SECURITIES AND EXCHANGE COMMISSION

17 CFR Parts 210, 270, 274

Release Nos. 33-10234; IC-32316; File No. S7-16-15

RIN 3235-AL61

Investment Company Swing Pricing

AGENCY: Securities and Exchange Commission.

ACTION: Final rule.

SUMMARY: The Securities and Exchange Commission is adopting amendments to rule 22c-1 under the Investment Company Act to permit a registered open-end management investment company ("open-end fund" or "fund") (except a money market fund or exchange-traded fund), under certain circumstances, to use "swing pricing," the process of adjusting the fund's net asset value ("NAV") per share to effectively pass on the costs stemming from shareholder purchase or redemption activity to the shareholders associated with that activity, and amendments to rule 31a-2 to require funds to preserve certain records related to swing pricing. The Commission is also adopting amendments to Form N-1A and Regulation S-X and a new item in Form N-CEN, all of which address a fund's use of swing pricing.

DATES: *Effective Dates:* November 19, 2018

Compliance Dates: See section II.C.

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SUPPLEMENTARY INFORMATION: The Securities and Exchange Commission (the "Commission") is adopting amendments to rules 22c-1 [17 CFR 270.22c-1] and 31a-2 [17 CFR 270.31a-2] under the Investment Company Act of 1940 [15 U.S.C. 80a-1 *et seq.*] ("Investment Company Act" or "Act"); amendments to Form N-1A [referenced in 17 CFR 274.11A] under the Investment Company Act and the Securities Act of 1933 ("Securities Act") [15 U.S.C. 77a *et seq.*]; amendments to Article 6 [17 CFR 210.6-01 *et seq.*] of Regulation S-X [17 CFR 210]; and adopting a new item in Form N-CEN [referenced in 17 CFR 274.101] under the Investment Company Act.[1]

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[1] Unless otherwise noted, all references to statutory sections are to the Investment Company Act, and all references to rules under the Investment Company Act are to Title 17, Part 270 of the Code of Federal Regulations [17 CFR 270].

I. INTRODUCTION

Avoiding shareholder dilution is a key concern of the Investment Company Act.[2] In particular, section 22(c) gives the Commission broad powers to regulate the pricing of redeemable securities for the purpose of eliminating or reducing so far as reasonably practicable

[2] *See* Investment Trusts and Investment Companies Investment Trusts and Investment Companies: Hearings on S. 3580 before a Subcomm. of the Senate Comm. on Banking and Currency, 76th Cong., 3d Sess. (1940), at 37, 137-145 (stating that, among the abuses that served as a backdrop for the Act, were “practices which resulted in substantial dilution of investors’ interests”, including backward pricing by fund insiders to increase investment in the fund and thus enhance management fees, but causing dilution of existing investors in the fund).

any dilution of the value of outstanding fund shares.[3] Under rule 22c-1 under the Investment Company Act, fund shareholders purchase and redeem fund shares at a price based on the current NAV next computed after the receipt of an order to purchase or redeem (the "forward price").[4] Forward pricing addresses, in part, the risk of shareholder dilution posed by the "backward pricing" method used by funds prior to the adoption of the forward pricing rule.[5] However, under rule 22c-1, the NAV price that a purchasing or redeeming shareholder receives when transacting shares typically does not take into account the transaction costs (including trading costs and changes in market prices) that may arise when the fund buys portfolio investments to

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3 Section 22(a) of the Act authorizes securities associations registered under section 15A of the Securities Exchange Act of 1934 (the "Exchange Act") to prescribe rules related to the method of computing purchase and redemption prices of redeemable securities and the minimum time period that must elapse after the sale or issue of such securities before any resale or redemption may occur, for the purpose of "eliminating or reducing so far as reasonably practicable any dilution of the value of other outstanding securities of such company or any other result of such purchase, redemption, or sale which is unfair to holders of such other outstanding securities."

Section 22(c) of the Act authorizes the Commission to make rules and regulations applicable to registered investment companies and to principal underwriters of, and dealers in, the redeemable securities of any registered investment company, whether or not members of any securities association, to the same extent, covering the same subject matter, and for the accomplishment of the same ends as are prescribed in section 22(a) in respect of the rules which may be made by a registered securities association governing its members.

4 *See* rule 22c-1(a). Prior to adoption of rule 22c-1, investor orders to purchase and redeem could be executed at a price computed before receipt of the order, allowing investors to lock-in a low price in a rising market and a higher price in a falling market. The forward pricing provision of rule 22c-1 was designed to eliminate these trading practices and the dilution to fund shareholders that occurred as a result of backward pricing. *See* Pricing of Redeemable Securities for Distribution, Redemption, and Repurchase, Investment Company Act Release No. 14244 (Nov. 21, 1984) [49 FR 46558 (Nov. 27, 1984)], at text following n.2.

5 *See* Pricing of Redeemable Securities for Distribution, Redemption and Repurchase and Time-Stamping of Orders by Dealers, Investment Company Act Release No. 5519 (Oct. 16, 1968) [33 FR 16331 (Nov. 7, 1968)] ("Rule 22c-1 Adopting Release"), at 2 ("One purpose of [rule 22c-1] is to eliminate or reduce so far as reasonably practicable any dilution of the value of outstanding redeemable securities of registered investment companies through (i) the sale of such securities at a price below their net asset value or (ii) the redemption or repurchase of such securities at a price above their net asset value. Dilution through the sale of redeemable securities at a price below their net asset value may occur, for example, through the practice of selling securities for a certain period of time at a price based upon a previously established net asset value. This practice permits a potential investor to take advantage of an upswing in the market and an accompanying increase in the net asset value of investment company shares by purchasing such shares at a price which does not reflect the increase.").

invest proceeds from purchasing shareholders or sells portfolio investments to meet shareholder redemptions.[6]

We sought to address the risk of shareholder dilution that can result from such transaction costs, along with the risk that a fund would be unable to meet its obligations to redeeming shareholders or other obligations under applicable law (while mitigating investor dilution) as a result of liquidity risk, with the proposal on fund liquidity risk management that we published in 2015.[7] In order to provide funds with a tool to mitigate potential dilution and to manage fund liquidity, the proposal included amendments to rule 22c-1 under the Act to permit funds (except money market funds and exchange-traded funds ("ETFs")) to use "swing pricing," a process of adjusting the fund's NAV to effectively pass on more of the costs stemming from shareholder transaction flows into and out of the fund to shareholders associated with that activity.

