

1401 New York Ave. NW Suite 330 Washington, DC 20005-2269 USA

+1 (202) 908 4520 tel +1 (202) 908 4538 fax info@cfainstitute.org www.cfainstitute.org

February 1, 2023

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

Re: File No. S7-26-22, Open-End Fund Liquidity Risk Management Programs and Swing Pricing; Form N-PORT Reporting

Submitted Electronically

Dear Secretary Countryman:

CFA Institute ¹ appreciates the opportunity to respond to the U.S. Securities and Exchange Commission's (the "SEC" or the "Commission") above-mentioned rule proposal ("the Proposal" or "the Release").² CFA Institute speaks on behalf of its members and advocates for investor protection and market integrity before standard setters, regulatory authorities, and legislative bodies worldwide. We focus on issues affecting the profession of financial analysis and investment management, education, and competencies for investment professionals, and on issues of fairness, transparency, and accountability of global financial markets.

Mandatory swing pricing is one of several requirements that the Proposal contemplates for open-end mutual funds. The swing pricing proposal would apply to open-end mutual funds other than exchange-traded funds ("ETFs") and money market mutual funds ("covered mutual funds"). We are writing in support of the rule proposal regarding swing pricing. Our letter focuses exclusively on swing pricing and does not comment on other aspects of the proposed rule.

Under swing pricing, a fund adjusts its price to account for the transaction costs generated by shareholder purchases and redemptions. As a result, purchasing or redeeming shareholders bear the transaction costs they have generated. To implement swing pricing, a fund determines the direction and amount of net flows over a certain period (such as one day), estimates the transaction costs those

¹ CFA Institute is the global association of investment professionals that sets the standard for professional excellence and credentials. The organization is a champion of ethical behavior in investment markets and a respected source of knowledge in the global financial community. Our aim is to create an environment where investors' interests come first, markets function at their best, and economics grow. There are more than 190,000 CFA charterholders worldwide in more than 160 markets. CFA Institute has nine offices worldwide and 160 local societies. In the U.S., it has nearly 81,000 members and 51 societies. For more information, visit www.cfainstitute.org or follow us on Linkedin and Twitter at @CFAInstitute.

² 87 Fed. Reg. 77172 (Dec. 16, 2022), ("SEC Release") available at

https://www.federalregister.gov/documents/2022/12/16/2022-24376/open-end-fund-liquidity-risk-management-programs-and-swing-pricing-form-n-port-reporting.

flows will generate, calculates a swing factor, and multiplies the swing factor by the fund's net asset value to determine a new net asset value for the fund.

EXECUTIVE SUMMARY

The proposed rule would mandate that mutual funds other than ETFs and money market funds implement swing pricing in all cases when they experience net outflows and also when such funds receive net inflows exceeding two percent of the fund's net asset value ("NAV").

We support the proposed swing pricing requirement because, in our view, it has two significant benefits. First, absent swing pricing, net outflows from the fund entail transaction costs that are borne by remaining shareholders. This represents an externality that imposes an unfair cost on the fund's remaining shareholders. To a lesser extent, net inflows also entail transaction costs borne by fund shareholders.

Swing pricing is an effective anti-dilution tool that shifts these costs back to the exiting or entering shareholders who have generated the costs. Thus, swing pricing represents a more equitable and fairer treatment of a fund's shareholders.

The second benefit of swing pricing is to remove a first-mover advantage that can cause runs in mutual funds. Absent swing pricing, the first-mover advantage incentivizes investors to redeem their shares before others do if they anticipate significant outflows. This scenario makes any one mutual fund vulnerable to run risk, actions that in turn can spread to other funds and can lead to financial instability for other parts of our capital markets. Swing pricing eliminates or reduces this first-mover advantage and thereby lessens the risk of a fund's run risk. As a result, swing pricing enhances fund resiliency and financial stability.

Outside the U.S., a number of markets introduced swing pricing two decades ago.³ According to academics, regulators and practitioners, as we discuss in greater detail below, ⁴ swing pricing has shown itself to be effective both in reducing dilution and enhancing fund resilience and financial stability. Yet, while mutual funds in Europe increased their use of swing pricing during the severe market stresses of March 2020, mutual funds in the U.S. have never used swing pricing. The absence of swing pricing in the U.S. stems from a combination of factors, including operational challenges, fear of stigma, and collective action problems. This situation justifies Commission action to mandate swing pricing in the overall interest of mutual funds and their shareholders. In doing so, the Commission will be fulfilling two elements of its three-part mission: to protect investors and to maintain fair, orderly, and efficient markets.

