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Via Electronic Mail January 13, 2016

Mr. Brent J. Fields, Secretary U.S. Securities and Exchange Commission 100 F Street, NE Washington, DC 20549-1090

> Re: Open-End Fund Liquidity Risk Management Programs; Swing Pricing; Re-Opening of Comment Period for Investment Company Reporting Modernization Release

File Nos. S7-16-15; S7-08-15

Dear Mr. Fields:

T. Rowe Price Associates, Inc. ("T. Rowe Price"), as sponsor and investment adviser to the T. Rowe Price family of mutual funds ("Price Funds"), appreciates the opportunity to comment on the above-referenced proposal (the "Proposal") issued by the Securities and Exchange Commission ("SEC"). As of September 30, 2015, T. Rowe Price and its affiliates managed approximately \$725.5 billion in assets, and the Price Funds comprised 179 funds with aggregate assets of approximately \$466.0 billion.

Overall, we are supportive of the Proposal's requirement for mutual funds to adopt and maintain a liquidity risk management program. We believe it will help the SEC, as the primary regulator of the asset management industry, to more effectively monitor and oversee the activities of mutual funds. While we are in general agreement with the underlying principles of the Proposal, we offer below some specific recommendations that we think will further enhance its effectiveness in light of our serious concerns with the Proposal's liquidity classification requirements. We note our general concurrence with the views expressed by the Investment Company Institute ("ICI") and the Securities Industry and Financial Markets Association ("SIFMA") in their comment letters and encourage the SEC to consider the additional issues we raise and an alternative liquidity classification framework that is based on SIFMA's approach. The following summarizes our perspectives with respect to the Proposal:

Liquidity Risk Management Programs

 Risk-Based Approach: We agree that funds should be required to maintain liquidity risk management programs operated by risk management professionals



and subject to oversight by fund boards, and we also support the proposed codification of the 15% standard asset limit.

- Proposal's Liquidity Classification Categories: We have concerns that the Proposal's specific liquidity classification requirements will create a complex liquidity compliance regime that will likely prove to be of little benefit to practicing fund managers, regulators, or the public. We believe the proposed requirement for funds to classify the liquidity of portfolio assets into six specified "convertible to cash" categories requires a degree of subjectivity that will make the classifications less relevant and useful as an indicator of fund liquidity. In the body of this letter, we recommend an alternative approach that is based off of the alternative described in SIFMA's letter and more in line with how liquidity is determined, analyzed and managed by funds. While we think the SEC's approach is well-meaning, we believe its level of preciseness is illusory and, in reality, unnecessary for funds to effectively manage their liquidity.
- "Convertible to Cash at a Price that does not Materially Affect the Value"
 Standard: Both the liquidity classification framework and the three-day liquid asset minimum require funds to assess the relative liquidity of each portfolio position based on the "number of days within which it is determined, using information obtained after reasonable inquiry, that the fund's position in an asset (or a portion of that asset) would be convertible to cash at a price that does not materially affect the value of that asset immediately prior to sale." The concept of converting a holding to cash "at a price that does not materially affect the value of that asset immediately prior to sale" is highly subjective, and will be burdensome and costly to implement in practice, especially for funds that could hold hundreds of portfolio positions. We recommend instead that funds primarily assess liquidity for purposes of classifying assets into liquidity buckets with reference to the time it would take to sell or liquidate a position without considering market impact.
- Liquidity Classifications Need for Safe Harbor: If the SEC adopts the rule
 as proposed, in light of the high degree of subjectivity involved in classifying the
 liquidity of portfolio assets, we believe the SEC should more explicitly provide
 that funds and their affiliates will not face liability for errors in classification
 unless the error is material under normal conditions and the fund or affiliate acted
 knowingly or recklessly.
- Alternative to the Three-Day Liquid Asset Minimum: We recommend, as an
 alternative to requiring a three-day liquid asset minimum, that the SEC require
 funds to determine whether to establish a highly liquid asset percentage (as
 defined further in the letter), considering all of the liquidity tools available to a
 fund.
- **Disclosure and Reporting:** If the rule is adopted as proposed, we suggest that the SEC require monthly reporting on Form N-PORT of the percent of a fund's assets in each of the classification categories to the SEC but that the information



should not be made public. We note that our comment above concerning protection from liability resulting from errors in classification is particularly applicable to the extent that subjective, asset-by-asset classification information is publicly disclosed. In addition, we oppose the requirement for a fund to file a line of credit agreement as an exhibit to its registration statement.

- Board Approval of Liquidity Program: We are supportive of fund boards providing oversight of funds' liquidity risk management programs but we do not believe that fund boards should be required to approve specific elements or components of funds' Liquidity Programs, including a fund's three-day liquid asset minimum. We recommend that the SEC look to the fund compliance rule, Rule 38a-1, as a model for framing the board's oversight function over liquidity risk management.
- Factors for Consideration Relationship of an Asset to Another Portfolio Asset and the Fund's Use of Derivatives: The factors for both the liquidity classifications and the 3-day liquid asset minimum suggest that a fund should treat assets used by the fund to "cover" derivatives transactions as having the same liquidity classification of the derivative instruments they are covering. Also, with respect to the liquidity classifications, in situations where a fund purchases a more liquid asset in connection with a less liquid asset and the fund plans to transact in the more liquid asset only in connection with the less liquid asset (i.e., "hedging"), then both assets should be classified in accordance with the less liquid asset. We request the SEC remove these factors from the final rule.
- Compliance Period: Based on the fact that we manage a large number of funds that hold a broad range of securities, we request a compliance date of 30 months after the effective date to comply with the Proposal rather than the proposed 18 months.