We received more than 70 comment letters on the proposal,[8] many of which addressed the swing pricing amendments.[9] Today, we are adopting new rule 22c-1(a)(3) permitting funds

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6 *See* Open-End Fund Liquidity Risk Management Programs; Swing Pricing; Re-Opening of Comment Period for Investment Company Reporting Modernization Release, Investment Company Act Release No. 31835 (Sept. 22, 2015) [80 FR 62273 (Oct. 15, 2015)] ("Proposing Release"), at section III.F, 184-187. However, going forward, in a fund that swing prices, the NAV of the fund would reflect such costs, which would be borne by redeeming and purchasing shareholders.

7 *See id*.

8 The comment letters on the Proposing Release (File No. S7-16-15) are *available at* http://www.sec.gov/comments/s7-16-15/s71615.shtml. We are adopting requirements for funds to adopt liquidity risk management programs today in a companion release. *See* Investment Company Liquidity Risk Management Programs, Investment Company Act Release No. 32315 (Oct. 13, 2106) ("Liquidity Risk Management Programs Adopting Release").

9 *See*, *e.g.*, Comment Letter of the Mutual Fund Directors Forum (Jan. 13, 2016) ("MFDF Comment Letter") (recommending that the Commission consider issuing a separate proposal for swing pricing due to the difficult operational issues of swing pricing); Comment Letter of Investment Company Institute (Jan. 13, 2016) ("ICI Comment Letter I") (arguing that, for funds to adopt swing pricing, there must be widespread changes in market practices and significant reengineering of fund operations). *But see* Comment Letter of Eaton Vance Corp. (June 13, 2016) ("Eaton Vance Comment Letter") (expressing that there are investor protection concerns associated with the implementation of swing pricing, but acknowledging the significant costs to existing shareholders as a result of purchase and redemption activity).

(other than money market funds and ETFs) to engage in swing pricing substantially as proposed, with certain modifications to respond to commenters' suggestions and concerns.[10] We believe swing pricing could be an effective tool to assist U.S. registered funds in mitigating potential shareholder dilution. We also believe that swing pricing may be an additional tool to manage a fund's liquidity risk.

We are also adopting amendments to rule 31a-2 to require funds to maintain records evidencing and supporting each computation of an adjustment to the fund's NAV based on the fund's swing pricing policies and procedures. Finally, we are adopting amendments to Form N-1A and Regulation S-X and adopting a new item in Form N-CEN to require a fund to publicly disclose certain information regarding its use of swing pricing.[11] We anticipate that this information will facilitate the Commission's ability to monitor and assess compliance with rule 22c-1 as amended and may assist investors in making more informed investment choices.

II. DISCUSSION

A. Swing Pricing

1. *Background*

Under rule 22c-1, all investors who submit requests to redeem from an open-end fund on any particular day must receive the NAV next calculated by the fund after receipt of such redemption request.[12] As most funds, with the exception of money market funds, calculate their

[10] If any provision of these rules, or the application thereof to any person or circumstance, is held to be invalid, such invalidity shall not affect other provisions or application of such provisions to other persons or circumstances that can be given effect without the invalid provision or application.

[11] We are adopting Form N-CEN today in a companion release. *See* Investment Company Reporting Modernization, Investment Company Act Release No. 32314 (Oct. 13, 2016) ("Investment Company Reporting Modernization Adopting Release").

[12] The process of calculating or "striking" the NAV of the fund's shares on any given trading day is based on several factors, including the market value of portfolio securities, fund liabilities, and the number of outstanding fund shares, among others.

NAV only once a day, this means that redemption requests submitted during the day receive the end of day NAV, typically calculated as of 4 p.m. Eastern time.[13] When calculating a fund's NAV, however, rule 2a-4 requires funds to reflect changes in holdings of portfolio securities and changes in the number of outstanding shares resulting from distributions, redemptions, and repurchases no later than the first business day following the trade date.[14] We allow this calculation method to provide funds with additional time and flexibility to incorporate last-minute portfolio transactions into their NAV calculations on the business day following the trade date, rather than on the trade date.[15] As a practical matter, this calculation method also gave broker-dealers, retirement plan administrators, and other intermediaries additional time to transmit transactions submitted before the cut-off time on the trade date, which then may be reflected in computation of the fund's NAV on the business day following the trade date.[16]

Nevertheless, we recognize that trading activity and other changes in portfolio holdings associated with meeting redemptions may occur over multiple business days following the redemption request. If these activities occur (and their associated costs are reflected in NAV) in days following redemption requests, the costs of providing liquidity to redeeming investors could be borne by the remaining investors in the fund, thus potentially diluting the interests of non-redeeming shareholders.[17] The less liquid the fund's portfolio holdings, the greater these

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[13] Commission rules do not require that a fund calculate its NAV at a specific time of day. Current NAV must be computed at least once daily, subject to limited exceptions, Monday through Friday, at the specific time or times set by the board of directors. *See* rule 22c-1(b)(1).

[14] Rule 2a-4(a)(2)-(3).

[15] *See* Adoption of Rule 2a-4 Defining the Term "Current Net Asset Value" in Reference to Redeemable Securities Issued by a Registered Investment Company, Investment Company Act Release No. 4105 (Dec. 22, 1964) [29 FR 19100 (Dec. 30, 1964)].

[16] *See infra* footnote 195. These redemptions are effected at the trade date's NAV.

[17] The transaction costs associated with redemptions can vary significantly, with some costs having a more immediate impact on shareholders than others. For example, during times of heightened market volatility

liquidity costs can become.[18] The significant growth in the assets managed by funds with strategies that focus on holding relatively less liquid investments (such as fixed income funds, including emerging market debt funds, open-end funds with alternative strategies, and emerging market equity funds), which could incur significant trading costs, could give rise to increased dilution effects from redeeming and subscribing shareholders in those funds.[19]

As we discuss more broadly in the Liquidity Risk Management Programs Adopting Release, these factors in fund redemptions can create incentives, at least in theory, in times of liquidity stress in the markets for shareholders to redeem quickly to avoid further losses (or a "first-mover advantage").[20] If shareholder redemptions are motivated by this first-mover

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and wider bid-ask spreads for the fund's underlying holdings, selling the fund's investments to meet redemptions will necessarily result in costs to the fund, which in turn may negatively impact investors who chose to redeem in the days immediately following the stress event. The impact of such costs on the remaining fund investors can vary depending on when a shareholder choses to redeem. *See, e.g.*, Comment Letter of Mutual Fund Directors Forum on the Notice Seeking Comment on Asset Management Products and Activities, Docket No. FSOC-2014-0001 (Mar. 25, 2015), at 6.

