

February 14, 2023

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 No. S7-26-22

Dear Ms. Countryman:

The Vanguard Group, Inc. ("Vanguard")¹ appreciates the opportunity to comment on the Securities and Exchange Commission's ("SEC") proposal regarding liquidity risk management programs and swing pricing.² Vanguard has a long history of supporting regulatory reforms designed to strengthen financial markets and protect investors,³ and we continue to support the highest quality liquidity risk management approaches to better prepare funds for stressed conditions, protect fund investors, and enhance investor understanding of investment risks.

Our unique investor-owned structure means the interests of our tens of millions of individual investors are at the center of everything we do, which is why we support necessary reforms and caution against policies that would unintentionally undermine those goals. To this end, although this proposal appears *intended* to address identified structural weaknesses, strengthen financial markets, and protect investors in response to the March 2020 market volatility, we believe it misses the mark. Instead, the proposal applies an ill-suited, one-size-fits-all approach across the large and diverse fund universe, without regard to actual stress outflows or decades of crisis resilience. And it does so without providing data to justify such a wholesale alteration of risk management and without considering the significant negative impact this proposal would have on investors.

¹ Vanguard is a leading global investment management organization that offers a large selection of low-cost mutual funds, exchange-traded funds, investment advice, and related services to individual investors, financial professionals, and institutional investors. As of December 2022, we managed assets globally on behalf of tens of millions of investors and acted as investment adviser to more than 400 funds worldwide.

² Open-End Fund Liquidity Risk Management Programs and Swing Pricing; Form N-PORT; SEC Release No. IC-34746 (November 2, 2022), available at https://www.sec.gov/rules/proposed/2022/33-11130.pdf ("Release").

³ See e.g., Letter from Sara Devereux, Principal, Global Head of Fixed Income Group, Vanguard, to Brian Smith, Deputy Assistant Secretary for Federal Finance, US Department of the Treasury (August 26, 2022) ("2022 Vanguard Letter to Treasury"), available at file:///C:/Users/uqs9/Downloads/TREAS-DO-2022-0012-0012 attachment 1.pdf (supporting efforts to improve Treasury market structure); Letter from Gregory Davis, Chief Investment Officer, Vanguard, to Vanessa A. Countryman, Secretary, Securities and Exchange Commission (April 11, 2022) ("2022 Vanguard Letter to SEC"), available at https://www.sec.gov/comments/s7-22-21/s72221-20123448-279694.pdf (commenting on SEC's 2021 proposed reforms to money market funds).

Executive Summary

Our comments and recommendations include the following:

- Liquidity risk management. We urge the SEC to reject the proposed amendments to Rule 22e-4 (the "Liquidity Rule"), which would replace the rule's current flexibility with a one-size-fits-all prescriptive approach across all funds. We are particularly concerned with the proposed requirement that funds make a 10% stressed size assumption for purposes of classifying its portfolio securities. This assumption far exceeds Vanguard's funds' historical redemptions, ignores the realities of how funds are managed and source liquidity, and would harm investors. If the SEC determines to move forward with amendments, we recommend doing so in a way that captures only certain funds—such as levered or concentrated bond funds, where redemption pressure and dilution may be more likely to occur—without harming the vast majority of funds that do not share those risks.
- Swing pricing and hard close. Though we have seen the benefits and tradeoffs of swing pricing in Europe, we are concerned that the proposal would create unfair disadvantages for investors trading through intermediaries and does not fully consider the economic impact it would have on fund investors and intermediaries in the United States. Given the significant costs and relatively modest upsides involved, we believe an alternative solution, one that requires fund companies to pre-swing and "price at the bid," would provide additional protection without imposing significant new costs or disruption on investors and markets.

1. Background

The proposed reforms regarding *liquidity risk management* (1) apply a host of costly and counter-productive reforms on financial products with a long history of success across all economic scenarios; (2) require that funds operate under assumed outflow assumptions that *far* exceed historical redemptions; (3) force funds to assume away the very market repricing that *provides* their liquidity; and (4) in some cases, create a management impossibility that would force fund providers (including broad-based index funds, which typically hold the most actively traded securities and are more constrained in their investment decisions) to create costly "mirrored funds" for no market or investor benefit.

With respect to the SEC's proposed reforms to *swing pricing*, we encourage the SEC to consider carefully the costs and benefits of such reforms and ensure that they are not imposing a significant change on our nation's retirement infrastructure without an equivalent benefit. Our view is that although swing pricing is utilized in Europe with relative success, the marginal improvement associated with swing pricing and hard close in the United States would be outweighed meaningfully by the infrastructure costs and changed investor and intermediary behavior associated with implementing these changes.

