



February 14, 2022

Ms. Vanessa A. Countryman
Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-1090

Re: Open-End Fund Liquidity Risk Management Programs and Swing Pricing; Form N-PORT; File Number S7-26-22 ("Proposal")

Dear Ms. Countryman,

Intercontinental Exchange, Inc. ("ICE"), on behalf of itself and its subsidiaries, appreciates the opportunity to comment on the Proposal by the Securities and Exchange Commission ("Commission" or "SEC") to amend current liquidity risk management requirements for certain registered investment companies ("registered funds").¹ ICE is generally supportive of regulatory initiatives aimed at improving transparency and encouraging best practices around liquidity risk management for the fund industry.

We provide our comments on the Proposal from ICE's perspective and based on its experience as a provider of liquidity risk management tools, including a liquidity classification service, as well as other portfolio data and analytics services. We are appreciative of the opportunity to share our perspectives with the Commission.

I. Background on ICE Liquidity Indicators™ Service

ICE, through its Fixed Income and Data Services business, offers a suite of pricing, evaluation, market data, analytics, and related services. Among the services offered by ICE is its liquidity risk management service, ICE Liquidity Indicators™, designed to support firms' risk management in connection with a variety of global regulatory obligations, including SEC Rule 22e-4 under the Investment Company Act of 1940 ("1940 Act") relating to liquidity risk

¹ Securities and Exchange Commission, Proposed Rule on Open-End Fund Liquidity Risk Management Programs and Swing Pricing; Form N-PORT Reporting, Securities Act Release No. 11130; Investment Company Act Release No. 34746 (November 2, 2022), 87 Fed. Reg. 77,172 (December 16, 2022) ("Proposal").



management programs for funds (“Rule 22e-4”).² Since 2015, ICE Liquidity Indicators™ has used ICE’s broad evaluated pricing content (e.g., price, yield, bid-ask spreads, duration, etc.) with an extensive network of market data sources, including the market color and transactional data across global markets, to assess the liquidity profile of securities. The pricing and evaluations inputs serve as a critical foundation of market information driving our liquidity services. ICE provides liquidity metrics for over 3 million global financial instruments on a daily basis across the equity, fixed income, and derivatives markets. The ICE Liquidity Indicators™ service helps clients measure liquidity at the security and portfolio levels.

Our service utilizes two different approaches to measure liquidity: a quantitative model-based approach and a heuristics approach.

- The **quantitative approach** utilizes proprietary modeling techniques to produce a broad array of liquidity metrics, including instrument-level liquidity scores. Clients can define individual inputs and assumptions, including a reasonably anticipated trade size (“RATS”) and target market price impact (“TMPI”), to generate client-specific liquidity metrics, including projected Days to Liquidate (“DTL”) and Days to Cash Conversion (“DTCC”), which, among other things, are used in our models to classify each security in the client’s portfolio into indicative SEC liquidity buckets identified in Rule 22e-4. The TMPI can be thought of as a conditional cost assumption, which can be used to determine the time to liquidate under the client-determined acceptable departure from the current price.
- The **heuristics approach** (discussed in more detail below in Section III.D) also categorizes securities into the SEC liquidity buckets, but it is a rules-based approach that projects liquidity for groups of instruments (e.g., sectors within an asset class) that can be defined with a relatively homogenous liquidity profile. This rules-based approach analyzes the underlying characteristics of an instrument to assign it an indicative liquidity bucket based on certain pre-defined logic and is not reliant on client inputs for RATS or TMPI.

Additionally, using ICE Liquidity Indicators™, clients can perform liquidity stress tests to better understand the liquidity of their investments under stressed scenarios (e.g., a suite of historical simulations such as 2008 Global Financial Crisis, or hypothetical stress scenarios).

For the purpose of our response to this Proposal, ICE aggregated and summarized its clients’ portfolios to provide the Commission with data regarding the inputs utilized and outputs received by funds using the ICE Liquidity Indicators™ service. We filtered for only those clients we expect utilize our service with regards to their Rule 22e-4 compliance workflows, as well as several other filters as described in the Appendix below. We were left with approximately 3,500

² For more information on our service, see: <https://www.theice.com/market-data/pricing-and-analytics/liquidity>

funds analyzed, combining for over 700,000 unique financial instruments across our client universe. Here are our general findings:

- **Equity TMPI:** For equity portfolio holdings across these approximately 3,500 funds, inputs are almost equally split between using a TMPI assumption of 1% or 2%, with funds using one of these two TMPI assumptions for approximately 90% of all equity holdings. The range of fund TMPI assumptions for equity portfolio holdings goes from 0.25% to 3.50%.
- **Fixed Income TMPI:** Our analysis of fixed income portfolio holdings revealed a larger concentration of funds using a 2% TMPI assumption, with 1% being the next most common TMPI assumption. Although the maximum assumption continues to be 3.5% in this asset class, there are more sub-1% assumptions for fixed income holdings than for equity holdings.
- **Liquidity Classifications:** Across the 3,500 funds we analyzed, using both our quantitative and heuristics approaches described above, we provided clients with SEC liquidity classifications for over 1.1 million instruments.³ In the results returned to clients,⁴ 93.6% of instruments were highly liquid (HLI), 0.9% were moderately liquid (MLI), 2.5% were less liquid (LLI), and 2.9% were illiquid (ILI).
- Please see Appendix at the end of this document for further detail.

II. Response to SEC Observations from the March 2020 Pandemic Market Event

In the Proposal, the Commission expressed concerns about the adequacy of the liquidity risk management programs adopted by registered funds based on its observations during the onset of the COVID-19 pandemic and subsequent lockdowns. Specifically, the Commission expressed concerns about potential delays by funds in identifying liquidity issues during stressed market events, the likelihood that meaningful fund outflows contributed to the dilution of shareholder value for remaining investors, and an overarching belief that funds have overestimated the liquidity of their investments. For support of its concerns, the Commission highlights the lack of use of tools such as swing pricing⁵ during that period's increased market volatility. The Commission also observed that approximately two-thirds of funds did not appear to reclassify the liquidity profile of any investments between the February 2020 and March 2020 N-PORT filings.

³ There are over 1.1 million total portfolio holdings, composed of 700,000+ unique securities.

⁴ Uncategorized portfolio holdings were removed from the analysis. Portfolio holdings are uncategorized for a number of reasons including incorrect identifier submissions, unrecognized identifiers, or no available coverage.

⁵ Since 2016, open-end funds (except money-market funds and ETFs) are permitted, but not obligated, to use swing pricing under certain circumstances.

“Funds Slow to Adjust” Assumption

To begin, we would like to comment on the Commission’s conclusion that funds’ existing liquidity risk management programs were slow to adjust to changing market conditions. In the Proposal, the SEC states that *“many fund and liquidity vendor classification models use data lookback periods of 30 days or more that made them slowly adjust to changing market conditions.”*⁶ We believe that the Commission’s conclusion is incorrect based on our analysis of March and April 2020 data.