18 *See, e.g.* Comment Letter of Morningstar, Inc. (Jan. 13, 2016) ("Morningstar Comment Letter"). *See also* Proposing Release, *supra* footnote 6, at n.45 and accompanying text. We discuss the extent to which swing pricing could effectively pass on to redeeming shareholders more of the costs stemming from their trading activity, as opposed to being borne by non-redeeming shareholders, in *infra* section II.A.2. Furthermore, because shareholders' purchase activity would provide liquidity to a fund, which could reduce the fund's costs in meeting shareholders' redemption requests that day, investors who purchase shares on a day that the fund adjusts its NAV downward would not create dilution for non-redeeming shareholders. *See infra* at text following footnote 123.

19 *See* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8, at section II.C.

20 *See id.*, at n.84 and accompanying text. *But see* Comment Letter of Nuveen Investments on the Notice Seeking Comment on Asset Management Products and Activities, Docket No. FSOC-2014-0001 (Mar. 25, 2015), at 10 (stating that there is no evidence that shareholders are actually motivated by a first-mover advantage); Comment Letter of BlackRock on the Notice Seeking Comment on Asset Management Products and Activities, Docket No. FSOC-2014-0001 (Mar. 25, 2015), at 17 (stating that although incentives to redeem may exist, this does not necessarily imply that investors will in fact redeem *en masse* in times of market stress, but also noting that a well-structured fund "should seek to avoid features that could create a 'first-mover advantage' in which one investor has an incentive to leave" before others); Comment Letter of Association of Institutional Investors on the Notice Seeking Comment on Asset Management Products and Activities, Docket No. FSOC-2014-0001 (Mar. 25, 2015), at 10-11 ("The empirical evidence of historical redemption activity, even during times of market stress, supports the view that either (i) there are not 'incentives to redeem' that are sufficient to overcome the asset owner's asset allocation decision or (ii) that there are disincentives, such as not triggering a taxable event, that outweigh the hypothesized 'incentives to redeem.'"); Comment Letter of The Capital Group Companies on the Notice Seeking Comment on Asset Management Products and Activities, Docket No. FSOC-2014-0001

advantage, they can lead to increasing outflows, and as the level of outflows from a fund increases, the incentive for remaining shareholders to redeem may also increase.[21] Additionally, a fund experiencing large outflows as a result of redemptions may be exposed to predatory trading activity in the securities it holds.[22] Regardless of whether investor redemptions are motivated by a first-mover advantage or other factors, there can be significant adverse consequences to remaining investors in a fund in these circumstances, including material dilution of remaining investors' interests in the fund.[23]

As a means of addressing potential shareholder dilution from redemptions, the Commission adopted in 2005 rule 22c-2 under the Investment Company Act, which permits funds to impose redemption fees under certain circumstances.[24] Although the Commission adopted the redemption fee rule to allow funds to recoup some of the direct and indirect costs

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(Mar. 25, 2015), at 8 ("We also do not believe that the mutualization of fund trading costs creates any first mover advantage."); Comment Letter of Investment Company Institute on the Notice Seeking Comment on Asset Management Products and Activities, Docket No. FSOC-2014-0001 (Mar. 25, 2015) ("Investor behavior provides evidence that any mutualized trading costs must not be sufficiently large to drive investor flows. We consistently observe that investor outflows are modest and investors continue to purchase shares in most funds even during periods of market stress."). *See also* discussion of the potential first-mover advantage in the Proposing Release, *supra* footnote 6, at n.49.

21 *Id*.

22 *See, e.g.*, Joshua Coval & Erik Stafford, *Asset Fire Sales (and Purchases) in Equity Markets*, 86 J. FIN. ECON. 479 (2007) ("Funds experiencing large outflows tend to decrease existing positions, which creates price pressure in the securities held in common by distressed funds. Similarly, the tendency among funds experiencing large inflows to expand existing positions creates positive price pressure in overlapping holdings. Investors who trade against constrained mutual funds earn significant returns for providing liquidity. In addition, future flow-driven transactions are predictable, creating an incentive to front-run the anticipated forced trades by funds experiencing extreme capital flows."); Teodor Dyakov & Marno Verbeek, *Front-Running of Mutual Fund Fire-Sales*, 37 J. OF BANK. AND FIN. 4931 (2013) ("We show that a real-time trading strategy which front-runs the anticipated forced sales by mutual funds experiencing extreme capital outflows generates an alpha of 0.5% per month during the 1990–2010 period . . . Our results suggest that publicly available information of fund flows and holdings exposes mutual funds in distress to predatory trading."). *See* discussion of predatory trading concerns in the Proposing Release, *supra* footnote 6, at nn.805-809 and accompanying text.

23 *See* Proposing Release, *supra* footnote 6, at n.37.

24 *See* Mutual Fund Redemption Fees, Investment Company Act Release No. 26782 (Mar. 11, 2005) [70 FR 13328 (Mar. 18, 2005)] ("Redemption Fees Adopting Release"). The redemption fee may be no more than two percent of the value of the shares redeemed. Rule 22c-2(a)(1)(i).

incurred as a result of short-term trading strategies, such as market timing, rule 22c-2 is not limited to the context of market timing and expressly contemplates that a fund board of directors may approve a redemption fee in order to "eliminate or reduce so far as practicable any dilution of the value of the outstanding securities issued by the fund," and thus the rule can also be used to mitigate dilution arising from shareholder transaction activity generally.[25] In adopting rule 22c-2, the Commission stated that the amount of the redemption fee under rule 22c-2 may include indirect costs associated with transactions in fund shares, such as liquidity costs.[26]

Fund boards have flexibility under rule 22c-2 to adopt redemption fees that address the needs of their funds.[27] Rule 22c-2 provides discretion for fund boards to structure redemption fees in way that "in its judgment, is necessary or appropriate" to achieve the anti-dilution purposes of the rule.[28] For example, we believe that a fund board, consistent with its obligations under 22c-2, may determine that it is appropriate to approve a redemption fee that would apply for an indefinite time period after purchase of the security – that is, whenever an investor redeems from the fund – in order to reduce dilution.[29] In addition, a fund board might determine

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25 *See* Redemption Fees Adopting Release, *supra* footnote 24, at section II.A. ("Rule 22c-2 requires that each fund's board of directors (including a majority of independent directors) either (i) approve a redemption fee that in its judgment is necessary or appropriate to recoup costs the fund may incur as a result of redemptions, or to otherwise eliminate or reduce dilution of the fund's outstanding securities, or (ii) determine that imposition of a redemption fee is not necessary or appropriate.") (internal citation omitted). *See also* Comment Letter of Federated Investors, Inc. (Jan. 13, 2016) ("Federated Comment Letter") (stating that redemption fees currently permitted under rule 22c-2 may be an effective anti-dilution tool and presenting an illustrative redemption fee structure assessed in an amount equal to expected transaction costs, up to two percent, for transactions over a certain dollar amount).

26 *See* Redemption Fees Adopting Release, *supra* footnote 24.