Given the substantial cost and unintended consequences that would flow to investors and markets from the proposal, we urge the SEC to withdraw or dramatically simplify this proposal

and finalize important reforms for products and markets—such as money market funds⁴ and enhancements to central clearing for the US Treasury market⁵—that have posed important challenges in a crisis environment. We also urge the SEC, working with other policymakers, to consider what additional steps should be taken to ensure sufficient liquidity exists in the short-term funding markets during times of stress so that all investors, including fund investors, can make choices in pursuit of their financial goals.⁶

March 2020 and the "Dash for Cash"

In March 2020, the economic shock of the COVID-19 pandemic led to an unprecedented flight to liquidity and safety by investors and other market participants. Not surprisingly, a number of financial market participants experienced volatility and instability in the short-term funding markets. 8

Importantly, one area in the financial system that performed *well* in March 2020—and has proven to be an important source of stability for markets and investors in many crises over the years—were traditional long-term open-end funds. For example, outflows for US equity and bond mutual funds during March 2020 were approximately 0.4% and 5%, respectively. This is a

⁴ See Money Market Fund Reforms, SEC Release No. IC-34441 (December 15, 2021) ("2021 SEC Money Market Fund Release"), available at https://www.sec.gov/rules/proposed/2021/ic-34441.pdf.

⁵ See Standards for Covered Clearing Agencies for U.S. Treasury Securities and Application of the Broker-Dealer Customer Protection Rule With Respect to U.S. Treasury Securities, SEC Release No. 34-95763 (September 14, 2022), available at https://www.sec.gov/rules/proposed/2022/34-95763.pdf. We note that evidence suggests that problems in February and March 2020 arose first in the market for US Treasury securities. See Investment Company Institute, The Impact of COVID-19 on Economies and Financial Markets, Report of the COVID-19 Market Impact Working Group (October 2020), available at https://www.ici.org/system/files/private/2021-04/20_rpt_covid1.pdf, at 25.

⁶ Reforms to registered investment funds alone do not—and cannot—eliminate liquidity risk in the underlying short-term funding markets. Policymakers should continue to look closely at these markets, their investors, and the various events surrounding March 2020 volatility, to improve resiliency in this critical segment of our markets. To this end, we commend Treasury and other financial services regulators for the steps they have already taken to improve Treasury market structure, including the steady, data-driven approach toward increasing post-trade transparency. *See* 2022 Vanguard Letter to Treasury.

⁷ Unlike the global financial crisis of 2007-2009, which was a credit crisis, the turmoil that gripped financial markets in March 2020 originated from investors' immediate need for liquidity (a "dash for cash") to protect against the uncertainty caused by the COVID-19 pandemic and the government-imposed economic shutdowns.

⁸ The "dash for cash" in March 2020, however, demonstrates the importance of reliable secondary market liquidity when market participants, who are seeking to liquidate positions, find no bids for even high-quality, short-term instruments. Regulatory constraints on key market players, such as certain elements of the capital requirements on banks, also have dramatically changed the willingness and ability of dealers to act as intermediaries in the short-term funding markets.

⁹ ICI data based on February 2020 month-end total net assets. See also ICI Viewpoints, Policymakers Need to Focus on Economic Fundamentals and Not Blame Bond Mutual Funds: Examining the Evidence of Investment Grade Corporate Bond Yield Spreads in March 2020, (July 6, 2022), available at https://www.ici.org/viewpoints/22-viewbondfund-survey-4; Policymakers Say Bond Mutual Funds Contributed Significantly to Treasury Market Stress but.

fraction of the approximately 30% experienced by institutional prime money market funds. Indeed, during this same time period, Vanguard saw aggregate *inflows* of 0.27% for equity funds and outflows of only 2.26% for bond funds. These flows, *especially* during an unprecedented global crisis, are fully in keeping with a healthy and successful investment product, let alone one that allows investors to make near real-time decisions involving diversified products at a low cost.

The SEC's arguments for proposing this suite of new requirements on high-quality products appear to be based on concerns about shareholder "dilution," so-called "first-mover advantage," and theoretical run-dynamics. But these arguments are easily rebutted by the decades of stability in long-term funds through a multitude of crises. For the overwhelming majority of these funds, resiliency and dilution risks are low, and so-called "first-mover advantage" and run dynamics are virtually nonexistent. Even during the volatile markets of March 2020, our funds performed exceptionally well, and several Vanguard funds even provided liquidity and stability by seeking opportunities in the market to buy assets at discounted prices.

Given this history of stability and the centrality of these products to tens of millions of investors' retirements and other financial goals, we were surprised by the SEC's proposal to impose this host of new requirements. We were especially puzzled because some of these proposed requirements appear to discount—or *run counter to*—important stabilizing elements associated with long-term funds. Indeed, given the lack of data evidencing first-mover advantage or run dynamics across this broad universe of long-term funds—and decades of evidence otherwise—it is not at all clear how this proposal would address investor harm or improve investor outcomes.