We use a time-weighted algorithm that, even with an extended lookback period,⁷ is likely to react appropriately when market volatility increases significantly. As demonstrated in Figures 1 through 3 below there was a notable and observable degradation of liquidity even using a longer lookback period across various asset classes and regions. We believe this demonstrates that our liquidity outputs responded timely even with longer lookback periods. We believe longer lookback periods are valuable to provide stability, ensure appropriate amounts of input data are utilized, and to avoid models overreacting to very transitory (e.g., intraday) liquidity events.

Since the market events of March 2020 were the first to really stress any commercially available liquidity models since the implementation of Rule 22e-4, ICE consulted with the industry throughout the shocked volatility period and solicited feedback from market makers, portfolio managers, and other market participants to assess the overall performance of results produced by our models. Our clients were contacting us for real-time validation of the models as the events were unfolding. In response, we reviewed the observed liquidity changes of the ICE BofA US Corporate Index⁸ as a proxy for a fund from February month-end through March month-end of 2020. Our analysis shows that using consistent assumptions for trade size (a \$10BN portfolio liquidation) and TMPI (a 0.50% assumption applied to every holding), the percentage that could be liquidated in one-day or less dropped from 97.4% as-of February month-end to a low of 78.2% as of March 23rd, before reverting back to 89.4% as of March month-end.⁹

Figure 1 below is a similar analysis for the constituents of the ICE BofA European IG Corporate Bond Index but shows a slower “rebound” period. Results of similar analysis is also provided in Figure 2 and Figure 3¹⁰ below for U.S. high-yield corporate bonds and U.S. large-cap equities,

⁶ Proposal, supra note 1, at 32.

⁷ The lookback periods utilized in our models vary by asset class, and generally range from 20 to 63 days.

⁸ Index services are provided through ICE Data Indices, LLC.

⁹ Please note that using the same assumptions, our analysis shows that the percentage of the index that could be liquidated in seven (7) days or more went from 0.2% on February month-end, spiked at 8.2% on March 23rd, and reverted back to 1.3% by March month-end.

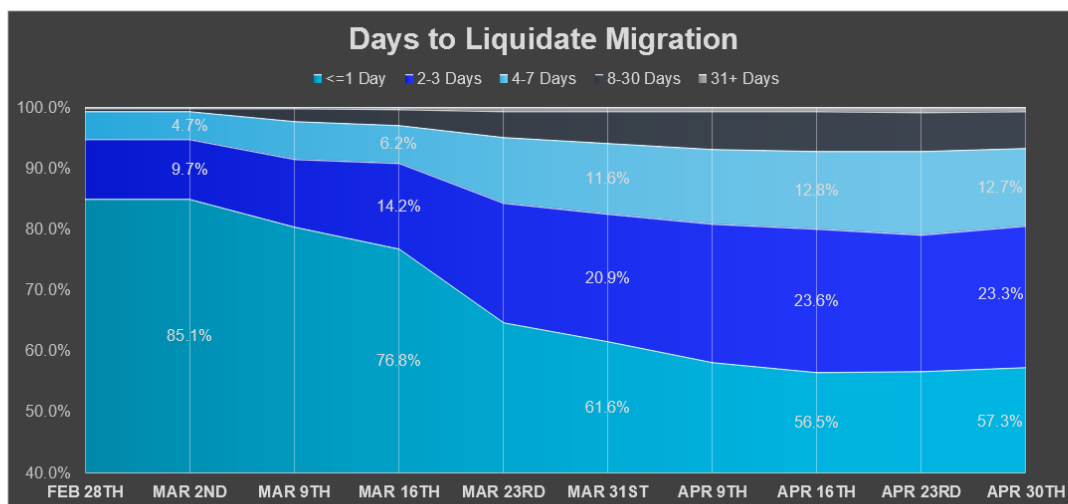
¹⁰ Liquidation volumes were selected based on an analysis of average transaction sizes for the applicable asset class and region compared to the number of constituents in the index.

respectively. As these charts indicate, our models were able to react to the market downturn in a timely fashion and reflect changing liquidity even when using longer lookback periods. Therefore, based on these results, we do not believe it is a valid assumption that a longer lookback period implies a slower reaction time to degrading liquidity.

Figure 1: Liquidity trend of IG European Corporate bonds during March & April 2020.

Liquidity Trend Analysis through the COVID Crisis: Corporates

ICE BofA European IG Corporate Bond Index: €25BN Liquidation Volume | 25bps Target MPI

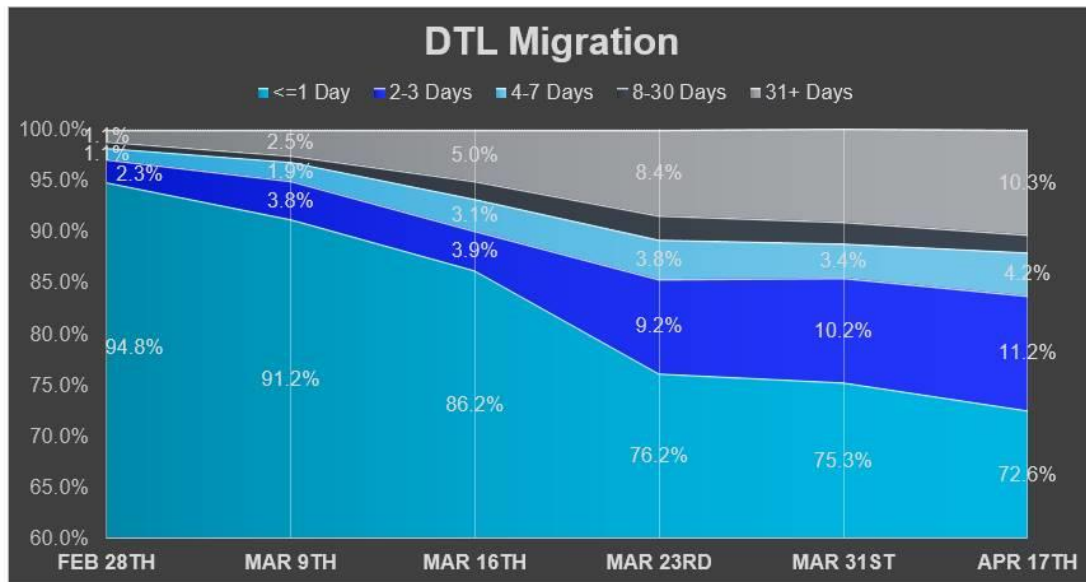


Source: ICE Data Services

Figure 2: Liquidity trend of U.S. High Yield Corporate bonds during March & April 2020.