27 *See id.*, at section II. ("[Rule 22c-2] permits each board to take steps it concludes are necessary to protect its investors, and provides the board flexibility to tailor the redemption fee to meet the needs of the fund."); and Mutual Fund Redemption Fees, Investment Company Act Release No. 27504 (Sept. 27, 2006) [71 FR 58257 (Oct. 3, 2001)], at section II.C ("[T]he terms of redemption fee policies are a matter for fund boards to determine.").

28 Rule 22c-2.

29 While rule 22c-2 provides a minimum seven day "time period" during which a redemption fee, if imposed,

it appropriate to impose a redemption fee only on a subset of such redemptions that the board determines are most likely to result in such costs or dilution, such as all redemptions exceeding a certain size (*e.g*. over $100,000 or $250,000) or on such large redemptions if advance notice is not provided.[30] The details of the redemption fee and the circumstances under which it would (and would not) be imposed, as well as exceptions or waivers must be disclosed to fund investors.[31]

While we believe redemption fees may be an effective anti-dilution tool, we acknowledge that these fees are viewed as unpopular with investors and intermediaries[32] and entail their own operational complexities.[33] As a result, redemption fees have not become prevalent as a means of addressing dilution due to shareholder transaction activity, and thus are used by a limited

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must apply, (*i.e.* a fee may not apply only to shares redeemed in three days or less after purchase, but must capture shares redeemed within at least a seven-day period after purchase), it does not impose a maximum duration of such a time period, and thus redemption fees may be imposed on shares redeemed within a month, three months, or even longer periods, depending on the duration deemed appropriate by the fund board. *See* rule 22c-2(a)(1)(i).

30 Redemption fees imposed for an indefinite time period after purchase but only on redemptions exceeding a certain size – like redemption fees imposed on all shares redeemed within a certain time period – might potentially implicate the senior security concerns of section 18(f)(1), but we note that in adopting rule 22c-2 we explicitly provided exemptive relief from section 18(f)(1) for redemption fees imposed under rule 22c-2. *See* Redemption Fees Adopting Release, *supra* footnote 24, at n.30 ("By adopting the rule, we are providing an exemption from . . . the Act's prohibition against the issuance of a senior security.").

31 *See id*., at n.32 ("The details of the redemption fee, the circumstances under which it would (and would not) be imposed, and the specific exceptions to imposition of the fee are currently disclosed to fund investors when they decide to invest in a fund, and may include exceptions for particular transactions."). *See also* Item 11(c) of Form N-1A.

32 *See* Eaton Vance Comment Letter ("Even investors who understand that transaction fees accrue to the benefit of the fund (and thus, indirectly, to fund shareholders) often react negatively when confronted with having to pay them.").

33 For example, we recognize the compliance burdens and operational challenges certain types of redemption fees place on intermediaries, who would be required to track various fund policies for such fees by share class that may include varying fee rates, applicability and waiver policies. Such data also would require daily updating as it is sourced by systems that support both front-end (customer facing) and back-end transaction processing to ensure fees are accurately assessed. *See* Proposing Release, *supra* footnote 6 at text accompanying n.724 (acknowledging potential operational complexity that could accompany the use of redemption fees). We acknowledge that these operational challenges may be particularly acute in circumstances where a fund's policies assess redemption fees only in circumstances where the fund is experiencing heavy redemptions or particular market stresses or where a fund assesses redemption fees that may vary in size each time they are applied.

number of funds.[34]

Funds may also attempt to address potential shareholder dilution by reserving the right to redeem in kind instead of with cash.[35] In-kind redemptions may reduce transaction costs by reducing the need for cash transactions, but they raise challenges of their own.[36] There are often logistical and operational issues associated with paying in-kind redemptions, and this limits the availability of in-kind redemptions under many circumstances.[37] For instance, in-kind redemptions could entail operational difficulties that result in manual processes, which would be imposed on both the fund and on investors receiving portfolio securities.[38] Moreover, some shareholders are generally unable or unwilling to receive in-kind redemptions.[39]

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34 *See* Eaton Vance Comment Letter ("Given a choice, most investors appear to prefer funds that do not charge transactions fees over funds that do. This creates a competitive disadvantage for funds that impose transaction fees, accounting for their limited use.").

35 *See, e.g.*, Adoption of (1) Rule 18f-1 Under the Investment Company Act of 1940 to Permit Registered Open-End Investment Companies Which Have the Right to Redeem In Kind to Elect to Make Only Cash Redemptions and (2) Form N-18F-1, Investment Company Act Release No. 6561 (June 14, 1971) [36 FR 11919 (June 23, 1971)] ("Rule 18f-1 and Form N-18F-1 Adopting Release") (stating that the definition of "redeemable security" in section 2(a)(32) of the Investment Company Act "has traditionally been interpreted as giving the issuer the option of redeeming its securities in cash or in kind.").

36 Mutual funds that reserve the right to redeem their shares in kind may use such redemptions to manage liquidity risk under exceptional circumstances. *See* Karen Damato, *'Redemptions in Kind' Become Effective for Tax Management*, Wall Street Journal (Mar. 10, 1999), *available at* http://www.wsj.com/articles/SB921028092685519084 ("'Redemptions in kind' are typically viewed by fund managers as an emergency measure, a step they could take to meet massive redemptions in the midst of a market meltdown."). Funds may also use in-kind redemptions for other reasons. For example, funds may wish to redeem certain investors (particularly, large, institutional investors) in kind, because in-kind redemptions could have a lower tax impact on the fund than selling portfolio securities in order to pay redemptions in cash. This, in turn, could benefit the remaining shareholders in the fund. *See, e.g.*, *id*. *See also* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8, at section III.F.

37 *See, e.g.*, Comment Letter of Invesco on the Notice Seeking Comment on Asset Management Products and Activities, Docket No. FSOC-2014-0001 (Mar. 25, 2015), at 11 (noting that while "Invesco has on occasion exercised rights to redeem in kind, in practice such rights are exercised infrequently").

38 *See* Money Market Fund Reform; Amendments to Form PF, Investment Company Act Release No. 31166 (July 23, 2014) [79 FR 47736 (Aug. 14, 2014)] ("2014 Money Market Fund Reform Adopting Release"), at section II.L.1.f (discussing "complex valuation and operational issues" associated with in-kind redemptions). *See also* Money Market Fund Reform; Amendments to Form PF, Investment Company Act Release No. 30551 (June 5, 2013) [78 FR 36834, (June 19, 2013)] ("2013 Money Market Fund Reform Proposing Release"), at n.473 and accompanying text.