³ See, e.g., BlackRock, Swing Pricing - Raising the Bar (Sept. 2021), ("BlackRock Swing Pricing Paper"), at Endnote 1, available at https://www.blackrock.com/corporate/literature/whitepaper/spotlight-swing-pricing-raising-the-bar-september-2021.pdf).

⁴ See page 4 below.

DISCUSSION

Swing Pricing Reduces Two Externalities: Dilution and Run Risk

When shareholders redeem their shares, they receive their pro rate share of the fund's net asset value, but they do not bear the full transaction costs of their redemptions. Rather, these costs are borne by the remaining shareholders and thus dilutes the value of the shares of the remaining investors. Moreover, the possibility of dilution creates an incentive for shareholders to redeem their shares before others to avoid the transaction costs, especially if the redeeming shareholders anticipate large outflows from the fund. All of this is unfair to investors.

In times of severe stress, this first-mover advantage can contribute to high levels of outflows from mutual funds, akin to a bank run. In the words of the International Monetary Fund (IMF):

The [run] risk arises because investors can redeem shares from the fund on a daily basis at its current net asset value without bearing the full transaction costs of their redemptions. These costs are then effectively borne by the investors who remain in the fund. This externality creates an incentive for investors to redeem ahead of others—known as the "first-mover advantage"— particularly from funds that hold less liquid assets that may be more difficult and costly to sell.⁵

To honor redemptions in the face of large outflows, funds may be forced to raise cash by selling assets at fire sale prices. Such sales will reduce the fund's net asset value (NAV), which in turn may encourage more shareholders to redeem. This can create a vicious cycle of redemptions, fire sales, more redemptions, and more asset sales. The instability can spread to other mutual funds and other financial sectors, transmitting shocks to other funds and amplifying financial instability in the wider market, and in particular, short-term funding markets.⁶

That is likely what happened in the pandemic-induced liquidity stress of March 2020, when outflows reached 5 percent of aggregate funds' net assets on a global basis before central banks intervened to stabilize markets.⁷

https://www.imf.org/en/Publications/GFSR/Issues/2022/10/11/global-financial-stability-report-october-2022. ⁶ For a diagram depicting this vicious circle, see Figure 3.5, Liquidity Mismatch of Open-End Investment Funds and Systemic Risk, *id.* at 71. The report refers to liquidity risk management (LRM) tools such as swing pricing and notes, "But it also has a systemic impact by dampening investors' incentive to redeem ahead of others, thereby reducing the risk of investor runs." *Id.* at 69. The IMF adds that destabilizing impacts can be transmitted across borders from advanced economies to emerging markets, in corporate bond markets in particular. *Id.* at 80. ⁷ See Fabio Natalucci, Mahvash S. Qureshi, Felix Suntheim, IMF Blog, How Illiquid Open-End Funds Can Amplify Shocks and Destabilize Asset Prices, (October 4, 2022), available at

https://www.imf.org/en/Blogs/Articles/2022/10/04/how-illiquid-open-end-funds-can-amplify-shocks-and-

⁵ IMF, 2022 Global Financial Stability Report, ("IMF Report"), at 70, available at

<u>destabilize-asset-prices</u> ("Open-end funds were forced to sell assets amid outflows of about 5 percent of their total net asset value, which topped global financial crisis redemptions a decade and a half earlier...Such dislocations posed a serious risk to financial stability, which were addressed only after central banks intervened by purchasing corporate bonds and taking other actions.").

Mutual funds and their shareholders also will incur transaction costs as a result of net inflows, but these are likely to be less than the costs of outflows because the fund has more time to deploy the new capital.

Swing pricing is an effective tool to address both externalities of dilution and risks to fund resilience and overall financial stability. By eliminating the dilution caused by investor withdrawals, swing pricing removes or reduces the first-mover advantage that some investors may seek during periods of market stress. As a result, swing pricing reduces the run risk of mutual funds and increases fund resilience. In addition, swing pricing can enhance overall financial stability, especially in short-term funding markets.