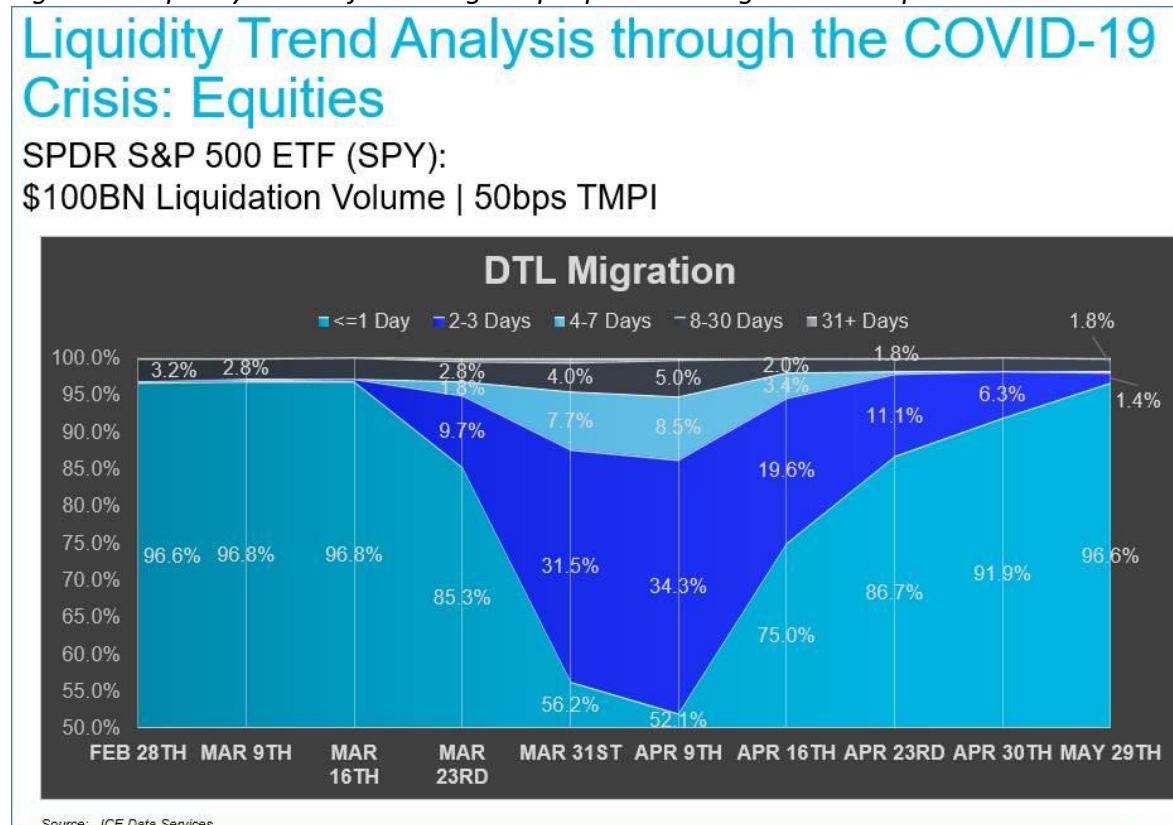
Liquidity Trend Analysis through the COVID-19 Crisis: Corporates

ICE BofA US High Yield Index (H0A0):
\$2BN Liquidation Volume | 50bps TMPI



Source: ICE Data Services

Figure 3: Liquidity trend of U.S. Large Cap Equities during March & April 2020.



Stress Testing of Liquidity

In the Proposal, the Commission stated that “funds should be better prepared for future stressed conditions.”¹¹ Other regulators, including the European Securities and Markets Authority (“ESMA”), focus more on liquidity scenario analysis and stress testing to prepare for future liquidity events.¹² This ESMA approach expects funds to quantitatively assess the impact to the liquidity of their portfolios given different historical simulations and hypothetical stress testing scenarios. To assist European clients with these requirements, ICE has developed

¹¹ Proposal, supra note 1, at 33.

¹² European Securities and Markets Authority. (Sept. 2, 2019). *Final Report Guidelines on liquidity stress testing in UCITS and AIFs* (ESMA34-39-882). https://www.esma.europa.eu/sites/default/files/library/esma34-39-882_final_report_guidelines_on_lst_in_ucits_and_aifs.pdf.

capabilities to allow funds to stress test their portfolios¹³ through a combination of historical simulations (e.g., 2008 Global Financial Crisis, 2014/2015 Eurozone contagion, COVID-19 pandemic, etc.) and hypothetical stresses (e.g., moderate stress, adverse scenarios, and severely adverse scenarios). This functionality allows funds to quickly visualize and measure the liquidity of their portfolios under both baseline and stress scenarios and has been broadly adopted by our EMEA and APAC clients. We believe scenario analysis can play a valuable role in the liquidity risk management process, and it would be appropriate for the Commission to consider such in lieu of the amendments to Rule 22e-4 currently being proposed by the SEC.¹⁴ We elaborate on this recommendation further below in Section III.B.

III Proposed Amendments to Rule 22e-4

A. Proposed Removal of the Less Liquid Investment Category

The SEC proposes to consolidate the current four bucket schema (i.e., Highly liquid investments (“HLI”), Moderately liquid investments (“MLI”), Less liquid investments (“LLI”) and Illiquid investments (“ILI”)) into three categories by removing the LLI bucket. Among other things, this change would require updating the definitions of the remaining three categories.¹⁵ The Proposal notes that bank loans are the most common type of investment in the LLI category and that the average settlement time is T+23 with a median of T+15.¹⁶

As the Commission noted, liquidity classifications help funds monitor liquidity and comply with the 15% limit on illiquid investments. The SEC asserts that the amendments to the liquidity classifications would “*better prepare funds for future stressed conditions*” but it is unclear how the removal of a bucket for less liquid investments is necessary to achieve that goal. The SEC also states that this change would “*reduce the risk of a fund not being able to satisfy redemptions without diluting the interests of remaining shareholders while waiting for the proceeds from the sale of an investment with extended settlement.*”¹⁷ However, the SEC does not support this view with sufficient evidence that it is an appreciable risk that funds would be unable to meet shareholder redemptions without diluting remaining shareholder interests or how removing the LLI bucket would reduce this potential risk.

¹³ Our stress testing functionality works by parameterizing the key inputs into liquidity such as bid-ask spreads, price volatility, and expected access to trading volumes. Clients can also add multipliers to their RATS and/or haircut their TMPI assumptions.

¹⁴ Specifically, requiring a 10% stressed trade size assumption and the proposed changes to the significant impact value standard.

¹⁵ Proposal, *supra* note 1, at 42.

¹⁶ *Id.* at 61.

¹⁷ *Id.* at 63.



We believe that removing the LLI category would reduce transparency and remove a level of granularity that is helpful to a liquidity risk officer's understanding of a fund's liquidity profile. In addition, while we support the Proposal to make the aggregated liquidity data publicly available on Form N-PORT, this additional transparency would be less robust without the LLI category, as the differentiation between LLI and ILI classifications would be unavailable to investors.