Swing Pricing

- Operational Challenges for U.S. Funds: We support the SEC's goal of protecting investors by reducing potential dilution resulting from high volume fund flows, and we also support the SEC's proposal of providing funds with the option to use swing pricing as a potential tool for achieving that goal. We note, however, that given the nature of fund distribution channels, funds often do not have access to timely information on net inflows and outflows and, therefore, will have difficulty accurately assessing when a fund's swing threshold has been exceeded. We would like the SEC, before adopting a final swing pricing rule, to consider ways it can require intermediaries to provide more transparency so funds can have intraday access to fund flow information.
- Swing Factor Determination Market Impact Costs: We believe that mutual funds should be permitted but not required to consider market impact costs when



determining their swing factor. Determining these costs involves subjective predictions that significantly add to a lack of precision in the swing factors.

• **Compliance Period**: We believe the SEC should provide for a compliance date that is one year after the effective date.

Our detailed comments on these issues are set forth below.

I. Liquidity Risk Management Programs

Risk-Based Approach

We support a rule requiring funds to adopt written liquidity risk management programs ("Liquidity Programs") that are risk-oriented and principles-based. We also support the proposed requirement to codify existing SEC guidance on illiquid assets, that a fund not acquire any asset that may not be sold or disposed of in the ordinary course of business within seven calendar days at approximately the value ascribed to it by the fund ("15% standard asset") if, immediately after the acquisition, the fund would have invested more than 15% of its assets in 15% standard assets. However, we believe that certain features of the proposed Liquidity Programs, particularly the proposed liquidity classification system, should be modified.

Proposed Relative Liquidity Classification Categories

In general, we support the proposed requirements that funds assess, periodically review, and manage their liquidity risk. However, we believe the proposed requirement for funds to classify the liquidity of portfolio assets (and portions of portfolio assets) into six specified "convertible to cash" categories is at the same time overly prescriptive and subjective, and that if it were to be adopted as proposed, funds would need more guidance from the SEC on how to classify specific asset types.

Overall, the proposed Liquidity Program is intended to reduce the risk that funds will be unable to timely meet their redemption obligations pursuant to section 22(e) of the 1940 Act and other regulatory requirements, diminish potential investor dilution, and allow funds to more effectively manage liquidity risk. These requirements are intended to protect investors and enhance the fair and orderly operation of the markets. The SEC believes that the proposed six-bucket classification system is more responsive to variation in the liquidity of funds' portfolio positions than the current framework in which funds classify a position as either "liquid" or unable to be sold or disposed of within seven days at approximately its stated value ("illiquid"). In addition, under the proposal, funds would be required to report the liquidity classification of each portfolio position as part of each fund's monthly portfolio holdings reporting on proposed Form N-PORT. The SEC believes that this data would assist the SEC in assessing risks and trends with respect to funds' portfolio liquidity and would also allow investors to better understand and gauge a fund's overall liquidity risk profile.

In practice, however, we believe the proposed six-bucket classification system would be operationally difficult to implement, of little benefit to fund investors, and an ineffective



liquidity tool for fund managers. The six-bucket classification system is highly subjective and requires fund advisers to classify every fund holding (or portions of a holding) into one of six specific, time-based buckets based on an estimation of market impact that cannot be exact. Because of the high degree of subjectivity involved, we believe the Proposal's bucketing approach will not be applied consistently across the fund industry and funds could classify the same holding differently. This will create liability concerns for fund managers, who, under the proposed rule, will be required to publicly disseminate these classifications in Form N-PORT quarterly. More importantly, it will make comparisons across funds less relevant for investors and regulators, and would likely create misleading comparisons and outcomes.

The SEC recognizes in the Proposal that an asset's liquidity is often fluid and dynamic and attempts to provide fund advisers with the flexibility to react to changing market conditions by applying specific factors to assess and classify each position in the portfolio. However, we believe that this approach, coupled with the degree of precision required to classify assets in the way the SEC has prescribed, allows for too much interpretation and subjectivity, especially for fixed income instruments and other instruments traded over-the-counter ("OTC"). Since there are no generally accepted methodologies for making the liquidity determinations that the SEC has proposed, there will inevitably be a wide variety of liquidity assessments for the same or similar assets, especially since the assessment of how long it will take to liquidate a particular position could fluctuate over time depending on market conditions and each fund manager's assessment of market impact.

Further, the asset classification categories are represented by compressed time intervals, which will be difficult if not impossible to predict with any precision or confidence. The trading determination of whether a holding can be sold in three *business* days as opposed to four *calendar* days without materially moving the market price can be made with little confidence, much less with enough confidence to report the outcome of this judgment in regulatory filings that are disclosed to the public. Further, each classification would be publically reported in Form N-PORT in a format that appears objective and suggests that investors should use the data for comparability across funds when in fact the classifications are subjective and imprecise. Contrary to the SEC's intent, the data regarding liquidity classifications will not provide the public with materially useful information about a fund's liquidity as the classifications will greatly vary across fund complexes and may appear to be arbitrary even though such variances would be related to bona fide differences in judgment.

Because the proposed classification scheme involves such a great deal of subjectivity, funds that are more conservative in classifying their portfolio positions (by treating their fund holdings as requiring more days to convert to cash), will actually appear to be less liquid and thus potentially higher risk. An adviser will have to make judgments as to the bucket in which a security should be placed where there is flexibility in settlement periods or where a fund holds a relatively large position with limited trading volume. For example, for a foreign security or OTC security that could settle in three business days but might settle in four calendar days based on market convention, more conservative funds may bucket the position as convertible to cash within 4-7 calendar days while less conservative funds would classify the asset as convertible to cash within 2-3 business days. This would make the less conservative fund appear less risky and more liquid to investors and other third parties even though the funds hold the same security. It



would also allow the less conservative fund to count an asset that other funds might consider less liquid as a three-day liquid asset for purposes of the three-day liquid asset minimum.

