of securities, positions, and assets other than a *de minimis* amount of cash and that publishes its portfolio holdings daily." In-Kind ETFs are not required to perform classification of portfolio investments and are not required to set a highly liquid investment minimum. As Members have analyzed their ETF products to determine which program elements are required, questions have been raised regarding the interpretation of the meaning of "a *de minimis* amount of cash," within the context of the In-Kind ETF definition given the unique characteristics of ETFs.

It is clear that an ETF that performs 100% of redemptions in cash for structural reasons (*e.g.,* the ETF invests solely in markets where an in-kind transfer of assets is not permitted) would not constitute an In-Kind ETF. Conversely, it is clear that an ETF that performs 100% in-kind redemptions at all times would constitute an In-Kind ETF. That said, the use of cash by ETFs to meet redemptions varies across a spectrum, with many ETFs that primarily utilize in-kind redemptions performing cash redemptions from time to time, and other ETFs performing primarily in-kind redemptions that may include a portion of cash in the redemption basket. Determining where along this spectrum the line is drawn between In-Kind ETFs and other ETFs is, therefore, challenging. Without further clarification from the Commission or staff, we believe the majority of ETFs will be uncomfortable being classified as In-Kind ETFs given the potential uses of cash from time to time, despite the fact that they primarily meet redemptions in kind. This could lead to greater tracking error (resulting from the need to maintain a highly liquid investment minimum) for U.S.-registered ETFs that could result in unnecessary costs for U.S. investors and make U.S.-registered ETFs less competitive compared to ETFs domiciled in other jurisdictions.

As the Adopting Release rightly points out, "there may be circumstances under which an In-Kind ETF may use cash to meet redemptions (in addition to securities and other non-cash assets)."[22] The Release lists three examples where this may be the case: (i) balancing

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[20] Rule 17a-10 provides an exemption from the affiliated transaction provisions of section 17(a) of the Investment Company Act of 1940 for certain sub-advisory affiliates.

[21] We note that Form N-PORT is not structured to take into account situations where different sub-advisers assign different classifications to the same security within a fund. This indicates that the rule and related forms did not take into account the complexities of multi-manager funds. Absent adjustments to the Form, reports could indicate a breach of either the 15% illiquid limit or highly liquid investment minimum, when in fact none occurred.

[22] Adopting Release, *supra* note 3, at 82217.

amounts; (ii) uninvested cash; and (iii) portfolio positions that are not eligible to be transferred in-kind. We note that a fourth possible example is a cash substitution for a portfolio asset that is eligible to be transferred in-kind. Such a cash substitution might be done for several reasons, including that the portfolio manager wants to keep a security that is hard to obtain, or an Authorized Participant may be restricted in trading a given security. Such cash substitutions are optional and at the discretion of the portfolio manager.

When a cash substitution takes place, the Authorized Participant will generally compensate the ETF for any transaction costs incurred from converting the security to cash to protect shareholders from dilution. In addition, cash substitutions typically are allowed only at the discretion of the portfolio manager, who will take the ETF's liquidity position into account in determining whether to allow the use of cash. If an In-Kind ETF experiences a situation where cash redemptions would have undesirable consequences on the liquidity of the ETF portfolio, it seems highly unlikely that the portfolio manager would conclude that cash redemptions were more appropriate than in-kind redemptions under those circumstances.

These uses of cash raise interpretive questions, which are not directly addressed in the Adopting Release. From a public policy perspective, clarifying this aspect of the In-Kind ETF definition would be in line with the objectives of the rule to reduce "the risk that funds will be unable to meet their redemption obligations and mitigating dilution of the interests of fund shareholders."[23] We request guidance on the following points.

1. Uninvested cash held in the portfolio that is reflected in the redemption basket.

The Adopting Release states that an In-Kind ETF may use cash to "correspond to uninvested cash in the fund's portfolio."[24] However, the Release does not explicitly state that uninvested cash corresponding to cash in the portfolio does not count towards the *de minimis* amount. We request an interpretation that uninvested cash held in the portfolio that is reflected in the redemption basket, irrespective of amount, does not count towards the *de minimis* amount of cash determination. Our Members believe the requested interpretation is reasonable given that the Release states that uninvested cash in the portfolio would be considered an "in-kind" redemption and the definition of In-Kind ETF focuses on the ability of the ETF to meet redemptions in-kind.