Vanguard supports efforts by policymakers to address identified weaknesses, including in the short-term funding markets, market structure, and in money market funds. ¹² We are, however, highly concerned that the SEC's proposal goes well beyond products and activities with identified weaknesses and paints with a broad brush sweeping and profound changes across *all* equity and bond funds that do not have these weaknesses and have operated successfully for investors and markets for decades. These "reforms" would result in unintended outcomes and

^{.. (}March 24, 2022), available at https://www.ici.org/viewpoints/22-view-bondfund-survey-3; Bond Mutual Fund Outflows: A Measured Investor Response to a Massive Shock (March 4, 2021), available at https://www.ici.org/viewpoints/21_view_covid1 (noting that investors redeemed only 5.2% of their bond fund assets). Net flows for ETFs were even more modest. Equity ETFs had total net inflows of 1.3% and bond ETFs had outflows of approximately 2.1% of their February assets. See Investment Company Institute, Experiences of US Exchange-Traded Funds During the COVID-19 Crisis, Report of the COVID-19 Market Impact Working Group (October 2020), available at https://www.ici.org/system/files/private/2021-04/20 rpt_covid2.pdf.

¹⁰ Release at 230.

¹¹ The concept of first-mover advantage is a phenomenon more associated with other financial products and client types including those that employ book value accounting, leverage, and less frequent repricing. These features are not applicable to unleveraged mutual funds that value assets mark-to-market on a daily basis and serve as agents for millions of investors, all with their own time horizons, risk preferences, and investment goals.

¹² See e.g., 2022 Vanguard Letter to Treasury; 2022 Vanguard Letter to SEC.

perverse incentives and undermine investors' ability to take advantage of diversified low-cost mutual funds.

2. Liquidity Risk Management

In 2016, the SEC adopted the Liquidity Rule to promote effective liquidity risk management practices and reduce the risk that funds would be unable to meet their redemption obligations. ¹³ The Liquidity Rule, which has been in operation for less than four years, imposed several new governance and reporting processes, including, most notably, that funds classify each portfolio investment into one of four liquidity classification buckets: highly liquid, moderately liquid, less liquid, and illiquid.

As adopted, the existing Liquidity Rule provides funds with flexibility and discretion regarding how to classify fund investments and allows a fund to tailor its liquidity risk management program to the fund's unique characteristics. Indeed, Vanguard's liquidity risk management program simulates each fund's liquidity needs using current market conditions and historical statistical analysis of that fund's daily cash flows and has been very successful at meeting our investors' needs in a responsible way.

The proposal would significantly change the Liquidity Rule and replace its current flexibility with a one-size-fits-all approach that harms investors. We strongly oppose the package of proposed changes and are particularly concerned with the proposal's requirement that funds make unprecedented assumptions about crisis outflows.

The One-Size-Fits-All Redemption Assumption Far Exceeds Historical Redemptions and Would Harm Investors

Although the vast majority of funds have operated well through decades of rallies and crises without experiencing liquidity concerns, the proposed amendments include several changes to the existing classification framework that would require most open-end funds to significantly modify their existing classification processes. Among those changes, we are particularly concerned with the SEC's proposal to replace the flexible and fund-specific reasonably anticipated trade size ("RATS") approach with a one-size-fits-all assumed 10% stressed redemption size for all funds.

Requiring the asset management industry to ignore idiosyncratic product, asset, and investor differences and replace asset managers' experience and expertise around unique funds and

¹³ See Investment Company Liquidity Risk Management Programs, SEC Release No. IC-32315 (October 13, 2016), available at https://www.sec.gov/rules/final/2016/33-10233.pdf. In 2018, the SEC adopted amendments designed to improve the reporting and disclosures of liquidity information by funds. See Investment Company Liquidity Disclosure; SEC Release No. IC-33142 (June 28, 2018), available at https://www.sec.gov/rules/final/finalarchive/finalarchive2018.shtml. The 2018 amendments, among other things, modified certain aspects of the liquidity framework by requiring funds to disclose information about the operation and effectiveness of their liquidity risk management program in their shareholder reports instead of requiring funds to disclose aggregate liquidity classifications publicly in Form N-PORT.

investor types with a single uniform stressed redemption size is arbitrary and harmful to investors. Under the proposal, all funds, regardless of size, investor base, or historical redemptions, would be required to assume a daily 10% redemption and consequent sale of 10% of each portfolio investment ("Assumed 10% Redemption"). The Assumed 10% Redemption is *multiples* of Vanguard's funds' historical redemptions during stressed liquidity periods, ignores the realities of how funds are managed and source liquidity, and would harm investors.

Funds' Historical Worst One-Day Outflows Do Not Remotely Approach 10%

The Assumed 10% Redemption ignores differences among funds and the relevant data of each fund's historical redemptions. Vanguard offers a wide-range of funds, including broad market funds, targeted sector funds, target-date funds, and index and active funds, to a diverse investor base. Each fund experiences inflows and outflows differently, and different market conditions lead different types of investors to purchase and redeem at different times. Despite these differences, both our equity and bond funds' redemption histories have a common theme: larger Vanguard funds, which tend to have broad and diverse investor bases where redemptions are not as influenced by a small number of holders, have lower one-day outflows. Indeed, since 2007, ¹⁵ no Vanguard fund with at least \$250 billion in assets has had a single day net outflow greater than 0.89% of its assets. And in that same time period, no Vanguard fund with assets between \$50 billion and \$250 billion has had a single day net outflow greater than 2.61% of its assets. Moreover, of our 36 funds with at least \$50 billion in assets, only two funds have had a single day net outflow in excess of 2% of assets, and only seven funds have had a single day net outflow in excess of 1% of assets. And these "larger" net outflows are exceedingly rare: over the past 15 years, these funds experienced a net outflow of 2% or more of assets 0.01% of days and a net outflow of 1% or more of assets 0.06% of days. Put differently, the proposal would require every Vanguard fund to assume a redemption almost four times (and for our largest funds over ten times) the largest daily outflow our funds experienced only a handful of times in the past 15 years—a period that includes the COVID-19 pandemic (March 2020), Brexit (2016), the downgrade of United States debt and European Sovereign Debt Crisis (2011), the Flash Crash (2010), and the Global Financial Crisis (2007-2009).