Further, we believe that the LLI category reflects a valuable distinction between investments that are easy to liquidate without impacting price but may take longer to settle from those investments that take longer to liquidate without impacting the price. We do not believe that classifying the former type of investments as illiquid would be appropriate. Moreover, by effectively reclassifying LLI holdings as illiquid, asset owners and the SEC would no longer be able to distinguish between a portfolio holding that could be liquidated quickly in large size without moving the price from a holding that would in earnest take more than seven days to dispose of without impacting the value of the investment.

In lieu of eliminating the LLI category, ICE recommends that the SEC consider alternative approaches such as (i) imposing a cap on LLI which would address concerns that LLIs are not sufficiently liquid by limiting funds' holdings in such instruments, or (ii) requiring a higher highly liquid investment minimum ("HLIM) for funds with higher LLI classification concentrations. Funds are already confined by a 15% cap on illiquid investments where they are not permitted to add new ILI investments to their portfolios if, immediately after the purchase, the percentage of ILI investments would be greater than 15% of their net asset value (NAV). ICE believes these alternatives would address the Commission's concerns while retaining the benefits of transparency and reported granularity.

The table in Figure 4 presents ICE's recommended classification definitions compared to the Proposal.

Figure 4: Table of recommended liquidity category definitions.

Liquidity Classification	Proposed Rule 22e-4	ICE Recommendation
Highly liquid investment	Any U.S. dollars held by a fund and any investment that the fund reasonably expects to be convertible to U.S. dollars in current market conditions in three business days or less without significantly changing the market value of the investment.	No suggested change
Moderately liquid investment	Any investment that is neither a highly liquid investment nor an illiquid investment.	Any investment that the fund reasonably expects to be convertible to U.S. dollars in current market conditions in more than three but in seven or fewer calendar days, without significantly changing the market value of the investment.
Less liquid investment	Removed	Any investment that the fund reasonably expects to be able to sell or dispose of in current market conditions in seven calendar days or fewer without the sale or disposition significantly changing the market value of the investment, but where the conversion to U.S. dollars is reasonably expected to settle in more than seven calendar days.
Illiquid investment	Any investment that the fund reasonably expects not to be convertible to U.S. dollars in current market conditions in seven calendar days or less without significantly changing the market value of the investment and any investment whose fair value is measured using an unobservable input that is significant to the overall measurement.	Any investment that the fund reasonably expects not to be able to sell or dispose of in seven calendar days or less without significantly changing the market value of the investment. ¹⁸

¹⁸ As detailed further below in our letter, we suggest removing the unobservable input criteria from the ILI definition.

B. Proposed Replacement of RATS with a Required Stressed Trade Size

Under current Rule 22e-4, funds are required to categorize the liquidity of their portfolio holdings by assuming a RATS, generally a pro-rata percentage (i.e., vertical slice) of the total market value of the securities held in their portfolio. The Proposal highlights that staff outreach has observed that there is a variety of different approaches employed by funds to derive this value, such as flow history, flow trends of similar funds, or other shareholder analysis. The SEC also expressed concern in the Proposal that the industry as a whole is using relatively small RATS to analyze market depth, leading to more liquid classifications. Under the Proposal, when determining an investment's liquidity classification, the Proposal would mandate that a fund use a stressed trade size assumption of the sale of 10% of such fund's net assets by reducing each investment by 10% ("10% vertical slice")¹⁹ to help determine whether such sale or disposition would significantly change the market value of the investment.

ICE does not believe that this proposed change is the most effective way to address any concern that funds may be overstating the liquidity of their portfolios. Instead, providing more specific requirements relating to liquidity stress testing (similar to what is required by ESMA described above) would be consistent with the existing requirement in Rule 22e-4 which requires funds to reasonably design liquidity risk management programs to include consideration of "liquidity of portfolio investments during both normal and reasonably foreseeable stressed conditions." Moreover, there would be added benefits to investors to have more global comparability between UCITS²⁰ and U.S. registered funds if Rule 22e-4 were more closely aligned with the ESMA liquidity stress testing guidelines in this regard.

Historically, the SEC has acknowledged that funds could legitimately adopt different approaches. In the final rule adopting the investment company liquidity risk management program, for example, the Commission stated "*that liquidity risk management techniques may vary across funds, including funds within the same fund complex, in light of unique fund characteristics, including, for example, the nature of a fund's investment objectives or strategies, the composition of the fund's investor base, and historical fund flows.*"²¹ We believe that statement is still accurate and should form the basis for any rulemaking the SEC undertakes in this area. Specifically, ICE believes that a fund itself is best positioned to know what RATS assumption is appropriate for its particular investments.

ICE's experience in providing liquidity services to a range of fund clients leads us to believe that funds have robust and sophisticated approaches in their input determinations. The RATS

¹⁹ The Proposal defends 10% as appropriate based on historical net outflow analysis performed by the Staff.
²⁰ "Undertakings for Collective Investment in Transferable Securities"
²¹ Securities and Exchange Commission, Final Rule Investment Company Liquidity Risk Management Programs, Securities Act Release No. 10233; Investment Company Act Release No. 32315, 81 Fed. Reg. 82142 (November 18, 2016). <https://www.sec.gov/rules/final/2016/33-10233.pdf>, page 39.



assumption used today by our clients to calculate days to liquidate generally range from a 3% to 10% vertical slice assumption applied to each portfolio investment. ICE has several clients who also vary the liquidation volume assumption based on asset type in lieu of a purely vertical slice for multi-asset portfolios.

ICE believes that a more effective way to strengthen funds' liquidity risk management than requiring all funds to use a standard stressed trade size assumption for their liquidity classifications is to require stress testing. We believe a reasonably designed liquidity risk management program would achieve two objectives. One objective is to help funds evaluate the liquidity of their investments in a normal or baseline environment. The second objective is to anticipate how funds would be impacted in stressed market events. The Proposal's requirement of a 10% vertical slice as an input for stressed trade size along with other baseline inputs means the outputs would neither represent baseline liquidity calculations nor the potential impact of a stressed event.

As part of this stressed test approach, the SEC could consider requiring a minimum stressed trade size that funds would use to determine liquidity bucket classifications (e.g., 2% pro-rata slice for the daily baseline scenario and 5-10% for a less frequent stressed scenario). An approach with separate stress testing but where funds can select their own RATS would allow funds to establish liquidity risk management programs that are appropriate to their specific investments. We further believe that an approach in which funds report both a baseline and user-selected stressed scenario(s)²² would more effectively address the SEC's concerns about the adequacy of funds' liquidity risk management programs.²³

C. Significant Market Impact Standard

Rule 22e-4 currently requires funds to classify their holdings based on the sale or disposition that does not significantly change the market value of the investment. Currently, funds have flexibility in how they determine what constitutes a significant change in market value and how they calculate the impact a sale or disposition would be expected to have on an investment. Under the Proposal, the Commission would establish a definition of what it means to significantly change the market value of an investment that incorporates several minimum standards for the variables used in making such a determination.