2. The maximum amount of cash used in a redemption that qualifies as a *de minimis* amount of cash.

The Adopting Release states that "As part of its policies and procedures, an In-Kind ETF generally should also describe how the ETF will manage and/or approve any portion of a redemption that is paid in cash and document the ETF's determination that such a cash amount is *de minimis*. In making these determinations, an In-kind ETF may consider, if applicable: (i) the amount (both in dollars and as a percentage of the entire redemption basket) and frequency with which cash is used to meet redemptions; and (ii) the circumstances and rationale for using cash to meet redemptions." This suggests that ETF sponsors have discretion to determine that any of the four main uses of cash by ETFs that primarily meet redemptions in-kind could be considered "in-kind" redemptions.[25] However, it is not clear from the Release how this

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23 *Id.* at 82142.

24 *Id.* at 82217.

25 *Id.*

squares with the reference to a *de minimis* amount of cash. Recognizing that the rule avoids establishing a bright line test, our Members believe it would be helpful to receive clarification about whether there are any limits on the ETF's discretion to determine what constitutes a *de minimis* amount of cash.

3. The maximum frequency of cash redemptions that use more than a *de minimis* amount of cash, before an In-Kind ETF is no longer considered an In-Kind ETF.

Our Members are unclear as to whether an In-Kind ETF can perform any redemptions that include more than a *de minimis* amount of cash without immediately being deemed to no longer be an In-Kind ETF. This situation could arise as a result of any of the uses of cash by ETFs discussed above. Such situations are not generally structural uses of cash by the fund that would lead to greater amounts of cash in the redemption baskets the majority of the time, meaning that in a stressed condition, the fund would still have the option to transfer securities in-kind. In other words, these are not structural uses of cash related to the underlying investment strategy, but rather are temporary uses of cash that are deemed appropriate by the portfolio manager. Further, where a cash substitution takes place, the ETF is typically compensated by the Authorized Participant for transaction costs incurred to convert the security to cash, which addresses the objective of the rule to mitigate the risk of shareholder dilution.

If there is no discretion ever to exceed a *de minimis* amount of cash for a given redemption, ETF sponsors may be reluctant to determine that an ETF is an In-Kind ETF, given that a redemption with a larger amount of cash may, at times, be in the best interests of ETF shareholders. Our Members would like clarification that if under certain circumstances an ETF redemption includes cash in excess of a *de minimis* amount of cash, that ETF is not automatically disqualified from the In-Kind ETF definition.

IV. Fundamental Concerns with the Classification Requirement

While prompt extension of the compliance deadline for implementing the classification requirement combined with the interpretive guidance requested above would mitigate some of our Members' concerns relating to Rule 22e-4 that have emerged during the implementation process, this process has also brought to light more fundamental concerns that we believe can only be resolved by targeted changes to the rule. The following discussion identifies three such areas, keeping in mind that because of the diversity among our Members and their approaches to liquidity risk management, the nature and extent of their concerns relating to specific aspects of the rule will vary.

A. Feasibility of Automating an Inherently Subjective Process

We ask the Commission to consider whether the classification requirement as adopted can reasonably be expected to accomplish the Commission's goal of providing standardized, meaningful and comparable liquidity classification reporting. More generally, based on the data, technology, and the state of liquidity "science" that exists today, can the introduction of subjective and hypothetical judgments, which require assessing portfolio liquidity through the eyes of the portfolio manager, be captured by an automated system with the expectation of objective and comparable results?

In addition, even if such a system could be built, or the Commission concluded that the output for its regulatory purposes would be useful, regardless of comparability or objectivity, we ask the Commission to consider whether the benefits of such an undertaking, considering its limits, outweigh the costs, including the direction of available resources toward classification instead of measures firms believe are more effective in achieving successful liquidity risk management.