39 *See* Comment Letter of BlackRock Inc. (Jan. 13, 2016) ("BlackRock Comment Letter") ("[R]edemptions

Funds may still mitigate shareholder dilution using redemption fees and redemptions in kind, but each has downsides (as described above) and they are not broadly utilized by funds. Therefore, for the reasons discussed throughout this section, we believe that providing funds the option to use swing pricing as another anti-dilution tool is likely to benefit investors and may complement or be an alternative to the tools currently available to funds.

Finding efficient and cost-effective ways to protect fund shareholders from the dilutive impacts of trading activity and related costs is challenging, and many tools have been used in different jurisdictions to address these issues.[40] As discussed in detail in the Proposing Release,

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in-kind are not practical for retail investors, as retail investors may lack the proper custodial accounts to hold a particular security and they may be less likely to have the necessary expertise and/or the operational ability to trade the securities that could be held in a fund. For example, a retail investor may not have a custodial account set up to hold a security that is traded in another country, nor the sophistication to be able to trade such a security."). *See also* Comment Letter of Invesco Ltd. (Jan. 13, 2016) ("Invesco Comment Letter") ("The primary problem with using redemptions in-kind to meet large redemptions is the willingness and ability of the redeeming entity to receive securities instead of cash."); Peter Fortune, *Mutual Funds, Part I: Reshaping the American Financial System*, NEW ENGLAND ECON. REV. (July/Aug. 1997), at 47, *available at* http://www.bostonfed.org/economic/neer/neer1997/neer497d.htm. ("A fund redeeming in kind does so at the risk of its reputation and future business . . ."). In the context of money market funds, we requested comment on whether we should require redemptions in kind for redemptions in excess of a certain size threshold, to ease liquidity strains on the fund and reduce the risks and unfairness posed by significant sudden redemptions. *See* Money Market Fund Reform; Proposed Rule, Investment Company Act Release No. 28807 (June 30, 2009) [74 FR 32688 (July 8, 2009)] ("2009 Money Market Fund Reform Proposing Release"), at section III.B. Commenters generally opposed this type of reform for a variety of reasons, all of which likely would apply equally to funds other than money market funds. For example, most commenters stated that in-kind redemptions would be technically unworkable due to complex valuation and operational issues that would be imposed on both the fund and on investors receiving the in-kind distribution. *See* 2013 Money Market Fund Reform Proposing Release, *supra* footnote 38, at section III.B.9.c.

[40] *See* Proposing Release, *supra* footnote 6, at text preceding n.423 ("While redemption fees (or purchase fees) could mitigate dilution arising from shareholder transaction activity, implementing a fee requires coordination with the fund's service providers, which could entail operational complexity."); *see also id.*, at text accompanying and following n.445 ("In considering the swing pricing proposal, we considered proposing a rule that would permit 'dual pricing' as opposed to swing pricing. We understand that certain foreign funds use dual pricing as an alternative means of mitigating potential dilution arising from shareholder transaction activity. A fund using dual pricing would not adjust the fund's NAV by a swing factor when it faces high levels of net purchases or net redemptions, but instead would quote two prices—one for incoming shareholders (reflecting the cost of buying portfolio securities at the ask price in the market), and one for outgoing shareholders (reflecting the proceeds the fund would receive from selling portfolio securities at the bid price in the market). While we believe that dual pricing also could mitigate potential dilution, we believe that swing pricing is a preferable alternative because we believe it would be simpler to implement and for investors to understand.") (internal citation omitted).

one particularly successful tool, which has been applied in the Luxembourg fund industry for over 15 years, is swing pricing.[41] Swing pricing is regarded abroad as an efficient mechanism to protect non-transacting shareholders from dilution, as well as an additional tool to help funds manage liquidity risks.[42] Asset managers have implemented swing pricing for a range of fund types and asset classes, including equity, fixed income and multi-asset funds.[43] A number of other jurisdictions also permit the use of swing pricing within their domestic markets, or are considering allowing its use.[44] Although swing pricing may be more or less widely implemented in different jurisdictions (due to a particular home market's regulatory regime, investor profiles and operational infrastructure), when implemented it has been shown to provide performance benefits to funds,[45] which is consistent with a reduction in dilution attributable to the transactions costs associated with shareholder activity.[46]

Against this background, today we are adopting amendments to rule 22c-1 that will enable funds to choose to use "swing pricing" as a tool to mitigate shareholder dilution. After further consideration and after evaluating comments, we have modified several aspects of the final rule from the proposal, including eliminating the consideration of "market impact" when

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41 *See* Proposing Release *supra* footnote 6, at n.418 and accompanying text. Luxembourg is a significant jurisdiction for the organization of UCITS funds in Europe.

42 *See, e.g.*, Association of the Luxembourg Fund Industry, Swing Pricing Update 2015 (Dec. 2015) ("ALFI Survey 2015"), at 21, *available at* http://www.alfi.lu/sites/alfi.lu/files/ALFI-Swing-Pricing-Survey-2015-FINAL.pdf (noting that it is "increasingly evident . . . that swing pricing is an accepted and well established anti-dilution standard in the marketplace and has become the most commonly practiced form of anti-dilution protection"); and *id.*, at 17 (noting that a significant percentage of survey respondents indicated that "there is potential to apply swing pricing as part of a range of measures to assist with fund liquidity issues").

43 *See id*., at 8-9.

44 *See id*., at 6, 20.

45 *See infra* footnote 88 and accompanying text.

46 *See also* BlackRock, *Fund Structures as Systemic Risk Mitigants*, Viewpoint (Sept. 2014) ("BlackRock Fund Structures Paper"), *available at* https://www.blackrock.com/corporate/en-fi/literature/whitepaper/viewpoint-fund-structures-as-systemic-risk-mitigants-september-2014.pdf.

setting a fund's swing factor; requiring funds to establish and disclose an upper limit on the fund's swing factor, which may not exceed two percent of the fund's NAV per share; and refining certain financial statement and performance reporting requirements related to swing pricing. The amendments as adopted also incorporate certain modifications to the board's approval and oversight role associated with swing pricing. The fund's board does not have to specifically approve changes to the fund's swing pricing policies and procedures. However, under the final rule, the fund's board will be required to approve the fund's swing pricing policies and procedures and periodically review a written report prepared by the persons responsible for administering swing pricing that describes, among other things, the swing pricing administrator's review of the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution. This report also must describe the administrator's review and assessment of the fund's swing threshold(s), swing factor(s), and swing factor upper limit considering the requirements of the rule, including the information and data supporting these determinations. The board-approved policies and procedures must specify the process for setting the swing threshold, swing factor, and swing factor upper limit. In addition, the board will be required to approve the swing threshold(s) and the upper limit on the swing factor(s) used by the fund, and any changes thereto. We are also providing for an extended effective date to help alleviate concerns raised by commenters regarding operational changes that will be necessary before this new pricing method becomes available in the marketplace, because we believe that efficient, coordinated efforts to implement such operational changes will ultimately benefit investors. We have directed our staff to review, two years after the rule's effective date, market practices associated with funds' use of swing pricing under rule 22c-1(a)(3) to mitigate dilution and to provide the Commission with the results of this review.