The proposal to replace nuanced, fund-specific reasonably anticipated outflow assumptions with a blanket 10% pro rata redemption assumption is arbitrary and disconnected from funds' actual redemption history and fund-specific liquidity risk management needs. Every fund is different, and fund complexes should continue to be empowered to tailor assumed redemptions to each

¹⁴ Our review was limited to a subset of Vanguard funds. *See* "Funds' Historical Worst One-Day Outflows Do Not Remotely Approach 10%."

¹⁵ Our review focused on funds with at least \$50 billion in assets on a given day (comprising 36 funds that represent over \$5.1 trillion in current total assets) and for the period 2007 to present. The analysis did not include funds of funds, whose holdings are almost exclusively other Vanguard funds. The analysis also excluded one-day net outflows of 3.25%, 2.89%, and 2.42% that were largely driven by Vanguard-planned month-end rebalancings among funds of funds, the timing of which were at the discretion of Vanguard, and not investor activity. All data about Vanguard funds provided in this paragraph are limited to those parameters.

fund based on the fund's attributes and actual behavior in light of the fund's redemption history under disparate market conditions.

The Assumed 10% Redemption Is Particularly Ill-Suited for Equity Funds

The Assumed 10% Redemption is at odds with how equity funds source liquidity in the marketplace. The US equity markets are some of the most transparent, liquid, and well-functioning markets in the world. These markets tend to perform consistently during times of market stress, and trading volumes often *increase* alongside volatility in real time, ensuring that the price discovery process remains robust and that buyers and sellers can continue to transact. And the prices at which buyers and sellers transact are not distorted by volatility: US equity markets are efficient, and prices—both bid and ask—change almost instantly to reflect the cost of selling. In these efficient markets, participants can readily source liquidity, even for large trades, and mutual funds can readily sell large positions to meet redemptions without diluting the investment outcomes of long-term investors.

The proposal aims to solve a volatility and liquidity problem that does not exist for equity funds. We have found that, "heightened volatility" ¹⁷ better positions equity funds to meet investor redemption requests. Our analysis of broad US market data for the period mid-2008 to 2022 shows that, as volatility increased, equity trading volumes (*i.e.*, liquidity) also increased. ¹⁸ Indeed, even equity securities that would be classified as "illiquid" under the current Liquidity Rule typically experienced increased trading volumes during these times of market stress. The US equity market dynamics simply do not support the SEC's proposal to impose a one-size-fits-all Assumed 10% Redemption on equity funds to "improve liquidity risk management programs." ¹⁹

The Assumed 10% Redemption Harms Investors

The proposed replacement of RATS with the Assumed 10% Redemption would be harmful to investors. The necessary steps to comply with this new requirement would hamstring portfolio managers' ability to meet a fund's objectives, be it maximizing fund performance or tracking a

¹⁶ In contrast, some bond markets may respond inversely to volatility. While equity market volumes tend to rise along with volatility, volumes of some types of fixed income securities may fall, as dealers widen spreads or stop quoting entirely due to uncertainty over whether they will be able to offset the risks associated with making markets. We believe these issues would be better addressed in the context of fixed income market structure than in changes to the Liquidity Rule.

¹⁷ Release at 28. *See, generally*, Release at 23-34.

¹⁸ We compared daily market volatility as measured by the CBOE Volatility Index ("VIX") with daily trading volumes for the equity securities in the Russell 3000 Index and found that increases in equity volatility were accompanied by increases in trading volumes. On average, a 10% change in the daily value of the VIX was accompanied by about a 5% increase in daily trading volume of an equity security compared to its average daily trading volume over the preceding 20 days. Additional analysis shows that trading volume in the equity markets increases, on average, within *all* currently existing liquidity classifications.

¹⁹ Release at 374.

target index. The proposal also could force funds operating at scale to reorganize into smaller "mirror funds"—a pointless and costly exercise that could have significant tax consequences for investors.

a. The Proposal Requires Funds To Be Managed to a Beyond Worst-Case Liquidity Scenario Every Day

The Assumed 10% Redemption would force funds to classify investments not according to current market conditions or even foreseeable market conditions but under constant and unprecedented extremely stressed market conditions. This approach to liquidity management completely disregards the realities of how open-end funds are managed and would harm investors by reducing returns.