B. Potential for Misleading Investors

Under reporting requirements adopted in connection with the rule, fund liquidity classifications will be made public, at the portfolio level, on a quarterly basis, with a 60 day lag. The Commission decided to make portfolio level liquidity classification information public based on the determination that investors would, and should be encouraged to, use this information as a basis for making investment decisions.

Providing the public with liquidity risk classifications based on incompletely developed models and inadequately tested data, the potential result of a too-short compliance deadline, certainly would not serve the intended purpose. However, our concerns with public disclosure of Rule 22e-4 classification determinations at the portfolio level go deeper.

Our Members have, from the beginning, strongly opposed public disclosure of fund liquidity classifications. We believe that encouraging investors to make investment decisions based on the information reported on Form N-PORT marks a radical departure from the investor protection principles that have guided the Commission's regulation of investor disclosure for some 80 years. These principles are:

- Disclosure should be full and fair. It is unlawful to omit information that is material to understanding the context.
- Issuers are prohibited from providing stale or outdated information.
- Information should be available to all, not just those with special access.
- Information provided to investors should not be speculative.

The liquidity classification information to be reported on Form N-PORT, by contrast, will be materially incomplete and out of context, unaccompanied by any explanation or discussion of the fund's risk profile as a whole; it will be intentionally stale (from 60 to 151 days out of date, depending on when the investor looks at the Form); it will be in structured format (not human readable), so available only to sophisticated market participants or through intermediaries; and it will be replete with subjective and speculative, even hypothetical, judgments, none of which can be explained in the N-PORT reporting format.

The process relies heavily on judgments from portfolio managers and others, based on predictions and extrapolation of data, which are then combined with other judgments from other sources based on similar assumptions. Perhaps the Commission can make use of this data, by looking at trends, employing statisticians, using it as a basis for setting up interviews with portfolio managers, or otherwise. For the investing public, which will see only quarterly percentages 60 – 151 days after the fact, without context or explanation, this information will be at best meaningless and more likely misleading.

In addition, because of the many subjective elements in the process, classifications will not be comparable across funds. And, because of the format of Form N-PORT, investors will have no way of understanding the limits of comparability.

The dangers to investors from disclosure of information that is both incomplete and stale are threefold. First, the focus on liquidity risk in isolation would encourage investors to exaggerate the importance of liquidity risk relative to other risks that may be far more important to their long-term investment goals. Second, although the subjectivity, staleness, and incompleteness of the information make it intrinsically unfit for investors to use as a basis for comparison among funds, the Commission's singling out of this information will encourage just that. Such comparisons are especially counterproductive for investors because conservative managers may well assess their holdings as less liquid than aggressive managers, thereby making less risky funds appear to have more liquidity risk, and vice versa. Third, less sophisticated investors will be particularly at risk of being disadvantaged. Unlike securities traded in the secondary markets, in which all market participants can be expected to benefit from publicly available information through the efficient market pricing mechanism, mutual fund shares are purchased and sold directly with the fund at net asset value per share. Thus, there is no automatic market mechanism for sophisticated investors' superior understanding of the liquidity information and its limitations to be transmitted to less sophisticated investors.

C. Potential for Impairment of Portfolio Management

While the classification requirement in itself functions primarily as a data collection and reporting requirement, and thus the most direct casualties of the concerns raised above involve the potential for data that does not serve the regulatory purpose, in the context of Rule 22e-4 and the related reporting rules as a whole, the classification requirement can also operate in a manner that has an adverse impact on portfolio management.

As discussed above, certain reporting provisions of the rule could be read to require pre-trade monitoring for application of the classification determination. Similarly, a fund's acquisition of a security for the first time could require running the trade through the classification process in advance.