2. *Overview of Swing Pricing Proposal and Comments Received*

We proposed amendments to rule 22c-1 that would permit a registered open-end fund (but not a money market fund or ETF) to choose to establish and implement swing pricing.[47] Under the proposal, a fund that chooses to use swing pricing would need to have policies and procedures that would require the fund to adjust its NAV per share by an amount known as the "swing factor" once the level of net purchases or net redemptions has exceeded a set, specified percentage of the fund's NAV, known as the "swing threshold." A fund would be required to consider certain factors in determining its swing threshold, and the fund's board would be required to approve the swing threshold. Likewise, a fund would have to consider certain factors in determining the "swing factor," which is the amount that the funds NAV would swing in response to the costs associated with the shareholder purchase and redemption activity, and the board would have to approve any swing factor upper limit.

Nearly all commenters supported the goals of swing pricing, and the ability of swing pricing in theory to achieve these goals.[48] However, commenters also highlighted a variety of concerns, many stemming from operational hurdles to implementing swing pricing in the United States that would require significant changes to fund processing infrastructure and systems.[49] Several commenters urged the Commission to assist the industry in addressing the

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47 *See* Proposing Release, *supra* footnote 6, at section III.F.

48 *See, e.g.*, Comment Letter of Americans for Financial Reform (Jan. 13, 2016) ("AFR Comment Letter"); Federated Comment Letter; Comment Letter of Global Association of Risk Professionals (Jan. 12, 2016) ("GARP Comment Letter"); Comment Letter of Vanguard (Jan. 6, 2016) ("Vanguard Comment Letter").

49 While most commenters supported the idea of swing pricing (with certain reservations), a few opposed swing pricing outright. *See, e.g.*, Comment Letter of ETF Consultants (Jan. 25, 2016) ("ETF Consultants Comment Letter"); Comment Letter of Voya Investment Management (Jan. 12, 2016) ("Voya Comment Letter"); Comment Letter of Eaton Vance Investment Managers (Jan. 13, 2016). *See also infra* section

operational challenges before swing pricing is implemented,[50] by seeking input from industry participants and other regulators about what could be done to make swing pricing a viable option in the U.S.[51] Commenters indicated that funds, intermediaries and service providers will have different levels of operational changes and burdens to consider, and certain funds may have the ability to implement swing pricing sooner than other funds (*e.g.*, some fund complexes have experience with implementing swing pricing in other jurisdictions, or are larger and may have more resources available to implement swing pricing, or are otherwise in a better position to be able to receive sufficient information to allow them to reasonably estimate whether they have crossed a swing threshold with high confidence). Commenters noted that such disparities could allow some funds to implement swing pricing faster than others, and that allowing time to work through operational issues in an efficient manner for all funds should help facilitate its implementation.[52]

In response to commenters' concerns regarding swing pricing's operational challenges and costs and to help facilitate efficient implementation of swing pricing, the Commission is adopting amendments to rule 22c-1 permitting swing pricing with a two-year extended effective date. Delaying the effective date should provide funds, intermediaries, and service providers a

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II.A.3.b. for a detailed discussion on operational challenges.

50 *See, e.g.*, BlackRock Comment Letter; Comment Letter of Dodge & Cox (Jan. 21, 2016) ("Dodge & Cox Comment Letter"); Comment Letter of Pacific Investment Management Company LLC (Jan. 13, 2016) ("PIMCO Comment Letter"); Comment Letter of Securities Industry and Financial Markets Association (Jan. 13, 2016) (Comments on Swing Pricing Proposal) ("SIFMA Comment Letter II").

51 *See, e.g.*, Morningstar Comment Letter; SIFMA Comment Letter II; Vanguard Comment Letter.

52 *See, e.g.*, BlackRock Comment Letter; Comment Letter of Capital Research and Management Company (Jan. 13, 2016) ("CRMC Comment Letter"); Comment Letter of Fidelity Management & Research Company (Jan. 13, 2016) ("Fidelity Comment Letter"); ICI Comment Letter I (suggesting that the SEC consider a delayed effective date (of two years or 30 months) to permit funds and intermediaries to work through operational issues, and to reduce potential competitive disadvantages that may result for funds that may be less ready to adopt swing pricing).

reasonable amount of time to evaluate and implement in an orderly and more cost-effective manner the necessary operational changes to conduct swing pricing, regardless of the unique operational hurdles a particular entity may face.[53] Providing this extended effective date may result in long-term benefits for many funds and investors as it may allow the industry to develop and implement standardized operations solutions for swing pricing that likely would result in lower costs, processing efficiencies and reduced operational risks that ultimately benefit investors.[54] We also appreciate the extent of operational changes that will be necessary for many funds to conduct swing pricing and that these changes may still be costly to implement, but we were not persuaded by commenters who argued that these changes are insurmountable, and indeed one stated that despite these challenges "the long-term benefits of enabling swing pricing for U.S. open-end mutual funds outweigh the one-time costs related to implementation for industry participants."[55] These issues are discussed in detail below.

As discussed in section II.A.3.b. below, commenters highlighted the various benefits of swing pricing for investors, including how the tool may be used to address the dilutive effect of shareholder transaction activity effectively and efficiently, and with observable performance benefits to the non-transacting shareholders in such funds.[56] Also, as discussed in section II.A.3.b. below, commenters raised overarching concerns regarding swing pricing generally, including shareholder fairness, alternatives to swing pricing such as redemption fees or

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53 *Id.*

54 *See infra* footnote 212 and accompanying paragraph. We note that providing an extended effective date to address such operational changes may also, consequently, alleviate some of the competitive concerns raised by commenters regarding certain funds being in a better position than others to rapidly implement swing pricing.

55 GARP Comment Letter.

56 *See infra* footnote 88 and accompanying text.

redemptions in kind, the impacts swing pricing will have on the current NAV and potential performance volatility, and transparency, disclosure, and potential gaming behavior concerns.

With respect to the more detailed elements of the proposed swing pricing rules, multiple commenters raised various additional concerns, and in some cases provided suggestions on the processes for determining the swing threshold, calculating the swing factor, estimating net shareholder flows, pricing errors and materiality, impacts on financial statement presentation and other disclosures, and board approval and oversight, all of which are discussed in the sections below.