Moreover, because the liquidity classification framework places emphasis on the size of a particular position, a large fund will be placed at a disadvantage and will likely look less liquid and more risky than a smaller fund with the exact same weightings of portfolio positions simply because the larger fund has a larger position in the same security. For example, a very large, diversified large-cap U.S. equity fund, typically considered highly liquid at both the asset and portfolio level¹, may not appear that way when compared to a smaller fund with the same portfolio makeup as both funds could reach different conclusions as to how to categorize their assets. We note that very large funds can typically handle a greater dollar volume of flows than smaller funds with the same portfolio positions. The Division of Economic and Risk Analysis study ("DERA Study"), for example, found that flow volatility decreases and portfolio liquidity increases as fund size increases. The proposed classification system, however, does not take this into consideration. Even if a larger fund and a smaller fund with the exact same portfolio composition use the same methodology to bucket their assets, the larger fund will necessarily look less liquid since it holds larger positions that may be spread across multiple buckets that show longer time periods to liquidate.

In addition, the Proposal does not provide an adequate measure of liquidity for all asset types. While the factors in the Proposal may translate well with respect to most types of equity exchange-traded securities, the data required by many of the factors is not readily available for fixed income securities, especially for fixed income securities of issuers in foreign or emerging markets. Certain fixed income securities frequently trade based on an issuer's overall debt structure and rating, not by the individual CUSIP. The liquidity characteristics of certain other fixed income securities can be determined more by the homogenous nature of those securities rather than individual characteristics of a particular security. The market factors that drive asset class liquidity tend to be heightened in times of market uncertainty or stress, thus further reducing the value, if any, of a CUSIP-by-CUSIP liquidity analysis. Moreover, infrequent trading of certain fixed income securities can lead to funds using stale and inaccurate liquidity measures in the calculation of a portfolio's liquidity. Many municipal securities, for example, are highly liquid, and smaller volumes can typically be sold in one to three business days. The proposed factors, however, require funds to consider the frequency of trades or quotes in assessing a position's liquidity. There are roughly 1.5 million different municipal CUSIPs in the market, and the daily trading volume for these securities is typically about plus or minus 1% of the outstanding municipal CUSIPs. Because of this low daily trading volume, many municipal securities could be classified in the more illiquid buckets under the SEC's proposed classification system based on its factors and subjective market impact analysis when in actuality they are typically highly liquid.

We note that the SEC suggested in the Proposal that external vendors will be able to supply the necessary liquidity classifications, but we do not believe that this is a realistic

¹ Paul Hanouna, Jon Novak, Tim Riley & Christof Stahel, Division of Economic & Risk Analysis, SEC, Liquidity and Flows of U.S. Mutual Funds 3 (Sept. 2015), available at https://www.sec.gov/dera/staff-papers/white-papers/liquidity-white-paper-09-2015.pdf.



solution. The proposed liquidity classifications lack objectivity, and third-party vendors are even further removed from the trading determinations required in order to assess market impact on a fund's portfolio holdings. We are not convinced that third-party vendors will be able to develop the tools to address all of the proposed factors required to classify each portfolio position's liquidity. Furthermore, even if such services were developed by third-party vendors to meet the Proposal's requirements, we would have reservations about subscribing for such data in view of the level of subjectivity involved.

"Convertible to Cash at a Price that does not Materially Affect the Value" Standard

Both the liquidity classification framework and the three-day liquid asset minimum require funds to assess the relative liquidity of each portfolio position based on the "number of days within which it is determined, using information obtained after reasonable inquiry, that the fund's position in an asset (or a portion of that asset) would be convertible to cash at a price that does not materially affect the value of that asset immediately prior to sale." Assessing how long it will take to convert an asset to cash without "materially affecting the value" of that holding before its sale may be impossible to assess with any reasonable accuracy, particularly with the time precision and extended time horizons proposed by the SEC. We recommend instead that funds primarily assess liquidity with reference to the language that the SEC adopted in Form PF: "assuming no fire-sale discounting." We also recommend incorporating the concept of "good faith estimates" and basing such estimates on current market conditions.

Under the Proposal's standard, funds and fund advisers will have to make significant judgments about the how quickly an asset can be sold at a particular price prior to actually selling the asset, and this cannot be accomplished with any precision or confidence, particularly for municipal bonds and other OTC instruments with limited trading volumes. An asset's price will change in response to a variety of forces in the market, and it is extremely difficult to distinguish the impact of a fund's transactions from other market forces, especially prior to executing the trade.

Additionally, the SEC should not require funds to reference the amount of time it would take to *convert an asset to cash* in all of the buckets. We note that there are many instances in which the settlement time of a particular transaction may be significantly further in the future than sale time. Our funds have successfully managed these timing differences in settlement periods through their portfolio structure and asset mix; the day-to-day buy, sell and hold decisions made by our investment professionals; and the use of other liquidity tools that the SEC references in the Proposal. Under the SEC's proposed standard, assets that have longer settlement times may make a fund look significantly less liquid, when in reality, the fund can easily manage these disparate settlement periods. Instead, funds should make a good faith estimate for liquidity based on current market conditions and assuming no fire-sale discounting.