A pre-trade testing requirement would introduce an entirely new potential "brake" on the portfolio manager's ability to execute trades. This would substantially reduce the portfolio manager's ability to manage liquidity risk as an integral part of overall portfolio management. In particular, pre-trade testing could prevent the portfolio manager from taking advantage of market opportunities (which can rapidly disappear while the pre-trade analysis is being conducted) or from appropriately positioning a portfolio in times of increased market volatility and stress. The risk is particularly great if the fund uses a vendor for classification data, since many vendors are not currently prepared to provide intraday data.[26]

Further, pre-trade compliance testing would require hypothetical scenario analysis and real-time reclassification (adding to a position could result in that position being reclassified) with

[26] As an interim solution, as part of our request for interpretive guidance prior to making critical infrastructure decisions, we have asked for guidance that would partially alleviate the need to build compliance systems that include a pre-trade monitoring function (see Section III.A. of this letter). However, a complete solution to this issue would require targeted changes in the rule and the reporting requirements.

assumed levels of execution in order to effectively test against the new liquidity restrictions. Further, orders that stay open for any period of time would require retesting at least daily or, again, immediately prior to execution.

The potential adverse impact of the classification system on sub-adviser portfolio management is of even greater concern. Sub-advisers generally seek to achieve the most effective implementation of their strategies and economies of scale by implementing the strategy across clients. The potential need to develop and apply dozens of different methods for classifying portfolio holdings jeopardizes the sub-adviser's ability to manage the strategy for which it has been hired uniformly and in the most economical manner. Because the sub-adviser's specialized expertise in the desired strategy, together with the recognized efficiencies of the sub-advised structure, are exactly the reasons fund investors select this investment approach, interference with the sub-adviser's operations through the Rule 22e-4 classification requirement effectively thwarts the investor's decision, and could generally impose barriers that reduce the availability of these valuable arrangements.

V. Proposal for Phased-In Compliance and Recommendations for Targeted Change

A. Phased-in Compliance Schedule

In order to address the concerns raised by the current compliance date, and to provide the Commission with time to provide interpretive guidance and consider fundamental changes to the rule, we propose the following revised, phased-in schedule for compliance with the rule:

> **Phase 1**. By December 1, 2018, funds that are larger entities will adopt liquidity risk management programs that include three of the five components contemplated by Rule 22e-4: (1) assessment, management, and review of the fund's liquidity risk, as defined in the rule (the risk that the fund could not meet requests to redeem its shares without significant dilution of remaining shareholders); (2) formalization of the fund's method of compliance with the Commission's current 15% limit on illiquid securities;[27] and (3) adoption of redemption-in-kind procedures.[28]

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[27] For the 15% limit component of their Phase 1 programs, because the Rule 22e-4 definition of "illiquid investment" is tied to the classification requirement, funds would necessarily continue to employ the definition of "illiquid asset" currently in use. *See* Revisions of Guidelines to Form N–1A, Release No. IC-18612 (Mar. 12, 1992), 57 Fed. Reg. 9828 (Mar. 20, 1992) (defining "illiquid asset" as "any asset which may not be sold or disposed of in the ordinary course of business within seven days at approximately the value at which the mutual fund has valued the investment").

[28] Rule 22e-4 requires open-end funds to adopt formal liquidity risk management programs that are reasonably designed to assess and manage the fund's liquidity risk. Under the terms of the rule, these programs must include five prescribed elements set forth in the Rule. The classification requirement is one of the five components. The other four components are:

- Liquidity risk management. Assessment, management, and review of the fund's liquidity risk.
- Highly liquid investment minimum. Establishment of a "highly liquid investment minimum," or a policy setting the percentage of the fund's assets held in highly liquid investments, together with policies and procedures for responding to a shortfall.

Board approval of these programs, as well as approval of one or more designated persons to administer the programs, will also be in place by December 1, 2018.

Phase 2. Compliance with the classification requirement (and all related aspects of the rule and reporting requirements) would be delayed by at least six months.[29] At such time as such compliance is required, classifications would be determined and reported on a pilot basis, without public reporting of any information relating to the classifications, and with a safe harbor protecting funds from liability.[30]

In considering this proposed phased-in schedule, we ask the Commission to keep in mind that it is effective liquidity risk management, not reporting of individual holdings liquidity, that has protected investors over the many decades that open-end funds have been the investment vehicle of choice for the long-term investment needs of retail investors. Our Members would like to focus their efforts on enhancing and formalizing their liquidity risk management programs in a way that benefits investors. The process of developing the policies and procedures for such programs is in itself a substantial undertaking. However, the enormity of the classification process component is taking by far the most time and resources, at the expense of what our Members believe is and should be the heart of the rule.[31]

In this regard, we do not believe that in setting the original compliance date the Commission could have appreciated the difficulties of operationalizing the Rule 22e-4 classification methodology that have now emerged, or taken into account in its cost-benefit analysis the potential for operational risk introduced by the compliance date in light of these difficulties.