The Assumed 10% Redemption would frustrate portfolio managers' ability to pursue fund objectives. An index fund that must be managed to the Assumed 10% Redemption might need to act at odds to its stated fund objective—to track an index—to comply with these beyond worst-case assumptions. For example, a fund could be required to moderate its purchases and sales to account for the extreme redemption assumption or might need to hold additional cash to stay within the extreme liquidity requirements. Inhibited portfolio management leads to inhibited fund performance and upsets the investors' expectation that the fund they invest in performs similarly to its target index. Fund performance would suffer if funds were overly limited in which securities they can hold and must hold outsized cash positions because of an assumed redemption far afield from any redemption that fund has experienced.

b. Funds of Scale Could Be Forced To Split into Mirror Funds

The Assumed 10% Redemption is even more detrimental as funds scale, creating perverse incentives to create mirror funds that offer no benefit to the markets, harm investors, and distort the real liquidity of these funds. Assume for example, a mutual fund that holds 8,000,000 shares of an equity security traded on the NASDAQ that has an average daily trading volume of 500,000 shares. Under the proposal, the fund must assume a daily liquidation of 800,000 shares of the security (10% of the fund's position) while being limited to a daily sale of only 100,000 shares of the security (20% of average volume). The fund would need eight days to sell through the liquidation assumption and, therefore, would consider the security "Illiquid." If instead, there were two mirrored funds that each holds 4,000,000 shares of the equity security, the assumed daily liquidation of each fund is only 400,000 shares. Although the total shares that would be sold into the market remains 800,000, each of the two funds could sell through the assumed liquidation in four days and consider the security "Moderately Liquid." As a consequence, a fund with a larger portfolio would appear less liquid than a fund with a smaller portfolio,

²⁰ This outcome is even more puzzling when one realizes that the proposal limits a fund's daily liquidations of an equity security to 20% of the security's average trading volume to avoid "significantly changing its market value," *Release* at 40, but also favors the scenario where twice as many shares of the equity security are assumed to be sold in a single day.

irrespective of their real overall liquidities. Indeed, the combination of extreme outflow assumptions and scale alone can cause securities to shift from "Moderately Liquid" to "Illiquid" (potentially violating the 15% Illiquid threshold) or from "Highly Liquid" to "Moderately Liquid" (potentially violating the Highly Liquid Investment Minimum requirement).

This penalty to funds of scale could, in some instances, force funds and their investors to choose between liquidating a fund and splitting the fund into mirror funds that pointlessly could cause significant tax liabilities for some investors. In certain circumstances, IRS rules do not permit mutual funds and ETFs to reorganize into multiple funds without the investors that transfer into the new fund experiencing a taxable event. ²¹ That is, the investors that move to a new mirror fund are typically treated for tax purposes as if they sold the original fund and purchased the new fund and could, depending on market conditions and other circumstances specific to each investor, realize significant taxable income despite a desire to continue holding their investment and experience no substantive change in their investment.

The harms of the Assumed 10% Redemption would be felt most acutely by investors in broadbased equity index funds and impact a great number of retail investors. Broad-based equity index funds track indices that comprise large segments of the equity market (e.g., Standard & Poor's 500 Index), and as such, hold the *most liquid* exchange traded securities. Their diverse and very liquid holdings, combined with the absence of riskier features like leverage, have helped broad-based equity index funds become the most attractive mutual funds to investors. Their resulting scale allows investors to benefit from the lowest expense ratios among mutual funds.²² The Assumed 10% Redemption would force these funds to change fundamentally—by limiting their ability to purchase more of the securities they already own and requiring them to hold additional cash—and could force some investors (depending on market conditions and other circumstances unique to each investor) in these funds to bear large tax burdens should funds of scale split into separate mirror funds.

Amendments to the Liquidity Rule Should Be Carefully Crafted, Supported, and Tailored To Meet Investor Needs

The existing Liquidity Rule provides the flexibility needed to appropriately address the idiosyncratic risks and behavior of each fund and its investors during the most extreme market volatility, including March 2020 (the first real test for the rule). Rather than mandating a single arbitrary trade size assumption for all funds and ignoring important differences among fund types, asset classes, and investor base as has been proposed, the rule permits funds to tailor their RATS based on *their* historical cashflows and current market conditions. It would be a mistake

²¹ See 26 U.S.C. § 355.

²² Compare Vanguard 500 Index Fund Admiral Shares, https://investor.vanguard.com/investment-products/mutual-funds/profile/vfiax (last visited January 26, 2023) (with an expense ratio of 0.04%) with Vanguard Emerging Markets Stock Index Fund Admiral Shares, https://investor.vanguard.com/investment-products/mutual-funds/profile/vemax (last visited January 26, 2023) (with an expense ratio of 0.14%).

to replace a successful, nuanced, and tailored liquidity risk management construct with an untested, beyond worst-case, one-size-fits-all model that would impose significant investor harm.