First, the Commission is proposing different calculations for funds' determination of significant market impact for exchange-traded instruments and for OTC holdings.

²² Our experience suggests that monthly stress testing provides adequate information to clients to inform them about the sensitivities of their portfolios.

²³ We suggest that only the aggregated baseline classification data would be publicly disseminated on Form N-PORT.

For securities listed on an exchange (either a national securities exchange or foreign exchange), the SEC believes that *“selling or disposing of more than 20% of the security’s average daily trading volume would indicate a level of market participation that is significant.”*²⁴ The proposal would *“require funds to measure the average daily trading volume [(“ADTV”)] over the preceding 20 business days”*²⁵. The Proposal states that when foreign shares are not traded but when U.S. markets are open (e.g., Golden Week in Japan), those days count as business days with zero volume. For all other investments, the Proposal would define a significant change in market value as any sale or disposition that would result in a decrease in the sales price of more than 1%.

ICE does not agree with the Commission’s differentiation between exchange-listed securities and other securities when determining what constitutes a significant market impact. The proposed method of determining significant market impact for exchange-listed securities is unnecessarily cumbersome by requiring daily volume calculations for only exchange-listed securities.

Furthermore, we believe that the emphasis on volume for exchange-traded securities instead of price impact is misplaced. ICE believes that it is important to permit a fund to define the significant value impact metric in a price domain for exchange-traded instruments as well as in the proposed volume metrics. As stated above, our Rule 22e-4 clients generally input a RATS and TMPI assumption, and our quantitative model-based approach calculates projected DTL and DTCC, which are then used to classify the investments into the appropriate SEC liquidity classification bucket²⁶. Clients can have different RATS or TMPI assumptions for each security in their portfolio. Changing either the RATS or TMPI may impact the classification output. As noted above, a 1% and 2% TMPI are the most commonly utilized assumptions among our clients who use our service for Rule 22e-4 compliance purposes, and funds generally apply the same assumptions across all of their holdings, including both exchange-traded and non-exchange-traded holdings.

As required under existing Rule 22e-4, the SEC classifications are essentially a time metric; in other words, each bucket is defined by how long it takes to convert to cash. We have clients who also try to solve for market price impact- for example, clients that solve for how much more it would cost to sell a specified volume in one day versus three days. Other clients use our services to solve for how much of a position they would be able to sell at a specified TMPI over a specified time horizon. As proposed, for exchange listed instruments, clients would have two

²⁴ Proposal, supra note 1, at 50-51.

²⁵ *Id.*, at 51.

²⁶ Please note that clients can elect to receive up to ~80 liquidity data points in the output file that are useful in other areas of their liquidity risk management frameworks, and to understand how we arrived at the SEC bucket classification.



different volume metrics that they would be required to input and no TMPI. As a result, the service we offer to clients would need to be simplified to use linear, arithmetic calculations that divide the RATS volume by the 20-day ADTV volume to reach the number of days to convert to cash. We believe this would lead to a loss of data quality over what our clients currently receive today for exchange-traded instruments. The current ICE Liquidity Indicators service factors in non-linearity into its calculations, recognizing the fact that volume introduced to the market on one day will impact the ability to sell that same volume on subsequent days without moving the price. As described further below, this feature would be rendered moot under the Proposal.

From our outreach, there seem to be two interpretations of this aspect of the current Proposal. Some are interpreting this aspect of the Proposal as a simplified linear interpolation. As introduced above, for exchange listed instruments, a fund would assume a 10% vertical slice liquidation volume, would have another volume metric equal to 20% of the rolling 20-day ADTV, and then would need to divide those values to solve for days to convert to cash. As a specific example, assuming the 10% vertical slice of the position is equal to a \$10MM liquidation volume, and 20% of the 20-day ADTV is equal to \$1MM, then it would take 10 days to liquidate that position. If this interpretation accurately reflects the SEC's intent, ICE believes this interpretation would be less effective in addressing the SEC's concerns about the adequacy of fund liquidity risk management programs than our current methodology of projecting DTL and DTCC for several reasons. First, this proposed approach would not capture the non-linear nature of investments which we have built into our liquidity models. As outlined above, for many assets, selling \$1MM today without significantly impacting the price would likely lead to having to sell *less than* \$1MM in the future to avoid significantly impacting the price. Our models take into account that the amount a fund could sell tomorrow without a significant market impact may be impacted by what is sold today, which this simplistic interpretation does not account for. Second, there is a material flaw in this interpretation when a specific market has an extended close. Using Golden Week in Japan as an example, this approach would lead to adverse liquidity classifications AFTER the market closure. To elaborate, a 20-day rolling day ADTV calculation will capture a week of no volume for up to 20 business days after Golden Week, which means the ADTV used for calculating the days to liquidate would be diluted and would not reflect an accurate picture of trading volumes while those days are included in the calculation, and calculations using those diluted volumes would result in inaccurate and adverse liquidity classifications.

Another possible interpretation of this component of the Proposal would be that it requires funds to calculate, for every exchange listed security, a projected MPI based on selling a volume equal to 20% of the rolling 20-day ADTV over a specified time horizon (e.g., 1 day). This in turn, would be used as the TMPI input into a subsequent calculation to solve for the SEC liquidity classification using a 10% stressed trade size and this calculated value as inputs to calculate days to liquidate. If this interpretation is what the SEC intended, we believe this approach is unnecessarily burdensome with no discernible meaningful benefit over the approach proposed

for non-exchange listed instruments (i.e., assuming a 1% price haircut for the cost of immediacy). ICE continues to believe that funds should have the flexibility to design their liquidity programs with assumptions that are based on their specific facts and circumstances. However, if the SEC insists on requiring more standardized and objective methods of determining what a significant market impact is, ICE believes it would be more effective in addressing the SEC's concerns to specify a regulatory TMPI value funds must assume across all portfolio holdings (i.e., 1.0% for consistency). If the SEC keeps their existing requirements for exchange-listed securities, ICE strongly recommends that the SEC permit funds to calculate this significant market price impact on a monthly basis and not a daily basis.