- Illiquid investment restriction. Codification (with some adjustments) of the current "15% illiquid limit," which prohibits an open-end fund from acquiring illiquid investments once 15% of its assets are illiquid.

- Redemption-in-kind procedures. Procedures regarding how and when funds that reserve the right to redeem in-kind will do so.

29 Components of the rules and related reporting provisions that are tied to the classification requirement, and which would be subject to the six-month delay, would include the highly liquid investment minimum, tying the 15% illiquid restriction to the classification process, all liquidity classification reporting on Form N-PORT, and reports on new Form N-LIQUID.

30 With respect to commencing classification with a six-month test period, there is substantial Commission precedent for undertaking major new data and disclosure regimes first on a trial basis in order to provide assurances of data quality and usefulness prior to imposing permanent and costly requirements. Examples of such pilot or experimental programs are the Tick Size Pilot, the Single Stock Circuit Breaker Pilot, the Limit Up Limit Down Pilot, the XBRL Voluntary Program, the Division of Investment Management Fund Profile, and the Plain English Disclosure Pilot. *See, e.g.* Order Granting Accelerated Approval to Proposed Rule Change To Amend FINRA Rule 6121 (Trading Halts Due to Extraordinary Market Volatility), Release No. 34–62251 (June 10, 2010), 75 Fed. Reg. 34183, 34186 (June 16, 2010) ("The proposed rule change is being implemented on a pilot basis so that the Commission and FINRA can monitor the effects of the pilot on the marketplace and consider adjustments, as necessary").

31 From a cost-benefit perspective, the relative importance of data collection versus liquidity risk management as the goals underlying the rule is worth keeping in mind. If the greater part of the cost of a rule is allocated to a component that provides a far smaller portion of the benefit, that raises a serious policy issue about how carefully the burdens of a rule are tailored to its goals.

Finally, we believe that the challenges raised by the current deadline have now become sufficiently clear that prompt action to extend the deadline at this time is warranted. Waiting to extend the deadline would only result in unnecessary and potentially duplicative expenditure of time, money, and resources, and ultimately be counterproductive to the long-term interests of funds and investors.

B. Recommendations for Targeted Change

Among the core principles announced by the President earlier this year is that the financial system should be regulated in a manner that will make regulation efficient, effective, and appropriately tailored.[32] For the reasons described above, we believe that the liquidity classification requirement of Rule 22e-4 falls short of all three of these tests. It is not efficient, because it reflects the large majority of the cost of Rule 22e-4, while providing at most only a small amount of the rule's benefit. It is not effective, because the information it provides to the Commission and investors will not be objective and comparable. And it is not appropriately tailored in light of the many issues discussed above.

Accordingly, we ask the Commission to reconsider the classification requirement, and in particular to consider the following three recommendations for targeted changes:

1. Eliminate the classification requirement and focus the rule on the core requirement for funds, under appropriate Board oversight, to assess, manage, and review liquidity risk, defined as the risk that the fund could not meet requests to redeem shares issued by the fund without significant dilution of remaining investors' interests in the fund.

2. To the extent the Commission decides to retain the classification requirement in the rule, make adjustments in the rule to achieve the simplification and workability goals intended by the Commission in adopting the requirement.

3. To the extent the Commission retains the classification requirement, eliminate the requirement to provide the classification information to the public.

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32 Core Principles for Regulating the United States Financial System, Executive Order 13772 (Feb. 3, 2017), 82 Fed. Reg. 9965 (Feb. 8, 2017).

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AMG appreciates the SEC's consideration of our Members' collective views and concerns with respect to implementation of Rule 22e-4 and our proposal for Commission action to address these issues. Please do not hesitate to contact either Timothy Cameron at [redacted] or [redacted] or Lindsey Keljo at [redacted] or [redacted] if you have any questions or if we can be of any further assistance.

Sincerely,

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