These advantages of swing pricing have been recognized by regulatory and monetary authorities, including the IMF,⁸ the Financial Stability Board⁹, and IOSCO;¹⁰ academics;¹¹ and certain mutual fund companies themselves.¹²

Even with swing pricing, investors will still have an incentive to exit a fund if they believe that market prices will plummet. That is, market risks may outweigh a shareholder's pro rata transaction costs in redeeming. In that case, however, swing pricing may induce exiting investors to spread their redemptions over a longer period and break them into smaller amounts, which are likely to reduce the impact of the sales.¹³

⁸ See, e.g., IMF Report supra note 5, at 69 (noting the advantages of measures such as swing pricing in terms of investor protection and financial stability).

⁹ Financial Stability Board, Assessment of the Effectiveness of the FSB's 2017 Recommendations on Liquidity Mismatch in Open-Ended Fund, (Dec. 14, 2022) ("FSB") at 29, available at <u>https://www.fsb.org/wp-</u>

content/uploads/P141222.pdf (noting that properly calibrated liquidity management tools such as swing pricing "can mitigate first-mover advantage at its source" and should be used "both in good times and in bad").

¹⁰ See International Organization of Securities Commissions, "Recommendations for Liquidity Risk Management for Collective Investment Schemes," (Feb. 2018), at 20, available at <u>https://www.iosco.org/library/pubdocs/pdf/IOSCOPD590.pdf</u> (noting that anti-dilution devices and swing pricing ensure that redeeming investors bear the transition costs they generate and also "remove a potential incentive for investors to redeem.").

¹¹ See SEC Release supra note 2, note 163 and accompanying text (citing a 2022 financial journal article).
¹² BlackRock states, "We strongly believe in the benefits of swing pricing, and recommend raising standards and best practices its use, while, crucially, maintaining its primary use as an investor protection tool." See supra note 3, BlackRock Swing Pricing Paper, at 1. BlackRock cautions, however, that "changes to operational infrastructure are needed before swing pricing can be adopted effectively in the U.S." See Comment Letter of BlackRock on Open-End Fund Liquidity Risk Management Programs; Swing Pricing; Re-Opening of Comment Period for Investment Company Reporting Modernization Release, Investment Company Act File No. 31835 (Sep. 22, 2015) [80 FR 62274 (Oct. 15, 2015)] ("2015 Proposing Release"), File No. S7-16-15 at 7. Despite the costs that those changes will entail, BlackRock believes that "the aggregate long-term benefits to both U.S. mutual fund shareholders and to the stability of the overall financial system should be significant, likely outweighing the transitional costs." *Id.* at 8.
¹³ See Lessons from COVID-19: Liquidity Risk Management and Open-Ended Funds, BlackRock ViewPoint (Jan. 2021), ("BlackRock ViewPoint") available at

https://www.blackrock.com/corporate/literature/whitepaper/viewpoint-addendum-lessons-from-covid-liquidityrisk-management-is-central-to-open-ended-funds-january-2021.pdf, at 7. ("Because the size of the swing factor applied is based partly on the size of the redemption, investors are not incentivized to pre-empt the swing pricing

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Given the advantages of swing pricing, it is understandable why the use of this tool increased in some parts of the world in response to the severe liquidity stresses of March 2020. Indeed, mutual funds in the UK and Europe increased the use of swing pricing and raised the swing factors in that period of stress. In Luxembourg, for instance, usage of swing pricing in the first half of 2020 rose to 43% from 36% in the preceding half-year period. The average swing factor among a sample of bond funds jumped more than 100 basis points during the market stress.¹⁴ In the UK, a fund survey found that the use of swing pricing among funds more than doubled from the last quarter of 2019 to the first quarter of 2020, and the size of swing factors also increased.¹⁵

Absence of Swing Pricing Among Mutual Funds in the U.S.

U.S. funds, in contrast, present the opposite picture. No U.S. open-end mutual funds implemented swing pricing in March 2020 and, indeed, no fund has ever done so since gaining the right to do so in 2018.¹⁶ This begs the question, "Why not?"

The question becomes more perplexing in light of favorable comments about swing pricing that some fund managers have made to Commission staff. During the severe market stress of March 2020, some fund managers that had used swing pricing successfully in Europe urged the Commission to explore emergency actions to facilitate funds' ability to operationalize the Commission's current swing pricing rule.¹⁷ Similarly, several fund managers with operations in both the U.S. and Europe have indicated to the SEC that swing pricing would have been useful for U.S. funds in March 2020.¹⁸

What obstacles are keeping U.S. mutual funds from implementing swing pricing, despite its advantages? The answer appears to involve a combination of operational challenges, fear of stigma, and collective action problems.