If the SEC determines to move forward with amendments, we recommend doing so in a way that captures certain funds—such as levered or concentrated bond funds, where redemption pressure and dilution may be more likely to occur²³—without harming the vast majority of funds that do not share those risks. ²⁴ For example, the SEC could issue guidance to highlight how these funds should consider specific factors in their liquidity risk management programs, such as their investment objective and asset mix, historical fund flows in *actual* stress scenarios, and their investor base (*i.e.*, retail and institutional mix), and to document what specific steps these funds should take to ensure sufficient liquidity under various market conditions, including stressed. The SEC through its examination authority could review these programs before—or after—a crisis to identify unreasonable assumptions and help improve fund practices. Once the SEC has sufficient data and understanding of various dynamics among these funds, it could follow with a more appropriately nuanced—and supported—proposal. This type of approach would bring more standardization and comparability across the relevant funds without unintentionally harming investors through the one-size-fits-all model proposed.

3. Swing Pricing

Vanguard supports efforts to protect fund investors and minimize dilution, especially during periods of market stress. We are concerned, however, that the proposed swing pricing requirements would create unfair disadvantages among investors that hold mutual fund shares indirectly through intermediaries or a retirement account versus investors that hold fund shares directly. Moreover, swing pricing is not a perfect solution to dilution, and its implementation would likely cost US investors more than the relatively small anti-dilution benefits that it would provide, particularly for funds, like Vanguard's, that already price at the bid. We therefore continue to encourage policymakers to carefully consider the operational costs and benefits associated with requiring swing pricing in the United States and believe an alternative solution, one that requires fund companies to pre-swing and "price at the bid" would provide additional protection without imposing significant new costs or disruption to investors and the markets. Finally, although the SEC favorably notes Europe's experience with swing pricing as support for imposing swing pricing on US funds, it may not fully appreciate the numerous distinctions between the European and US markets.²⁵

²³ Release at 231 (explaining that the proposed amendments aim to address issues of "first-mover advantage" and dilution).

²⁴ See, e.g., Speech, "The Name's Bond:" Remarks at City Week, Gary Gensler, Chair, Securities and Exchange Commission (April 26, 2022) ("2022 Chair Gensler Speech"), available at https://www.sec.gov/news/speech/gensler-names-bond-042622 (discussing the "potential liquidity mismatch" of fixed income funds).

²⁵ See, generally, Release starting at 30.

The Proposal Would Disadvantage Investors Trading Through Intermediaries

The SEC is proposing a hard close to help operationalize its swing pricing proposal. A hard close, however, would require significant changes to the mutual fund ecosystem, and would have a direct detrimental impact on retail investors, including retirement plan participants. For example, today, all fund investors—whether trading directly with a fund or through an intermediary, such as a retirement plan—can place an order by 4:00 p.m. ET and still receive that day's price. Under the proposal, those same investors would need to submit their orders hours earlier or receive the next day's price.

The current US market structure was designed to support many different types of investors and platforms, including those operating through retirement plans and on third-party platforms. The investment choices investors make on these platforms or through financial intermediaries are frequently aggregated, netted, and verified before the relevant data is delivered to funds late in the day (after market close) or evening. In addition, there are often many layers of intermediaries through which trade information passes before reaching the fund. As a result, underlying investor transactions typically are processed at the end of the day only *after* receiving each fund's NAV.

Today, mutual funds execute distribution contracts with intermediaries—such as financial advisers on taxable accounts or retirement plan service providers—which contain provisions naming the intermediary as an agent for the fund when accepting orders from investors, including retirement plan participants. Under these contracts, intermediaries can accept orders to purchase and sell fund shares from investors up to the closing time for the fund as described in its prospectus (generally 4:00 p.m. ET). Once the intermediary determines a trade order is in good order, it is priced at that day's fund's NAV. Only then is the trade order delivered to the fund for processing in accordance with the terms of the distribution contract. This provides investors who hold mutual fund shares through intermediaries (who are more likely to be smaller retail investors) with substantially the same access to the securities markets as investors who hold mutual fund shares directly.

The proposal would disrupt the current mutual fund processing system and create unequal treatment for investors holding mutual funds through intermediaries vs. investors holding mutual funds directly. For example, investors who purchase and sell fund shares through intermediaries, including retirement plan accounts, would be at an informational disadvantage because intermediaries would need to impose earlier cutoff times to accommodate the netting process described above. This could result in retail investors not being able to act on late day market information that direct investors (typically larger investors) would have before transacting up until 4:00 p.m. ET. These cutoff times also would vary based on product type (e.g., 529 plan, 401(k) plan, IRA), where the investor's shares are held (e.g., retirement plan service provider, broker-dealer intermediary), and each intermediary's operational capabilities. In turn, retail investors would need to keep track of various cutoff times depending on the intermediary they use and their geographic location—all of which could lead to investor confusion.

Furthermore, this requirement would disadvantage the mutual fund as an investment product as compared to other products such as ETFs and collective investment trusts ("CITs"), which are

not subject to a similar hard close requirement. It is not clear that a migration of assets or flows from mutual funds to other investment vehicles would necessarily benefit investors or advance regulatory aims, but it would be the likely outcome. For example, mutual funds work particularly well in today's retirement plans because they are generally offered in fractional shares (unlike ETFs). CITs, although quite common in 401(k) plans, are still not permitted in other types of retirement plans, such as 403(b) plans, 457(f) government plans, or IRAs. This would exacerbate an uneven playing field for investors in these plans who are limited to the mutual fund product.