T. Rowe Price's Approach

Our liquidity risk management framework as it currently exists and as it is evolving provides portfolio managers, investment division leadership, and risk personnel with insight into the T. Rowe Price portfolios' expected ability to satisfy potential client withdrawals. The



framework is intended to apply broadly across the firm, but is constructed to take into consideration differences for various asset classes and security types. The risk management framework is administered and overseen by risk professionals at T. Rowe Price but relies heavily on the advice of subject matter experts from the investment divisions and trading desks. It aligns with how our portfolio managers consider liquidity in their investment management decisionmaking process because it is a holistic assessment of the portfolio that involves a security classification utilizing liquidity-related data where readily available (for example, daily trading volume for exchange-traded equity securities) but also more qualitative information where such data is not obtainable or not as relevant. During our review of a portfolio's liquidity, we make certain assumptions for each asset based on the characteristics and available data and other liquidity-related information for each instrument's asset class. For example, we assume that all investment-grade bonds have a similar liquidity profile. We do not drill down to look at, for example, each investment-grade bond's issuer, maturity, and issue date for purposes of classifying its liquidity. The Proposal is a significant departure from our approach because it requires a quantitative analysis that not only looks at each particular security but requires advisers to analyze each position's (and portions of a position) particular characteristics separately.

Liquidity reporting primarily focuses on assessing the ability to meet one-day redemptions equal to the 99th percentile (gross redemptions) experienced by a portfolio during a "normal" market environment. The reporting also provides similar information assuming a "stressed" environment, which is based on the portfolio's ability to meet a redemption that is two times the size of the 99th percentile (gross redemptions) and assumes reduced levels of market liquidity. While the fund board receives regular presentations from the chief risk officer and the risk team on liquidity risk management, unlike the Proposal, the board is not responsible for determining or approving any liquidity risk metrics as those determinations would be more appropriately made by risk professionals with the input of both equity and fixed income investment professionals who are subject-matter experts in the securities they cover and trade.

Costs of the SEC's Liquidity Classification System

Building and maintaining the proposed six-bucket classification system would pose a significant burden on T. Rowe Price, with fund shareholders ultimately carrying a majority of the expense. All securities (and portions of such positions) held within a fund complex would need to be analyzed, assessed and then assigned to one of the six liquidity buckets. An individual fund may have hundreds if not thousands of portfolio positions, and the T. Rowe Price family of mutual funds held just under 44,000 holdings combined, as of December 31, 2015. As mentioned previously, our approach differs quite significantly from the six-bucket system mandated by the Proposal, so we would have to significantly augment our system and develop new processes to meet its requirements. We note that some firms, including T. Rowe Price, have systems in place to compile some of the data required under the Proposal, but additional data will have to be collected, managed and analyzed, particularly in order to capture the anticipated market impact in selling a position. In addition, OTC instruments that do not have readily available trading volume data, or whose trading volume is relatively low, would require additional research and manual intervention by trading professionals in order to assess all the factors required to classify the security. Furthermore, under the Proposal, the majority of large



positions would have to be assessed and potentially divided into several different buckets, and we would need to build a process to be able to capture this element of the proposed bucketing scheme.

Further, compiling and reviewing the data for our current holdings and newly purchased assets would pose a significant burden, and the requirement for "ongoing review" of each asset would place an even greater burden, on funds. At a minimum, funds would have to review all liquidity classifications at least monthly in connection with Form N-PORT filings, and, as described in the Proposal, funds holding assets whose liquidity depends considerably on current market conditions would need to review their assets' liquidity classifications relatively often (the Proposal suggests that such review could occur daily, or even hourly, depending on the circumstances). This would be an extremely resource-intensive endeavor - the costs of which would ultimately be borne by fund shareholders. While we have not attempted to try to estimate the costs of building the SEC's classification system (and we know of no similar system or service that is commercially available), we think the effort involved would be comparable to the daily pricing of a fund's portfolio, which could range in the millions of dollars for a fund complex the size of T. Rowe Price. For many funds (for example, funds whose positions do not have readily available quantitative data related to liquidity), the exercise of continuously reviewing every position in every portfolio (which, as mentioned above, could be as often as daily or even hourly) would be operationally similar to continuously fair valuing the fund's less liquid portfolio positions. We question whether the potential benefits of the Proposal's classification system would outweigh these costs.

Proposed Alternative:

We propose that the SEC adopt a framework that utilizes four classification categories instead of six, with the factors outlined by the SEC in the Proposal considered guidelines rather than codified in the rule text. This alternative is similar to the alternative proposed by SIFMA in their comment response letter. Like the SIFMA alternative, the buckets would be based on a spectrum from highly liquid (Category 1) to illiquid (Category 4). The factors and methodology for allocating portfolio assets among the categories would differ among the categories, reflecting the different levels of precision that are appropriate for different points along the spectrum, and the purpose of each category.

Under this alternative, the adopting release would continue to make clear that funds may consider additional factors, and that a fund would not be required to consider any particular factor in classifying individual assets. In addition, the adopting release would make clear that a fund would be permitted to weigh any one factor or group of factors over others, and could ignore certain factors entirely, as it sees fit in categorizing a particular asset or asset class.

We note, for example, that with respect to exchange-traded equity instruments, funds can use historical quantitative measures, such as a percentage of an issue's daily average trading volume ("DATV") (e.g., 20% of DATV), to determine an asset's liquidity classification. With respect to many other securities traded in dealer markets or in developing markets, however, there can be limited data available, and funds would be required to rely on more qualitative data.



We note that if more trading volume and other liquidity-related data becomes available for such asset classes, funds may be able to utilize a more objective bucketing approach for these assets.