The operational challenges stem from the fact that mutual funds often determine the day's NAV before they receive buy or redemption orders from certain intermediaries. For an order to receive the day's NAV, a customer must submit the order either directly to the fund (or to its designated parties, the transfer agent and clearing agency) or to an intermediary before the fund determines its NAV (generally at 4 p.m. Eastern time). The intermediaries, however, are not required to submit their orders prior to the time when the fund strikes the NAV. Some intermediaries pass on their orders as late as the next

mechanism by making large withdrawals at once. Instead, their incentive is to either remain invested in the fund; or to make smaller redemptions, spread out over a longer period of time.").

¹⁴ See SEC Release supra note 2, at Note 62 and accompanying text.

¹⁵ The survey sample included corporate bond funds, mixed bond funds, and a small number of small and mid-cap equity funds. *See* FSB *supra* note 9 at 18 and Bank of England and Financial Conduct Authority Survey, "Liquidity Management in UK Open-Ended-Funds," (March 26, 2021), available at

https://www.bankofengland.co.uk/report/2021/liquidity-management-in-uk-open-ended-funds.

¹⁶ In 2016, the SEC amended Rule 22c-1 to permit, but not require, an open-end fund (other than an ETF or a money market fund) to implement swing pricing. The rule took effect 24 months later, in 2018.

¹⁷ See supra note 2, SEC Release at 77239.

¹⁸ *Id.* at 77200.

morning. To complicate matters further, certain pension plans cannot even process their orders until they know the day's NAV.¹⁹

This presents a catch-22 dilemma for funds that wish to use swing pricing, because they rely on timely order flow information to determine the direction of net order flows and the amount of the swing factor. Industry practices must change for funds to receive the timely flow information they need to implement swing pricing. To date, however, the industry has been unwilling or unable to fashion an industry-wide solution. Nor is there reason to believe that an industry-led solution is forthcoming, in part because that would likely be costly to implement. No one fund has the incentive to be the first to change its practices; furthermore, no one fund would have the ability on its own to effect industry-wide change. Seen in that light, this presents a collective action problem to the adoption of timely processing practices and implementation of swing pricing.

Moreover, funds may have additional disincentives to introduce swing pricing. Specifically, funds may perceive a stigma to implementing swing pricing, especially if they were the first to do so. Funds may fear that swing pricing could confuse investors or drive some of their shareholders to competitors. For instance, certain investors might perceive swing pricing as costly to them, because they would bear the transaction costs of their redemptions. To that extent, the self-interest of the redeeming shareholders could conflict with the interests of the fund overall and its remaining shareholders.

These baseline challenges—operational issues, collective action problems, competitive pressures, and perceptions of stigma—justify regulatory action, as contemplated in the proposed Rule.

The Proposed Hard Close

To enable swing pricing, the rule would mandate what is called a hard close: for an order to receive that day's price, funds or their designated parties must receive the order before the set time when the fund calculates its NAV.²⁰ Any orders that come in after that time—including those from intermediaries—would receive the next day's price.²¹

Some mutual funds, shareholders, and intermediaries may view this as a disadvantage, to the extent they consider same-day pricing important. In addition, as the Release acknowledges, industry practitioners in the U.S. would bear implementation expenses to adapt to a hard close. Those expenses, however, must be balanced against (1) the benefits of swing pricing and (2) the costs of doing nothing.

¹⁹ *Id.* at 77239.

²⁰ *Id.* at 77184.

²¹ Even with a mandated hard close, exchange orders would still present a Catch-22 style dilemma, because the quantity of shares or dollar amount of the second leg of the exchange is contingent on the amount in the first leg, and the latter can only be known once the fund's NAV has been determined. The proposed rule offers a solution to this dilemma, however, by allowing a fund's swing pricing administrator to use reasonable, high confidence estimates to determine swing prices, thus obviating the need for complete flow information. The Release notes that some funds groups with both U.S. and European operations may already have experience with this type of estimation, because European funds that have adopted swing pricing generally use the prior day's price to estimate today's flows. *Id.* at 77287.