3. *Discussion of Final Swing Pricing Rules*

a. Scope of New Swing Pricing Rules

Under the final rule, all registered open-end management investment companies, with the exception of money market funds and ETFs, may choose to use swing pricing.[57] Although rule 22c-1(a) generally applies to all registered investment companies issuing redeemable securities,[58] we believe money market funds, while potentially susceptible to the risk of dilution, already have extensive tools at their disposal to mitigate potential shareholder dilution, and ETFs, because they redeem directly only with authorized participants, are generally able to utilize transaction fees to pass on certain costs associated with redemptions.

A fund may decide to adopt swing pricing policies and procedures as part of the liquidity

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[57] For purposes of the new amendments to rule 22c-1, "exchange-traded fund" includes an exchange-traded managed fund ("ETMF"). *See* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8 at n.30 and accompanying text (discussing ETMFs in greater detail).

[58] Rule 2a-7 provides exemptions from rule 22c-1 for money market funds to permit certain money market funds to use the amortized cost method and/or the penny-rounding method to calculate its NAV, and to permit a money market fund to impose liquidity fees and temporarily suspend redemptions. *See* rule 2a-7(c)(1)(i); rule 2a-7(c)(2).

risk management program it is required to implement under rule 22e-4.[59] Some fund complexes may decide to use swing pricing for certain funds within the complex but not others, or establish different swing thresholds for different funds within the complex.[60] As discussed below, funds utilizing swing pricing are required to exclude any purchases and redemptions that are made in kind in determining whether the fund's level of net purchases or net redemptions has exceeded the fund's swing threshold.[61] We are not permitting closed-end investment companies ("closed-end funds"), unit investment trusts ("UITs"), ETFs and money market funds to use swing pricing under the final rule, as discussed in more detail below.

Closed-End Funds

Closed-end funds do not issue redeemable securities and therefore do not incur the same costs as open-end funds, associated with shareholder purchase and redemption activity, that swing pricing is intended to address.[62] One commenter suggested that swing pricing should be permitted for closed-end funds, indicating that certain closed-end funds (*e.g.*, those that rely on

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59 *See* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8. Under rule 22e-4, each open-end fund, including open-end ETFs but not including money market funds, is required to adopt and implement a written liquidity risk management program reasonably designed to assess and manage the fund's liquidity risk. *See id*.

60 Outside the U.S., it is a common industry practice for funds within a fund complex each to have an individual swing threshold, or for some funds within a complex to use swing pricing while others do not. *See, e.g.*, BlackRock Fund Structures Paper, *supra* footnote 46; and J.P. Morgan Asset Management, *Swing Pricing: The J.P. Morgan Asset Management Approach in the Luxembourg Domiciled SICAVs* (June 2014), *available at* http://www.jpmorganassetmanagement.de/DE/dms/Swing%20Pricing%20%5bMKR%5d%20%5bIP_EN%5d.pdf ("J.P. Morgan Asset Management Swing Pricing Paper").

61 We note that although redemptions in kind are excluded from the swing threshold, any such redemptions would still receive the swung NAV if the fund were to swing price on that day. This is because the swung NAV would apply to all redemption transactions on that day, regardless of how the proceeds are paid. We recognize that funds have discretion in determining whether to satisfy redemptions in kind, and that a fund that does satisfy redemptions in kind is less likely to cross its swing threshold. As a result, a fund can control how much it engages in swing pricing through its use of redemptions in kind. We believe this flexibility is appropriate, however, because funds have discretion on whether to use swing pricing, and redemptions in kind reduce dilution, which lessens the need for swing pricing.

62 *See* section 2(a)(32) (defining "redeemable security") and section 5(a)(1)-(2) (defining "open-end company" and "closed-end company") of the Act.

rule 23c-3) may incur transaction costs that may be mitigated by swing pricing.[63] The same commenter conceded, however, that the "the risk of investor dilution in connection with any offering or tender process is low for closed-end funds," that "the goals of the 'swing-pricing' option for open-end funds are already met for closed-end funds through existing mechanisms," and that the commenter would not expect many closed-end funds to utilize swing pricing. Because closed-end funds do not issue redeemable securities,[64] and therefore are much less likely to encounter much of the dilution that swing pricing is intended to address,[65] we agree that the goals of swing pricing are already met for closed-end funds and, as proposed, we are not permitting closed-end funds to utilize swing pricing.[66]

UITs

Although UITs issue redeemable securities, we are not permitting UITs to utilize swing pricing for a number of reasons. First, most assets currently held in UITs serve as separate account vehicles used to fund variable annuity and variable life insurance products, and these UITs essentially function as pass-through vehicles, investing principally in securities of one or

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63 *See* Comment Letter of Simpson Thacher & Bartlett LLP (Jan. 14, 2016) ("[A] closed-end fund that continuously offers its shares may determine that the subscribing shareholders should bear the costs of the fund investing the new cash. In such situations, a fund and its board may determine that the use of the swing-pricing mechanism is appropriate. Accordingly, there may be potential benefits in allowing closed-end funds the option to use swing pricing.").

Certain closed-end funds ("closed-end interval funds") do elect to repurchase their shares at periodic intervals pursuant to rule 23c-3 under the Investment Company Act. *See* Liquidity Risk Management Program Adopting Release, *supra* footnote 8, at n.145.

64 If a closed-end fund were to repurchase shares, it would have control over the timing and amount of any such repurchases (subject to the requirements of rule 23c-3, in the case of interval funds), and thus would not face the same liquidity pressures as open-end funds.

65 *See supra* section I.

66 We believe that the risk of investor dilution targeted by swing pricing is already sufficiently mitigated for closed-end interval funds by the requirements in rule 23c-3 and, therefore, it would not be appropriate to permit such funds to utilize swing pricing.

more open-end funds that could implement swing pricing.[67] UITs are not actively managed, and their portfolios are not actively traded. Unlike an open-end fund, a UIT generally does not have personnel available to actively manage the UIT's liquidity level. Because of the lack of a manager, we do not believe it would be feasible for a UIT to engage in the active administration of the swing pricing threshold and factor required by the rule. Also, UITs whose sponsor maintains a secondary market for the purchase and sale of units do not incur the dilutive transaction costs that swing pricing targets. Finally, we are not permitting UITs that are ETFs to utilize swing pricing for the reasons discussed in the ETFs section immediately below. We did not receive any comments on the Proposing Release indicating that UITs should be permitted to utilize swing pricing.

ETFs

As proposed, we are not permitting ETFs to use swing pricing because, unlike mutual funds, which typically internalize the costs associated with purchases and redemptions of shares, ETFs typically externalize these costs by redeeming in kind and by charging a fixed and/or variable fee to authorized participants who purchase creation units from, and sell creation units to, an ETF to cover liquidity and transaction costs.[68] We also are not including ETFs within the

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67 *See* Proposing Release, *supra* footnote 6, at n.139 and accompanying text. We currently estimate that approximately 92.9% of UITs serve as separate account vehicles (based on data as of December 31, 2015).