In addition, under our proposed alternative, a fund would be permitted to classify an entire asset class that the adviser believes is generally homogeneous (e.g., large-cap equity) and would not be required to evaluate the liquidity of any particular asset in that asset class unless the adviser knows or has a reason to know that the asset (or portion thereof) should fall within another category. In such situations, advisers could have the option of classifying a position into a different category and could disclose the exception on Form N-PORT.

At one end of the spectrum, Category 1 would correspond in most respects to the Proposal's three-day liquid asset designation (*i.e.*, highly liquid assets that are convertible to cash within three business days), with the differences noted below, and thus would include the type of assets that would be expected to qualify for the "three-day liquid asset minimum" in the Proposal. Assets in this category could be used towards a fund's "highly liquid asset percentage," which we propose below as an alternative to the proposed "three-day liquid asset minimum." At the other end of the spectrum, Category 4 would include assets currently considered illiquid under the "15% guidance," and that would be considered "15% standard assets" under the Proposal.

The second and third categories would be used to classify assets that fall between the two ends of the spectrum. For many funds, these middle categories will cover the great majority of fund assets, and thus the bulk of the assets that portfolio managers rely on to implement their investment strategies and that they will purchase and sell for that purpose. In these middle categories, fund assets are considered liquid, but are not relied on as "highly liquid," and can be viewed as more or less relatively liquid depending on a variety of qualitative (subjective) and quantitative (objective) factors.

We note that some of our greatest concerns with the Proposal arise from the following aspects of the proposed classification system: (1) identifying a precise number of "days to cash" for all buckets; (2) applying the standard "without materially affecting" the asset's price; and (3) classifying each "portion" of every asset separately. We incorporate the concept of "days to cash" in Category 1, where we believe it can be workable when applied in the appropriate context and purpose.

Category 1 is designed to identify highly liquid assets, both for general liquidity risk management purposes and for purposes of our recommended highly liquid asset percentage alternative, described below. Because of this purpose, it is appropriate to consider a stated number of days (in this case, approximately three business days) expected to convert the position to cash in the context of normal trading (based on normal trading lots). An asset's classification in Category 4 would be based on expected sale within seven days at approximately its stated value, in accordance with the longstanding 15% guidance. Classification in Categories 2 and 3 would be based on a variety of qualitative and quantitative considerations. Other than with respect to the three-day and seven-day standards for Categories 1 and 4, the timing of asset sales would be a factor but would not be identified with reference to specific range of days.



Classification of assets in all categories would represent a good faith estimate of liquidity based on current market conditions. As discussed above, classification would not require an evaluation of whether the asset can be sold "without materially affecting" the asset's price immediately prior to sale. We note that if the SEC believes a boundary must be part of the rule, we recommend instead requiring an assumption that the asset would be sold with no fire-sale discounting. This boundary is based on Form PF, Question 32, which states in part: "Use good faith estimates for liquidity based on market conditions over the reporting period and assuming no fire-sale discounting." Unlike Form PF, however, we recommend an estimate based on current market conditions at the end of the reporting period, rather than over the reporting period.

Lastly, with respect to the proposed treatment of position size (reflected in the Proposal as a requirement that classifications be assigned to "portions" of a position), our recommended alternative would permit but not require funds to separately classify portions of a single holding. Moreover, as discussed above, we believe that the position size factor would most significantly impact large funds, which are more likely to have holdings that represent a significant portion of the market but typically have greater overall liquidity and resources to manage liquidity effectively.

The following is a description of the four liquidity categories we propose:

- Category 1. Cash, cash equivalents, and assets that the fund believes it can liquidate (sell
 and receive settlement proceeds) within approximately three business days in the context of
 normal trading (also referred to as "highly liquid" assets).
- Category 2. Assets that are considered liquid in ordinary markets, but which may become
 less liquid in stressed conditions or may, for other reasons, be expected to require more than
 three business days to liquidate.
- Category 3. Assets that are considered less liquid than assets in Category 2 (e.g., there are
 fewer active participants in the relevant market and execution is more sporadic and in smaller
 sizes), but are still considered liquid (and thus not appropriate for classification in Category
 4).
- Category 4. Assets that the fund believes could not reasonably be expected to be sold by the fund within seven calendar days at approximately the value ascribed by the fund (i.e., "15% standard assets," as that term is used in the Proposal, which we refer to as "illiquid").

We believe that this alternative offers many advantages to the six-bucketing approach described in the Proposal. First, the classification system is based on four buckets that encompass a larger range than the proposed six buckets, which are far too granular and precise. The use of fewer buckets would provide fund managers with more flexibility in bucketing assets. A potential benefit of a more flexible, less precise bucketing scheme is that it reduces some of the liability concerns discussed in this letter. In addition, fewer buckets may also reduce potential shareholder confusion because there will be less room for variation between funds. This alternative would also allow fund managers to group homogeneous assets together, which would be considerably less burdensome and would provide a significant cost savings.



We recognize and agree with the SEC on the importance of being able to convert some assets to cash within three business days to meet redemption requests. We believe that Category 1 as described above appropriately requires funds to consider which assets can be used to meet shareholder redemptions. However, using this standard for all assets, including the ones we know cannot be converted to cash within three business days, is unnecessarily burdensome. Consequently, for all categories other than Category 1, the classifications would be made using a good faith estimate for liquidity based on current market conditions and assuming no fire-sale discounting.

We note that even though the proposed alternative reduces some of the subjectivity involved in classifying assets, it still allows for variation between funds. Consequently, in the adopting release, we ask that the SEC provide specific guidance on how to classify different asset types with a variety of examples of how the factors should be applied.