D. Removal of the Asset Class Level Classification Accommodation

Under current Rule 22e-4, a fund “may generally classify and review its portfolio investments (including the fund's derivatives transactions) according to their asset class, provided, however, that the fund must separately classify and review any investment within an asset class if the fund or its 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.”²⁷

The SEC proposes to remove the accommodation for asset class level classification, highlighting its view that asset class level classification is not widely used by many funds and their belief that *“this method runs the risk of over-estimating the liquidity of a fund's investments and not adjusting quickly in times of stress”* and that *“asset class level classifications are not compatible with the other changes we are proposing to the classification framework, including the proposed definitions of the value impact standard.”²⁸*

As currently written, Rule 22e-4 assumes that funds take an either/or approach to classifying assets. Meaning, they either classify at the security level or they classify at the asset class level. Thus, by removing the ability to classify at the asset class level, that would leave funds with only the ability to classify at the security level. We do not think that this would give the funds or their liquidity providers the tools they need to classify certain types of instruments that do not lend themselves to the type of model that relies on a stressed trade size or TMPI to determine classification at the security level. We agree that an asset class level classification approach does not make sense for any broad asset classes with potentially heterogeneous liquidity profiles such as equities, corporate bonds, municipal bonds, and certain securitized products, among others. However, ICE believes that certain types of assets do, in fact, have relatively homogenous liquidity profiles, and for these instrument types an approach such as our heuristics approach, that allows for these homogenous liquidity profiles to be considered, is a more appropriate classification methodology than classification at the security level. For the heuristics approach within our liquidity service, briefly mentioned above, ICE applies an

²⁷ 17 C.F.R. §270.22e-4(b)(1)(ii)(A).

²⁸ Proposal, supra note 1, at 56-57.

approach for certain individual sectors (primarily, OTC derivatives) where we analyze aggregated market depth information²⁹ across the asset class sector to determine liquidity classification outputs. For example, our analysis supports that there is a homogenous liquidity profile for all G-7 currency vanilla interest rate swaps for up to 10-year terms, and that they are all highly liquid. Once a homogenous liquidity profile is identified, further analysis is performed to segregate pockets of that asset class that we determine do not share that liquidity profile. Separation among the assets based on factors such as tenor, currency, issuer, and moneyness, and liquidity classifications are assigned based on the combination of factors that identify a homogenous group. For context, 6.7% of all liquidity classifications provided to our Rule 22e-4 clients were supplied using our heuristics approach.³⁰ Moreover, the rules used in our heuristics approach and outputs are reviewed periodically to determine whether the classifications remain appropriate based on the observed market data for the assets analyzed using this approach.

ICE believes that the Commission should continue to allow funds to establish their liquidity risk management programs using an asset class-based approach when appropriate. At a minimum, the SEC should continue to allow funds to use an asset class approach for instruments that do not trade on an exchange and do not have instrument level publicly reported trade data.

E. Amendment to the Definition of Illiquid Investment

The SEC also proposes to amend the definition of an Illiquid investment to include those portfolio investments whose fair value is measured using an unobservable input (i.e., Level 3 investments under the fair value hierarchy established by U.S. GAAP). The SEC acknowledges in the Proposal *“that observability is a valuation concept and may not always correspond to liquidity”*³¹ and further that *“the investments classified as highly liquid that were Level 3 investments primarily were mortgage-backed securities.”*³²

As a provider of evaluations, a liquidity classification service, and a fair value hierarchy classification service, ICE does not believe that the method of valuation of an instrument is determinative of its liquidity. Thus, we do not believe it is appropriate to amend the definition of an illiquid investment to include all investments classified as Level 3 for accounting purposes due to the valuation methodology used. For example, asset classes such as agency specified pass-thru securities that do not have instrument-level post-trade transparency (other than in an

²⁹ Market data reviewed includes, but is not limited to, trade and issuance volumes, trade counts, aggregated market statistics, and other available data at the asset class or issuer level.

³⁰ Based on analysis of over 3,500 client funds, as-of November 2022 month end, in aggregate over 1.1 million securities were bucketed with approximately 74,000 classifications (6.7%) resulting from our heuristics approach.

³¹ Proposal, *supra* note 1, at 64.

³² *Id.*, at 65, Footnote 113.

aggregated Structured Trading Activity Report (STAR)³³ as published by FINRA and ICE Data Services) may lead certain funds to conclude that these are Level 3 classifications because the method of valuation is significantly based on unobservable inputs (e.g., assumptions regarding prepayment speeds, amortization term, and coupon). However, looking at the FINRA-IDS STAR reports, these can often be highly liquid assets. As illustrated by the November 18, 2022 report, there were 89 trades on 370 unique securities with over \$2 billion in daily trading volume in Single-Family 30YR Amortization Specified Pass-Thru securities issued by GNMA. As such, a fund could reasonably conclude that these instruments are Level 3 under U.S. GAAP, but still highly liquid in terms of ability to convert positions into cash.

Instead of amending this definition, ICE believes it is more appropriate for the Staff to monitor those situations where funds file Form N-PORT with holdings that are a combination of Level 3 and HLI and discuss these on a case-by-case basis instead.

F. Day Counting Methodology

The Proposal would amend Rule 22e-4 to specify *“that funds must count the day of classification when determining the period in which an investment is reasonably expected to be convertible into US dollars. For example, in order for a fund to classify an investment as highly liquid on Monday, it would need to reasonably expect that the investment could be sold and settled to US dollars by Wednesday at the latest.”*³⁴

While the Commission indicates in the Proposal that funds have inconsistent practices in this regard, they further expressed concern that such *“inconsistency may lead certain funds to overestimate their liquidity classifications and reduce their ability to meet redemptions.”*³⁵

While ICE supports the Commission’s desire for consistency in this area, ICE believes it is more appropriate to begin counting the day after classification and thus, effectively, count the day of classification as day zero. With the electronification of securities markets, the timeframe to sell or dispose of an asset can be measured in seconds, minutes, or hours, not in days. Therefore, ICE designed its service to return values for DTL and DTCC of less than 1 day when a fund can expect to liquidate and convert to cash (i.e., t+0 settlement) on the same day. Under the Proposal, even if a financial instrument can be liquidated and converted to cash in its entirety on the same day, the Commission has indicated that they believe number of days to convert to cash should count as one day, even if the model determines that the liquidation event should take minutes versus the course of the entire day. Another example of a scenario when counting the date of classification as day one would be inappropriate is when a fund places a trade late

³³ For more information see <https://www.finra.org/finra-data/browse-catalog/structured-product-activity-reports-and-tables>

³⁴ Proposal, supra note 1, at 68.

³⁵ *Id.*



in the trading day, for example, minutes before the close of the local market. In such a case, it would not make sense to count the trade date as day one. While the Commission’s proposed amendment may not present significant issues for funds invested in instruments that can be liquidated and converted to cash on the trade date or even the next day after trade date, extrapolating this proposed counting methodology out to eight days reveals the impact it could have on classifications. As shown in the table below, under the Commission’s Proposal, a security in a t+3 settlement environment would be treated as taking four days to convert to cash and would shift the classification from highly liquid to moderately liquid. Similarly, assets that take six days after trade date and the date of classification to convert to cash would be required to be classified as illiquid.