The Costs of the Proposal Would Be Borne by Investors, and May Not Be Fully Offset by Sufficient Anti-Dilution Benefits

Vanguard remains concerned that the proposal does not fully consider the economic impact the proposed swing pricing requirements would have on fund investors and intermediaries. Indeed, the proposal would require significant enhancements and rebuilds across all aspects of the mutual fund industry, including intermediaries, retirement plan recordkeepers, custodians, and transfer agents—costs of which we fear would be passed along to investors in the form of higher fees and expenses. Assessing the total costs of implementing the proposal is impossible within the short comment period, but given the extent of necessary enhancements, the proposal is very likely to cost the industry billions of dollars.²⁶

Beyond the initial transition costs, there would be additional, on-going costs that investors transacting through intermediaries would experience because of sustained time out of the market attributable to the hard close requirement. For those investors whose primary exposure to the market is through an intermediary, such as employer-sponsored retirement accounts, their orders (as discussed above) would be subject to earlier cutoff times, increasing the chance they receive the next day's NAV.²⁷ That time out of the market (*e.g.*, 2 days per month per investor for new biweekly contributions) represents an ongoing drag on performance for consistent, periodic buyand-hold investors.²⁸ Additionally, most retirement plan transactions are ongoing contributions, withdrawals, or loans tied to life events and individuals' economic needs. The long-term savers the SEC is trying to protect would face ongoing costs of delay on each of these transactions—a persistent drag on main street investors that could overwhelm the economic benefit swing pricing is designed to produce.

The magnitude of this cost becomes increasingly concerning when it is contrasted to the marginal amount of dilution experienced by investors that swing pricing seeks to address. Vanguard has reviewed the largest net redemptions from our US bond funds during 2020 and

²⁶ The sheer scale of the transition should not be underestimated. For example, Vanguard will need to amend or renegotiate approximately 2,300 intermediary contracts.

²⁷ On the other hand, investors transacting directly with a fund would have until 4:00 p.m. ET to submit their orders and still receive a given day's NAV.

²⁸ Time in the market, rather than timing the market, is one of the things investors can control to achieve greater retirement security. *See e.g.*, Vanguard, Investor Resources & Education, *Navigating a down market* (June 17, 2022), available at https://investor.vanguard.com/investor-resources-education/news/navigating-a-down-market.

2021 and analyzed whether trade price obtained in the market differed from the valuation of holdings used to calculate NAV on the trade date, thereby creating dilution. We concluded that dilution to existing shareholders was minimal. Of the six days with the largest net redemptions (as a percentage of a fund's assets) during that timeframe, only *two* had a negative impact on the NAV, and that impact on a per share basis amounted to \$0.0006 and \$0.0033, respectively.

Moreover, even if dilution had been more significant on these days, swing pricing would not have precisely addressed it. Our experience in Europe (described in more detail below) has indicated that swing pricing cannot perfectly offset trading costs for the UCITS products at times of severe market volatility and liquidity issues due to the rapid short-term change in transaction costs. While we do not expect any anti-dilution tools to operate with such precision as to eliminate all dilution, we and our investors would expect the cost of implementing an anti-dilution tool to reflect its efficacy. We therefore encourage the SEC to carefully consider whether the *de minimis* dilution experienced by investors and the benefits presented by swing pricing are sufficient to warrant investors paying for a costly overhaul of mutual fund pricing and intermediary markets.

Pricing at the Bid: A Much Simpler Alternative

Any anti-dilution tool required by the SEC ought to be tailored to address the types of funds and circumstances where dilution concerns are salient. In the case of equity funds, daily price transparency promotes liquidity and mitigates dilution, making application of a blunt tool like swing pricing unnecessary. We acknowledge that some dilution during market volatility, or periods of extended outflows, can occur, however, for example in a small subset of bond funds.²⁹

We would expect that utilizing swing pricing for bond funds in the United States would be less necessary due to the way bonds may be priced for NAV purposes. For example, in the United Kingdom, bonds price at the midpoint of the bid, making swing pricing more applicable. In other jurisdictions, including the United States, however, bid pricing is often used. ³⁰ Pricing at the bid is, in effect, "pre swung" and improves, in a simple yet effective way, fund pricing in a crisis. As such, we would encourage the SEC to consider a simpler pricing model (than the proposed complex and operationally challenging swing pricing proposal and hard close) that would require all bond funds to "pre-swing" and price at the bid.

The SEC has previously acknowledged the anti-dilutive impacts of bid pricing in certain circumstances. Indeed, the SEC has stated that at times of low net redemptions (at or below the market impact factor threshold) and normal market conditions, swing pricing is "economically

²⁹ Until this proposal, policymaker concerns about dilution have largely been limited to redemptions from money market funds and bond funds. *See e.g.*, 2022 Chair Gensler Speech.