Liquidity Classification - Need for Safe Harbor

We believe that the subjectivity of the proposed liquidity classifications raises significant liability concerns for funds and their advisers. As proposed, each portfolio position's liquidity classification will be reported to the SEC monthly and disclosed quarterly on Form N-PORT. Section 34(b) of the 1940 Act provides that it shall be unlawful for any person to make any untrue statement of a material fact in any registration statement, report, record, or other document filed or transmitted pursuant to the 1940 Act or the keeping of which is required pursuant to Section 31(a) of the 1940 Act. The liquidity classifications reported on Form N-PORT will be subject to liability under Section 34(b), and it is also possible that information concerning liquidity classifications could be held to be information, the keeping of which is required pursuant to Section 31(a) and, thus, subject to liability under Section 34(b). We note that Section 34(b) does not require a violator to act willfully, and the SEC has ruled that intent or knowledge is not required to establish a violation.

As discussed above, however, if adopted as proposed, liquidity classifications will be highly subjective, with the potential for funds classifying the same or similar positions very differently. As mentioned above, we believe that these liability concerns will be greatly reduced if the SEC pursues an approach similar to the alternative we suggest and provides more specific guidance on how to apply the classification scheme to specific asset types. However, in any case, we believe that the SEC should affirmatively provide a safe harbor so that liability will not attach for errors in a position's liquidity classification unless the error is material under normal market conditions and the fund or other person responsible for the filing acted knowingly or recklessly.

Alternative to the Three-Day Liquid Asset Minimum

We strongly oppose a three-day liquid asset minimum that would be approved by a fund's board. Portfolio managers continually consider the amount of liquid assets they need to maintain in a portfolio. We believe that it would be appropriate for a liquidity risk management program to include a requirement for portfolio managers, in conjunction with risk personnel, to consider and for boards to review the amount of highly liquid assets maintained in their portfolios in order to meet redemptions. However, the portfolio manager should retain the



ultimate decision on the percentage of highly liquid assets that is prudent for the fund as part of managing the fund's investment program, which may take into account some of the factors that the SEC has outlined including, shareholder redemption activity, shareholder concentration, availability of borrowing opportunities, and other relevant factors.

Disclosure and Reporting

If the rule is adopted as proposed, we ask the SEC to allow funds to report liquidity on an aggregate basis per classification bucket instead of at the individual security level. This would help address the issues discussed above relating to subjectivity and the differences in classifications across funds and the potential liability associated therewith. Even though our proposed alternative also involves security classification, we have concerns if this information were to be publicly disclosed. Individual holding liquidity classifications will not provide meaningful information to investors as these liquidity determinations would be provided out of context as structured data in Form N-PORT with no information for the investor as to how it fits into the fund's risk profile as a whole.

Alternatively, we would support a regime whereby individual security level classifications would only be available to the SEC and that the SEC would only make public aggregate liquidity information by bucket. We note that the SEC would also have access to a fund's asset-by-asset classifications during an exam.

While we currently file a line of credit agreement as a material contract with respect to certain Price Funds as part of their registration statements, we believe the agreement itself offers little value to investors since these agreements and their exhibits are complex and lengthy legal documents with technical terms. In addition, filing these agreements on EDGAR is labor-intensive because they are so long and not easily convertible into EDGAR formats. We further note that certain census-type information regarding line of credit arrangements can be reported in funds' Form N-CEN, including, for example, whether the fund has a committed line of credit, the size of the line of credit, the name of the institution with which the fund has the line of credit, whether the line of credit is shared among other funds, whether the line of credit was drawn on, the average amount of credit used, and number of days the credit was outstanding. We believe that this type of summary information will be more useful to shareholders than parsing through an entire line of credit agreement itself, and we therefore support its inclusion on Form N-CEN. Lastly, we note that the SEC would still have access to a fund's line of credit documentation during an exam. Therefore, we recommend eliminating this requirement from any final rule.

Board Approval of Liquidity Program

We agree with the SEC that independent oversight by a board over a fund's Liquidity Program is appropriate, and we note that such a requirement is similar to board approval of a fund's compliance program required by Rule 38a-1 under the 1940 Act. Similar to a fund's Rule 38a-1 compliance program, however, we do not believe that fund boards should be required to approve specific elements or components of funds' Liquidity Programs, including the three-day liquid asset minimum. As noted above, establishing a three-day liquid asset minimum will involve a fact-intensive, technical analysis of the multiple factors required by rule 22e-4. We



believe that the investment staff in conjunction with independent risk and/or compliance personnel, rather than the fund board, is most appropriate to make these determinations and that a fund's board should primarily serve in an oversight role with respect to the process itself, as opposed to the specific outcomes of the process.

Instead of requiring a fund board to approve a fund's three-day liquid asset minimum, we suggest that the board oversee the process utilized by portfolio managers and risk personnel to determine the percentage of liquid assets maintained in a portfolio. Fund boards will receive at least annual reports regarding the adequacy and effectiveness of a fund's liquidity risk management program, which should include a report on the operation of the liquid asset percentage, including whether it was re-set at all during the preceding reporting period. This approach is more consistent with the traditional role of the fund board, where the board is responsible for monitoring operational areas that present material risks or conflicts of interest but not required to make specific determinations about highly detailed, operational issues in which they are not directly involved. Furthermore, funds will retain flexibility to quickly adjust their liquid asset percentages in response to changing market conditions without having to call a formal fund board meeting. Lastly, we note that board approval of the liquid asset percentage is not necessary for the protection of investors assuming the board retains oversight with respect to the process.