Settlement Period	T+0	T+1	T+2	T+3	T+4	T+5	T+6	T+7
# of Days to Convert to Cash (Current)	0	1	2	3	4	5	6	7
# of Days to Convert to Cash (SEC Proposal)	1	2	3	4	5	6	7	8

ICE believes that mirroring the settlement cycle in determining how to count days to convert to cash will more accurately reflect the amount of time it takes a fund to convert an investment to U.S. dollars. Further, we do not believe that equating the date of classification to the trade date in the settlement cycle would cause funds to overestimate the liquidity classifications as suggested by the Commission, nor did the Commission present any support that this method of counting days for classification purposes would reduce the ability of a fund to meet redemptions.

IV. Amendments to Rule 22c-1 - Swing Factor Calculations

The Proposal would amend Rule 22c-1³⁶ to require all registered open-end funds, except money market funds and ETFs, to engage in swing pricing under certain circumstances. Under the Proposal, funds would be required to swing the NAV price down when faced with any net redemptions using a swing factor that includes near-term transaction costs of rebalancing when the net redemption is <1% of the NAV and a swing factor that includes both transaction costs and “market impact costs”³⁷ when net redemptions exceed 1% of the fund’s NAV. However, when a fund has net purchases, the Proposal would only require swing pricing when the net purchases exceed 2% of the fund’s NAV (i.e., inflow swing threshold). In those situations, the fund’s swing factor would adjust the price upwards by both the near-term transaction costs and

³⁶ Existing Rule 22c-1 permits, but does not obligate, a fund to swing their NAV price with a 2% cap under certain circumstances since 2016. In the Proposal, the SEC notes that no fund has implemented swing pricing, even during the stress periods of March 2020. Proposal, supra note 1.

³⁷ “Market impact costs are the costs incurred when the price of a security changes as a result of the effort to purchase or sell the security.” *Id.* at 106-107.

the market price impact costs associated with shareholder activity. The fund's swing pricing administrator would be allowed to use lower thresholds.

The Proposal further goes on to define near-term costs to *"include spread costs, transaction fees and charges arising from asset purchases or asset sales resulting from those purchases or redemptions."*³⁸ Moreover, costs are to be analyzed *"based on an assumed purchase or sale of a vertical slice of the fund's portfolio"* which *"would more fairly reflect the costs imposed by redeeming or purchasing investors."*³⁹ Finally, the Proposal explicitly specifies that good faith estimates for the swing factor must include *"(1) spread costs; (2) brokerage commissions, custody fees, and any other charges, fees, and taxes associated with portfolio investment"* purchases or sales; and when appropriate, *"(3) the market impact."*⁴⁰

ICE's comments on the swing pricing proposal only focus on certain operational aspects. The merits of the proposed amendments to Rule 22c-1 versus the operational issues that funds and intermediaries may face is outside the scope of ICE's comments.

We generally agree with the Proposal's statement that *"methodologies used to estimate market impact are often created by liquidity measurement vendors. These vendors typically create a model to gauge what size of trade will have a market impact on a security (using various factors such as bid-offer spreads, issue sizes, recent daily average volumes, and recent trade sizes), back-test the model to check its accuracy, and then adjust the weights of the various factors used in the model accordingly."*⁴¹ As a provider of both liquidity services and best execution services (i.e., calculation of size-adjusted trading cost analytics among other outputs), ICE has considered the workflow changes necessary to implement the proposed swing pricing requirements. Based on initial client outreach, we believe that, even with the proposed hard close,⁴² it would not be feasible for our clients to provide us with known or actual flow information in a timeframe that would allow them to calculate and publish their swing-pricing adjusted NAVs in a timely fashion. Even with the proposed hard close requirement, we believe such calculations are operationally untenable within the NAV-calculation window.

³⁸ Proposal, supra note 1, at 116, Footnote 194.

³⁹ *Id.*, at 117.

⁴⁰ Proposal, supra note 1, at 118. As stated above, the market impact is to be included when net redemptions exceed 1% of the fund's NAV or when net purchases exceed 2% of the fund's NAV.

⁴¹ *Id.*, at 121, Footnote 206.

⁴² The Proposal hard close requirement would make the current day's execution price solely available if the eligible order is received by the fund, its designated transfer agent, or a registered securities clearing agency (as opposed to another intermediary) prior to the pricing time as of which the fund calculates its NAV, typically 4:00PM EST). *Id.*, at 132.

V. Form N-PORT Filing Frequency and Amendments

Under existing rules, funds file Form N-PORT on a quarterly basis with a 60-day delay, submitting all three months' forms at the end of their fiscal quarter. Only the third month's form is made publicly available on EDGAR, 60 days after the quarter-end. Under the Proposal, each month's form would be filed separately, 30 days after the end of the month, and subsequently made publicly available on EDGAR 60 days after month-end. Moreover, it is proposed that Form N-PORT include a new disclosure⁴³ regarding the percentage of a fund's portfolio that falls into each liquidity classification and be publicly disseminated on EDGAR.

ICE generally supports initiatives designed at improving transparency. However, increased transparency needs to be appropriately balanced with the costs, and we believe that this aspect of the Proposal would create significant additional expenses that would be passed on to shareholders without countervailing benefits, as monthly reports on a 60-day lag only offer incrementally useful information compared to quarterly reports.

ICE also supports the public disclosure of the aggregated liquidity classification data. The additional transparency of liquidity data, even at the aggregated level, would improve liquidity trend analysis and fund comparison metrics.

If the Commission does not move forward with its Proposal to eliminate the LLI classification and allows funds additional flexibility in the stressed trade size assumption, as we recommend above, then ICE believes certain changes would be needed to the following proposed Form N-PORT disclosures:

1. Add a new Item B.12.c⁴⁴ which would identify the percentage of each portfolio holding utilized in the classification (i.e., the reasonably anticipated trade size percentage) and include such information in the public dissemination of Form N-PORT.
2. If the SEC requires both a baseline classification and a stressed scenario separately, as we recommend, we think it would make sense to have additional disclosures under Item B.8 (i.e., the derivatives transactions may change classification between the baseline and stressed scenario), Item B.12 (i.e., additional disclosure of the percentages in each bucket under both the baseline and stressed scenario), and Item C.7 (i.e., funds would disclose two or more classifications per holding, for each scenario). We also believe it would be appropriate for a new Item B disclosure to serve as a narrative description of the stress scenario submitted on the filing. We would recommend that only baseline data be publicly disseminated.

⁴³ Proposed Item B.8 and Item B.12.b of Form N-PORT

⁴⁴ ICE would recommend renumbering proposed Item B.12.b to Item B.12.c and make the RATS disclosure Item B.12.b in order to keep the percentage and the RATS assumption used together on the report.