A hard close would provide the direct benefits of providing timely order flow and thereby enabling the implementation of swing pricing, as well as a number of important corollary benefits. For example, it would help modernize order processing and also provide a new tool to combat late trading.²² These are significant benefits, which speak directly to two of the three parts of the SEC's mission: to protect investors and to maintain fair, orderly, and efficient markets.²³

Conversely, continuing with the status quo would entail a range of costs, from the micro level (the dilution costs borne by remaining shareholders) to the macro level (risks to financial stability). Without liquidity risk management tools such as swing pricing, our markets are implicitly accepting the risk of— or even relying on—future Federal Reserve rescues of mutual funds and their assets, just as we experienced in March 2020.²⁴ And a future crisis could come sooner than we might think, given inflationary pressures.²⁵

Central bank interventions, while sometimes necessary, nonetheless have deleterious consequences. Chief among them is the distortionary effect on asset prices and market-based pricing mechanisms. Bailouts also raise the issue of moral hazard by encouraging rational expectations among investors of future bailouts in a crisis. Bailouts also promote risk-taking behavior and distort asset prices to the extent that they underprice risk. Finally, "temporary" emergency measures have a risk of becoming permanent; in particular, central banks may find it difficult to extricate themselves from a role of asset purchaser of last resort.

Swing Pricing Design Elements

As for the design of swing pricing policies, we support the proposed requirements with respect to three important design elements involving the vertical slice, the market impact, and the removal of the regulatory cap on swing factors.

The proposed rule would require a fund's Administrator to make good faith estimates, supported by data, of the costs the fund would incur if it purchased or sold a pro rata amount of each investment in its portfolio to satisfy the amount of net purchases or net redemptions. The pro rata amount is called a vertical slice of the portfolio. We support the proposal's requirement to calculate transaction costs based on a vertical slice.

²² *Id.* at 77209-77210.

²³ The third part of the mission is to facilitate capital formation. See SEC website, available at https://www.sec.gov/our-

goals#:~:text=The%20SEC%27s%20long%2Dstanding%20three,capital%20formation%E2%80%94remains%20its%2 0touchstone.

²⁴ See IMF Report supra note 5, at 70 (noting the actions of central banks in March 2020 and the goal of minimizing the need for future central bank interventions).

²⁵ In late 2022, the IMF suggested that fund sector resilience could be tested again amid rising interest rates and high economic uncertainty. Observing that outflows from open-end bond funds had increased in recent months, the IMF noted that "a sudden, adverse shock like a disorderly tightening of financial conditions could trigger further outflows and amplify stress in asset markets." *See* IMF Blog *supra* note 7, available at <u>How Illiquid Open-</u> End Funds Can Amplify Shocks and Destabilize Asset Prices (imf.org).

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In practice, selling a vertical slice is only one of multiple ways by which a fund can obtain the cash to meet redemptions. Alternatively, the fund could draw down cash reserves, sell most highly liquid assets, or do both. Such methods, however, likely will result in an imbalance in the mix of assets in the portfolio, and that will likely necessitate further sales in the near-term to mid-term to rebalance the portfolio so that it remains true to its investment objective(s). Therefore, we believe that the vertical slice method is the fairest, most complete, and most accurate measure of total long-term transaction costs incurred by the fund to meet redemptions. We recognize that such calculations may require a fund to estimate transaction costs as if it were selling a vertical slice, rather than identifying the actual costs of immediate transactions.

We also believe it is appropriate to include the market impact, when it exceeds a *de minimis* amount, in determining the swing factor. It would be materially incomplete to exclude market impact unless it was negligible. Indeed, market impact can represent a significant component of overall transaction costs. As we explain in our CFA Institute curriculum material on trading costs:

Transaction costs include explicit costs and implicit costs. Explicit costs are the direct costs of trading. They include broker commissions, transaction taxes, stamp duties, and exchange fees. Implicit costs include indirect costs, such as the impact of the trade on the price received. The bid–ask spread, *market impact*, delay, and unfilled trades all contribute to implicit trading costs. [Emphasis added.]²⁶

While the proposed rule would help to standardize calculations of the swing factor by requiring inclusion of market impact, it would temper that requirement by excluding transactions that fall under certain defined thresholds. Specifically, the proposed rule would require inclusion of market impact in the swing factor (1) for redemptions exceeding 1 percent of a fund's net assets and (2) for all net inflows that trigger swing pricing (i.e., net inflows exceeding 2 percent of a fund's net assets).²⁷

We recognize that market impact determinations may require estimates, which can be difficult to tease out of the larger impact of market forces in general. As the IMF observes, "The expected price impact will depend not only on the trading needs of a single fund but also on those of other funds, making it particularly difficult for funds to accurately estimate price impact in times of stress."²⁸

Nonetheless, we believe that inclusion of market impact (unless *de minimis*) in the calculation of transaction costs, even if it involves estimates, is better than ignoring it.