We agree that a fund's investment adviser or risk officers administering the fund's liquidity risk management program should be required to submit written reports to the fund's board concerning the adequacy of the fund's liquidity risk management program, including the fund's liquid asset percentage, and the effectiveness of its implementation. However, we oppose the proposed requirement that funds maintain a written record of the assessment of each of the factors set forth in the proposed rule when setting and adjusting each fund's liquid asset percentage. We are not aware of any similar recordkeeping requirement under the 1940 Act for other board determinations that involve a fund's investment program. Instead, consistent with our position that the fund board should serve in an oversight capacity, we feel that the factors should be considered by the fund's adviser and, to the extent relevant, discussed more generally in the written report submitted to the fund's board.

If the rule is adopted as proposed, given the fact-intensive and subjective nature of many of the factors, we believe that the final rule should provide fund boards with a safe harbor in approving specific elements of the liquidity risk management programs and clarify that funds and/or boards are not required to consider all of the factors set out in the Proposal, particularly if those factors are not applicable. The rationale for the board's safe harbor would be consistent with the recommendation above with respect to a safe harbor for disclosure by the fund of its liquidity classifications.

Factors for Consideration – Relationship of an Asset to Another Portfolio Asset and the Fund's Use of Derivatives

As proposed, the factors for both the liquidity classifications and the three-day liquid asset minimum require funds to treat assets used by the fund to "cover" derivatives and other transactions by applying the liquidity classification of the derivative instruments they are



covering. We believe this approach is problematic and should be removed from the final rule. As noted in the Proposal, Investment Company Act Release No. 10666 ("Release 10666") states that "[a] segregated account freezes certain assets of the investment company and renders such assets unavailable for sale or other disposition." However, these segregated assets would only be "frozen" and "unavailable for sale or other disposition" for the period that they are used to cover a specific transaction. At any point, a portfolio manager may decide to unwind a specific asset used as coverage and may replace that asset with another liquid asset. We note that this may change very quickly as portfolio managers consider and re-consider the assets that are tied to a transaction as coverage.

The proposal notes that, in accordance with Release 10666, segregated assets may be replaced by other appropriate non-segregated assets of equal value, and when they are so replaced, formerly segregated assets would no longer be considered unavailable for sale or other disposition. However, as proposed, until those segregated assets are unwound, funds would still be required to classify those assets by referencing the liquidity of underlying instrument. Since segregated assets can be unwound quickly (for example, the following day), we believe that treating assets used by the fund to "cover" derivatives and other transactions using the liquidity of the derivative instruments they are covering provides an inaccurate representation of a fund's liquidity and effectively counts an otherwise liquid asset as illiquid based on a regulatory interpretation, while ignoring its true liquidity.

With respect to the factors to consider for liquidity classifications, the proposal states that in situations where a fund purchases a more liquid asset in connection with a less liquid asset and the fund plans to transact in the more liquid asset only in connection with the less liquid asset (*i.e.*, "hedging"), then both assets should be classified in accordance with the less liquid asset. However, the proposal fails to recognize that hedging is a portfolio management decision. Even if an instrument is originally intended to be used as a hedge for some other, less liquid asset in the portfolio, it is not required to be used as such, and the portfolio manager may decide to transact in the more liquid asset outside of any reference to the less liquid asset. Deciphering a fund manager's intentions with respect to the relationship between portfolio positions introduces a level of complexity that is unnecessary for purposes of a fund's overall liquidity risk management and will increase the costs of compliance. Consequently, for liquidity classification purposes, the two assets should be treated separately.

In addition, we note that some strategies (for example, certain bond funds) utilize derivatives to manage overall portfolio characteristics. For example, a short term bond fund may purchase a futures contract as a means of managing the overall duration or interest rate sensitivity of the portfolio. In such situations, the derivative is not related to any particular asset in the portfolio. It is not clear how such a derivative's liquidity would be classified under the proposed framework.

Lastly, we note that the proposal seems to suggest that derivatives are inherently more risky and present greater liquidity risk than other, more traditional assets. We note that, in some situations, derivatives may be more liquid than more traditional assets, including some bonds. For example, many derivatives that reference bonds as underlying reference assets are exchange traded and cash-settled, unlike the underlying bond, which may not be.



Compliance Period

The SEC proposes a compliance date of 18 months after the effective date to comply with proposed rule 22e-4, but smaller entities (groups of investment companies with net assets of less than \$1 billion as of the end of the most recent fiscal year) would have a compliance date that is 30 months after the effective date. As a large fund family, we believe that it will require more than 18 months to develop internal processes and procedures to implement Liquidity Programs for our funds, including the data and systems development work necessary to build a liquidity classification system, and to seek board approvals, all in accordance with the requirements of the Proposal. Larger fund complexes will face the same challenges and need as much or more time as smaller fund families in complying with the Proposal. Accordingly, we request a compliance date for all entities that is 30 months after the effective date.

II. Optional Swing Pricing

Operational Impediments to Implementing Swing Pricing in the U.S.

We support the concept of swing pricing as an additional tool that open-end funds may use to mitigate potential dilution by passing on purchase and redemption costs to the transacting shareholders, rather than having those costs borne by remaining shareholders. We have found the use of swing pricing to be an effective anti-dilution tool for our Luxembourg-domiciled société d'investissement à capital variable ("SICAV") funds. However, we note that there are serious operational challenges that will not make it possible to use swing pricing in the U.S. in the same way that it is currently applied in other jurisdictions. For example, there is a 3-hour gap between the cut-off time for orders received by our Luxembourg-based SICAV funds until the time they strike their net asset value ("NAV"). During this time, the SICAV can collect information on fund flows from their transfer agent in order to calculate whether any swing thresholds have been breached and, if so, the swing factor that should be applied. No such gap exists for our U.S. mutual funds. Our U.S. mutual funds produce their NAVs as of 4:00 p.m. ET, which is the same as the cut-off time for shareholder transactions.