VI. Transition Periods

The SEC has proposed a ladder transition period with a 24-month compliance date for the amendments on swing pricing, and a 12-month compliance date for all other amendments. ICE believes that a 12-month compliance period for the Rule 22e-4 amendments and Form N-PORT amendments is insufficient. We strongly recommend a minimum of a 24-month transition period to give the industry, including liquidity classification and N-PORT vendors such as ICE, time to adjust. First, there are numerous code changes that would need to be made to vendor systems to align with new requirements, while continuing to serve clients not subject to SEC rules. In addition to other changes highlighted throughout this letter, parameterization of these changes would be a resource intensive update.

As a provider of information for parts of Form N-PORT,⁴⁵ our clients currently request the information at various times throughout the month. With some existing clients who only make their data request in the middle of the month, we assume that ample time will be required to improve their processes around month-end holdings compilation and preparation of the input request file that they submit to ICE. We expect that an additional twelve-month transition period (i.e., 24-month total compliance date after the effective date of the rule) would benefit this workflow change for some of our clients and their service providers (i.e., many of our clients use a third-party regulatory reporting software platform to make the data request of ICE on their behalf).

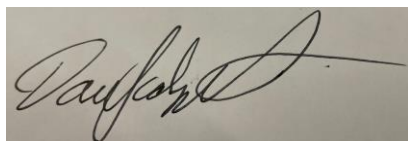
Even more challenging for some of our clients to implement would be the Proposal's requirement that the liquidity classification workflow be a daily process. Although many of our clients already consume daily liquidity classification data, we have some clients who are on a monthly flow. In many cases, those clients do not submit their portfolio holdings directly to ICE but instead use a regulatory reporting software provider as an intermediary. From our own outreach, some of these software provider partners are not prepared to change their workflow to provide daily holdings data. Therefore, there needs to be ample time for either these software partners to overhaul their workflow systems (i.e., support separate environments where the user can continue to review and update the month-end data for their N-PORT filing throughout the subsequent month, while also supporting one to collect and submit daily holdings for liquidity classifications) or for clients to develop their own direct connectivity outside of their current processes.

⁴⁵ ICE offers a service providing much of the reference data and taxonomy disclosures required for Part C, calculation of the risk metrics required for Part B, as well as incorporating Liquidity classification and Fair Value classification data into our N-PORT service upon subscription. We are also working on incorporating the required Rule 18f-4 disclosures into our N-PORT outputs for clients who subscribe to that service as well.

* * * * *

ICE appreciates the opportunity to present its perspective and views on the Commission's Proposal. Should any questions arise about the content of this letter, please do not hesitate to contact me.

Respectfully submitted,

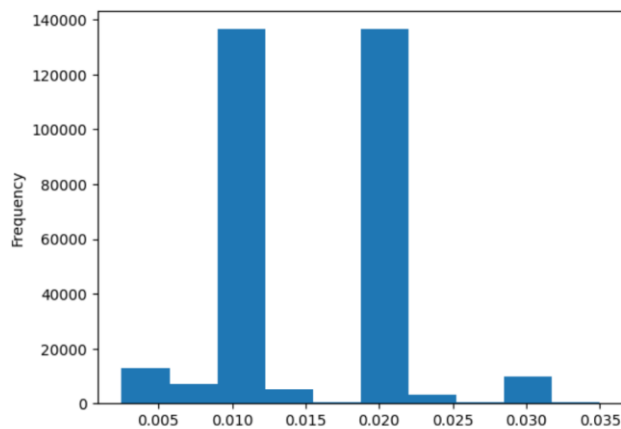
A handwritten signature in black ink, appearing to read "David Scalzetti", is shown on a light-colored background.

David Scalzetti, CFA
Senior Director, Regulatory Products & Strategy
Intercontinental Exchange, Inc.

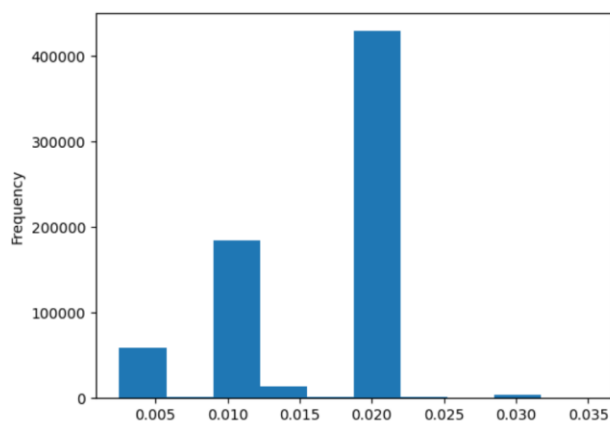
APPENDIX: Description of Aggregated Client Holding Analysis

Our client holdings database has over 4,000 unique U.S. fund names. We manually removed those portfolios where clients appear to be using the system for stress testing an existing fund (e.g., the fund names are “Fund XYZ” and another portfolio with the same holdings called “Fund XYZ Stress”). After this manual filtering, we were left with over 3,500 funds.

We analyzed, at the holding level, the distribution of clients TMPI assumptions in aggregate, and then separately for equity instruments versus fixed income. For the Equity TMPI, this graph shows a histogram of over 300,000 total equity portfolio holdings with the TMPI assumption on the X-Axis and total count of securities using that assumption on the Y-Axis:



The next graph shows the same histogram of the nearly 700,000 total fixed income portfolio holdings, we received showing 2% outweighing 1% at a nearly 2:1 ratio.



As part of the delivery of our results, we include an output called the “SourceOfLiquidityBucket” which returns whether the results are based on our quantitative model-based approach (i.e.,



“Calculated”), our heuristics approach (i.e., “Heuristics_Driven”), whether the client gave us the bucket they want us to provide in the output (i.e., “User_Tagged”), or whether we returned uncategorized. The table below shows the distribution of liquidity classifications by model type, which was used to calculate the analysis shared above in our comment letter.

Uncategorized are removed from the analyses presented above since most are due to syntax errors in client submissions (e.g., when a client provides as internal firm identifier and presents it as a CUSIP or ISIN, we will return uncategorized in the output file). Uncategorized account for nearly 9% of the total client submissions.

Source of Bucket	Bucket	Sec Count	Percent of Grand Total
CALCULATED	HLI	958,503	76.4%
	MLI	3,614	0.3%
	LLI	24,423	1.9%
	ILI	19,513	1.6%
HEURISTICS	HLI	58,495	4.7%
	MLI	2,378	0.2%
	LLI	2,195	0.2%
	ILI	11,245	0.9%
USER_TAGGED	HLI	52,561	4.2%
	MLI	4,007	0.3%
	LLI	2,400	0.2%
	ILI	2,907	0.2%
UNCATEGORIZED	-	111,826	8.9%
GRAND TOTAL		1,254,067	

Bucket	Sec Count	Percent of Total
HLI	1,069,559	93.6%
MLI	9,999	0.9%
LLI	29,018	2.5%
ILI	33,665	2.9%
Total Categorized	1,142,241	