Finally, we support the proposed removal of the cap on the amount of the swing factor. The current rule imposes a cap of 2 percent of a fund's per share NAV. This percentage is significantly less than the optimal levels of swing factors under various scenarios of market stress and fund illiquidity.²⁹

²⁶ Larry Harris, CFA Institute, CFA[®] Program, Level 2, Portfolio Management: Trading Costs and Electronic Markets, (2023).

²⁷ See SEC Release supra note 2, at 77184.

²⁸ See IMF Report supra note 5, at note 33.

²⁹ See, e.g., IMF Blog supra note 7, ("The adjustments that funds can make to the end-of-day prices—known as swing factors—are often capped at insufficient levels, especially in times of market stress.").

According to IMF estimates, it would take a swing factor of up to 9 percent of assets under management to eliminate run risks completely, depending on various factors.³⁰ The IMF also estimates that the stresses of March 2020 would have required even greater swing factors:

[D]uring the March 2020 stress episode, when liquidity conditions were poor, the discounts on ETFs increased dramatically, reaching more than 5 percent across all bond ETFs (up to 27 percent for high-yield bond ETFs and up to 13 percent for investment-grade bond ETFs...). These discounts are indicative of the swing factor that would be required by an [open-end fund] with a similar portfolio structure and investor base.³¹

In practice, it is unlikely that a mutual fund would voluntarily impose a swing factor of 9 percent or more. Nonetheless, there is no policy justification to set an arbitrary swing factor cap that fell significantly short of actual transaction costs in the recent past and potentially could do so again in a future liquidity crisis.

Continued Regulatory Vigilance Needed

If the experience of other markets is any guide, we can expect substantial variation in the use of swing pricing if the Commission mandates it.³² In March 2020, for instance, funds in several European markets used swing pricing in a variety of ways:

[S]ome funds used partial swing pricing (where a NAV adjustment occurs only if net flows exceed a swing threshold), some funds used full swing pricing (where a NAV adjustment occurs any time a fund has net inflows or net outflows), and some funds did not use swing pricing.³³

The proposed rule would standardize the approach in the U.S. by mandating swing pricing for all net outflows and for net inflows exceeding a defined threshold. Nonetheless, we could still expect variability in the application of swing pricing if the Commission adopts the proposed rule, because it relies on a series of good-faith estimates by mutual funds to calculate certain types of flows, certain transaction costs, and swing factors.

This limitation should not dissuade the Commission from adopting the proposed rule. Expected variability in application, however, suggests that the Commission should closely monitor the implementation and effectiveness of the rule and, in particular, any buildup of liquidity risks that may occur notwithstanding the adoption of swing pricing.

³⁰ Optimal swing factors for Open-end funds to fully eliminate run risks range from an estimated 0% to 9%, depending on levels of stress, price impact, and fund sensitivities, according to the IMF. *See* IMF Report *supra* note 5, at 83, citing research studies.

³¹ *Id.* at 87.

³² See, e.g., FSB supra note 9 at 18 ("Nevertheless, UK survey data and responses to an ESMA-coordinated survey of EU funds highlighted wide variation in the swing factors applied across corporate bond funds during the COVID-19 shock.") See also BlackRock ViewPoint *supra* note 13, at 7 ("However, recent analysis suggests use of swing pricing still varies significantly between asset managers, by jurisdiction and by asset class.").

³³ See SEC Release supra note 2, at 77182.

Conclusion

Large outflows from mutual funds produce two external costs: dilution, borne by the remaining shareholders; and financial instability, borne by financial markets and economies as a whole. Swing pricing is an effective mechanism to reduce both externalities. We support the rule proposal to mandate swing pricing for covered mutual funds.

Should you have any questions about our positions, please do not hesitate to contact Stephen Deane at stephen.deane@cfainstitute.org.

Sincerely,

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Andres Vinelli Chief Economist Research, Advocacy and Standards CFA Institute

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Stephen Deane, CFA Senior Director, Capital Markets Policy CFA Institute