³⁰ Approximately, 59% of participants to a Deloitte 2022 survey use bid pricing when valuing fixed income securities. *See* Deloitte, *Fair valuation pricing survey, 20th edition, executive summary*: Finding new paths forward (2022), available at https://www2.deloitte.com/content/dam/Deloitte/us/Documents/financial-services/us-fsi-fair-valuation-survey-2022.pdf, at 12.

equivalent" to bid pricing.³¹ We agree, and in fact for our Irish-domiciled UCITS products we do not apply a swing factor where it is our policy to apply bid pricing—that is, we rely on the bid price to allocate transaction costs to transacting investors during times of net redemptions. Rather than re-engineering core elements of the US retirement ecosystem, pricing at the bid would provide additional anti-dilution protection without the significant costs and confusion.

The European Model of Swing Pricing Is an Inappropriate Comparison

The proposal notes Europe's experience with swing pricing as support for imposing swing pricing on US funds but may not fully appreciate the critical differences between the European and US markets. Vanguard has used swing pricing in some form in Europe since 2017 and agrees that it offers these investors anti-dilution benefits.³² Features of European funds, such as their operating models and distribution infrastructure, however, are more conducive to swing pricing. These include: differences in retirement plan systems; lesser reliance on omnibus intermediaries and overnight batch processing that are NAV-dependent;³³ and several hours between fund cutoff times for receiving trades (trades must be received by the transfer agent to be deemed in good order in Europe) and when the NAV is calculated (European NAVs' typical valuation point is 6:30 p.m. CET each day).³⁴

The European swing pricing regulatory regime also differs substantially from the SEC's highly prescriptive proposal.³⁵ European regulations permit swing thresholds and swing factors to vary depending on the fund and the market for the fund's underlying securities, enabling asset managers to adapt their swing pricing practices to best suit the needs of their investors. At Vanguard, the impact of the swing methodology is reviewed by a swing pricing committee on an

³¹ See 2021 SEC Money Market Fund Release at 188. See also Release at 116-17 (noting that "[i]f a fund values its portfolio holdings at the bid price, it would not need to include spread costs in its swing factor when the fund has net redemptions.")

³² While swing pricing in Europe has limited dilution, based on the relative outflows seen in US and European bond funds in March 2020, there is little evidence to support the view that swing pricing will change investor behavior or reduce redemptions. Overall, US and EU bond fund outflows during March 2020 were approximately 5% and 5% as a percentage of previous month-end assets, respectively. See Investment Company Institute, Experiences of European Markets, UCITS, and European ETFs During the COVID-19 Crisis, Report of the COVID-19 Market Impact Working Group (December 2020), available at https://www.ici.org/system/files/private/2021-04/20 rpt covid4.pdf and ICI Viewpoints, Bond Mutual Fund Outflows: A Measured Investor Response to a Massive Shock (March 4, 2021), available at https://www.ici.org/viewpoints/21 view covid1, at note 5.

³³ Many US intermediary systems do not initiate their end-of-day batch processing until all NAVs are received for the funds offered on their platforms.

³⁴ In other words, European funds receive most daily trading activity in their shares before calculating their NAVs, which creates far greater certainty in cash flow estimates than in the US fund market, where complete fund flow information is not available until after overnight processing is finalized on most fund orders.

³⁵ There is no explicit provision on swing pricing in the UCITS Directive, although regulations applicable in the UCITS' domicile (*e.g.*, Ireland) address the ability to use swing pricing and the conditions for such use. *See* Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009, on the Coordination of Laws, Regulations, and Administrative Provisions Relating to Undertakings for Collective Investment in Transferable Securities (UCITS), as amended (UCITS Directive).

on-going basis to ensure it is still the most appropriate methodology to protect our European funds from dilution. ³⁶ To ensure the swing factors are reasonable against charges incurred, we also may seek to implement ad hoc temporary and/or permanent changes to the swing factors. To this end, in 2019 Vanguard shifted from full swing pricing to partial swing pricing for our UK and Ireland-domiciled funds after analyzing the impact of costs arising from investors transacting in our European funds, as well as the impact of full swing pricing on our European funds' performance (particularly with respect to tracking error, which rose). The SEC's proposed one-size-fits-all approach would not offer the same flexibility and could undermine our ability to adjust swing pricing practices to ensure they meet the needs of investors—a concerning approach given the high cost to investors.

* * *

Vanguard appreciates the opportunity to comment on the proposal. If you have any questions or would like to discuss our views further, please contact Ricardo Delfin, Principal, ricardo_delfin@vanguard.com or Jane Heinrichs, Senior Policy Advisor, jane heinrichs@vanguard.com.

Sincerely,

/s/ Gregory Davis

Gregory Davis Chief Investment Officer The Vanguard Group, Inc.

cc: Chair Gary Gensler
Commissioner Hester M. Peirce
Commissioner Caroline A. Crenshaw
Commissioner Mark T. Uyeda
Commissioner Jaime Lizárraga

William Birdthistle, Director, Division of Investment Management

³⁶ Our swing methodology is reviewed at least quarterly in Europe, and during extreme market volatility, such as in March 2020, reviews can occur daily.