Many investors in U.S. mutual funds do not purchase shares of a fund directly from the fund itself but instead purchase and redeem shares from any one of several different types of intermediaries, such as broker-dealers, fund platforms and retirement plans. Ultimately, all fund purchase and redemption information is submitted to the fund's transfer agent, and the transfer agent then keeps track of cash flowing into and out of the fund. However, intermediaries typically net orders received from investors against each other and submit a single file containing net or omnibus purchase and redemption information to the fund's transfer agent. Thus, funds do not get a clear picture of total purchases and total redemptions but rather just net information.

Under rule 22c-2, purchase and redemption orders must be submitted by investors to broker-dealers and other intermediaries by 4:00 pm in order to receive that day's price, and, pursuant to the SEC's rules, intermediaries are then allowed to provide the complete order information to the fund transfer agent at a later time. Often, intermediaries do not provide this information to the fund's transfer agent until late at night or even the following morning. Because funds do not have a complete understanding of fund flow information until after they



strike their NAV, we are not sure it will be possible to accurately determine whether or not the swing threshold was breached. Consequently, funds will be using imperfect and incomplete information to adjust their NAVs, as they will necessarily need to rely on interim information or estimated flows from their intermediaries. There could be substantial costs and technology hurdles in order for intermediaries to provide enough information prior to finalizing the calculation of a fund's NAV to allow the fund to accurately determine whether a swing threshold has been breached. Our experience with Rule 22c-2 tells us that it will not be easy to collect this information from all intermediaries in a timely manner.

It is our understanding that this issue of material shareholder flow information not being received until after NAV calculation is not present in other jurisdictions where swing pricing is applied, as ownership of SICAV funds, for example, is heavily weighted towards direct, institutional investors. This difference in shareholder base means that accurate flow information can be received prior to NAV calculation, and in the case of SICAV funds, accurate flow information is typically received three hours prior to NAV calculation. This timing allows for swing pricing to operate with minimal risk of NAV errors due to misapplication of a swing factor.

Given the potential for NAV errors if swing pricing is implemented with the current timing of fund flow information, we strongly encourage the SEC to consider what changes are necessary to its regulatory framework to require (or otherwise provide funds with the ability to influence) intermediaries to provide accurate estimates of purchase and redemption information prior to funds striking their NAVs so that swing pricing can be an effective tool to mitigate potential dilution.²

Swing Factor Determination

We believe that mutual funds should be permitted but not required to consider market impact costs when determining their swing factor. These costs are not easily quantifiable and funds will not be able to generate an accurate estimate of market impact costs.

Under proposed rule 22c-1(a)(3), in determining its swing threshold, a fund would be required to consider, among other things, any near-term costs that are expected to be incurred by the fund as a result of net purchases or net redemptions occurring on the day the swing factor is used to adjust the fund's NAV per share, including "market impact costs." Market impact costs are defined in the Proposal as costs that are incurred when the price of a security changes as a result of the effort to purchase or sell the security. The SEC recognized in its Proposal that market impact costs cannot be calculated directly and suggested that these costs can be roughly estimated by comparing the actual price at which a trade was executed to prices that were present

² We note that effective October 14, 2016, upon the implementation of the new money market reform rules, intermediaries will be asked to provide inter-day access to fund flow information for money market funds that are subject to liquidity fees and gates to assist those funds in determining whether certain thresholds have been surpassed that require a liquidity fee or gate to be imposed. If intermediaries are able to do so, we would like the SEC to encourage intermediaries to leverage these capabilities so that all mutual funds could have access to intraday fund flow information.



in the market at or near the time of the trade. We feel that because these costs cannot be directly calculated, and because they are not easy to quantify, the SEC should not require them to be considered in the final rule.

We note that our SICAV funds, for example, are not required to take market impact costs into consideration when determining their swing factor but are permitted do so, if they feel it is applicable (for example, with certain illiquid securities). When setting their swing factor, our SICAV funds primarily consider transaction costs, both explicit and implicit, such as broker commissions or estimated dealer transaction fees paid by the fund, custody transaction charges, tax implications, and foreign exchange costs. Unlike market impact costs, these costs are easily quantifiable and do not require subjective prediction. In addition, for the same reasons as applicable to the Proposal's six-bucket liquidity classification system, because market impact costs are not easy to quantify, calculating them would require significant research and manual manipulation, making swing pricing more labor-intensive and burdensome to perform.

Compliance Period

The SEC proposes that, as reliance on rule 22c-1(a)(3) would be optional, a compliance period would not be necessary. However, some fund managers already have extensive experience with swing pricing, while other fund managers will be approaching swing pricing for the first time and, hence, be at a disadvantage. In order to provide a level playing field, we believe the SEC should provide for a compliance date that is one year after the effective date.

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We support the SEC's goal of strengthening liquidity risk management by open-end funds and we appreciate the opportunity to submit our comments on this Proposal.

Thank you again for the opportunity to express our thoughts on this important topic. Should you have any questions or wish to discuss our letter, please feel free to contact Christopher Edge, Head of Equity Risk Management, at 410-345-2432, Fran Pollack-Matz, Senior Legal Counsel, at 410-345-6601, or Darrell Braman, Managing Counsel, at 410-345-2013.

Sincerely, /s/David Oestreicher David Oestreicher Chief Legal Counsel