68 The fixed and/or variable fees are imposed to offset both transfer and other transaction costs that may be incurred by the ETF (or its service providers), as well as brokerage, tax-related, foreign exchange, execution, market impact and other costs and expenses related to the execution of trades resulting from such transaction. The amount of these fixed and variable fees typically depends on whether the authorized participant effects transactions in kind or with cash and is related to the costs and expenses associated with transactions effected in kind versus in cash. When an authorized participant redeems ETF shares by selling a creation unit to the ETF, for example, the fees imposed by the ETF defray the costs of the liquidity that the redeeming authorized participant receives, which in turn mitigates the risk that dilution of non-redeeming authorized participants would result when an ETF redeems its shares. *See* Invesco Comment Letter ("When an authorized participant redeems in cash, the variable transaction fee that an ETF may impose to offset transaction costs should address both dilution and liquidity concerns.").

scope of rule 22c-1(a)(3) because we believe that swing pricing could impede the effective functioning of an ETF's arbitrage mechanism.[69] The effective functioning of the arbitrage mechanism is necessary in order for an ETF's shares to trade at a price that is at or close to the NAV of the ETF.[70] If an ETF were to adopt swing pricing policies and procedures, an authorized participant would not know whether the ETF's NAV would be adjusted by a swing factor on any given day and therefore may not be able to assess whether an arbitrage opportunity exists.[71] The Commission historically has considered the effective functioning of the arbitrage mechanism to be central to the principle that all shareholders be treated equitably when buying and selling their fund shares (*i.e.*, that shareholders would not transact in shares of an ETF at market prices significantly diverging from the ETF's NAV).[72] Therefore, we believe that the implementation of swing pricing by an ETF could raise concerns about the equitable treatment of shareholders, to

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69 ETMF market makers would not engage in the same kind of arbitrage as ETF market makers because all trading prices of ETMF shares are linked to NAV. *See* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8, at n.834 and accompanying text. ETMFs would charge transaction fees that mitigate the risk of dilution, however, and therefore we do not include ETMFs within the scope of rule 22c-1(a)(3).

70 By this we mean that, and we generally expect that, each day and over time an ETF's shares will trade at or close to the ETF's intraday value. *See* Request for Comment on Exchange-Traded Products, Securities Exchange Act Release No. 75165 (June 12, 2015) [80 FR 34729 (June 17, 2015)] ("2015 ETP Request for Comment") ("When providing exemptive or no-action relief under the Exchange Act, the Commission and its staff have analyzed and relied upon the representations from ETP issuers regarding the continuing existence of effective and efficient arbitrage to help ensure that the secondary market prices of ETP Securities do not vary substantially from the value of their underlying portfolio or reference assets."). *See also* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8 at n.844. Because an ETF does not determine its NAV in real time throughout the trading day, in assessing whether this expectation is met, one looks to the difference between the ETF shares' closing market price and the ETF's end-of-day net asset value (*i.e.*, its "premium" or "discount"). *See* 2015 ETP Request for Comment.

71 *See infra* paragraph accompanying footnote 128 (noting that a fund is not required to disclose its swing threshold under the final rule).

72 *See, e.g.*, Spruce ETF Trust, *et al.*, Investment Company Act Release No. 31301 (Oct. 21, 2014) [79 FR 63964 (Oct. 27, 2014)] ("ETFs require various exemptions from the provisions of the [Investment Company Act] and the rules thereunder. Critically, in granting such exemptions to date, the Commission has required that a mechanism exist to ensure that ETF shares would trade at a price that is at or close to the NAV per share of the ETF."); and Precidian ETFs Trust, *et al.*, Investment Company Act Release No. 31300 (Oct. 21, 2014) [79 FR 63971 (Oct. 27, 2014)] (notice of application).

the extent that swing pricing could impede the effective functioning of the arbitrage mechanism. No commenters disagreed with our proposal not to allow ETFs to use swing pricing. We are, as proposed, not permitting ETFs to utilize swing pricing.

Money Market Funds

Under the final rule, like under the proposal, money market funds would not be able to use swing pricing. No commenters suggested that money market funds be allowed to use swing pricing. Money market funds are subject to extensive requirements concerning the liquidity of their portfolio investments. Also, a money market fund is permitted to impose a liquidity fee on redemptions if its weekly liquid investments fall below a certain threshold, and these fees serve a similar purpose as the NAV adjustments contemplated by swing pricing.[73] That is, money market fund liquidity fees allocate at least some of the costs of providing liquidity to redeeming rather than non-transacting shareholders,[74] and generate additional liquidity to meet redemption requests.[75] We therefore believe that money market funds already have liquidity risk management tools at their disposal that could accomplish comparable goals to the swing pricing permitted for other funds under rule 22c-1(a)(3).

We also believe that the liquidity fee regime permitted under rule 2a-7 is a more appropriate tool for money market funds to manage the allocation of liquidity costs than swing pricing.[76] Money market funds also have unique minimum liquid investment requirements, and

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73 *See* rule 2a-7(c)(2); *see also* 2014 Money Market Fund Reform Adopting Release, *supra* footnote 38, at section III.A.

74 *See, e.g.*, 2014 Money Market Fund Reform Adopting Release, *supra* footnote 38, at n.139 and accompanying text.

75 *See id.*, at n.120.

76 While funds may adopt swing pricing policies and procedures at their discretion, rule 2a-7 requires a money market fund under certain circumstances to impose a one percent liquidity fee on each shareholder's redemption, unless the fund's board of directors (including a majority of its independent directors)

we believe the use of liquidity fees is appropriately tied to those requirements. We also anticipate that open-end funds that adopt swing pricing policies and procedures may be required under such procedures to adjust their NAV from time to time (whenever the fund's net purchases or net redemptions exceed the fund's swing threshold). In contrast, money market fund investors (particularly, investors in stable-NAV money market funds) are particularly sensitive to price volatility,[77] and we anticipate liquidity fees will be used only in times of stress when money market funds' internal liquidity has been partially depleted.

We note that some foreign jurisdictions have a similar conception of liquidity fees as a distinct tool separate from swing pricing. For example, in Europe, UCITS may use swing pricing and apply "dilution levies," which are in many respects similar to liquidity fees.[78] While many UCITS use swing pricing as a matter of normal course, dilution levies may be considered a liquidity risk management tool that is used in connection with stressed conditions.[79]

b. General Considerations Relating to Swing Pricing

As highlighted above, most commenters expressed general support for the goals of swing pricing, as well as the ability of swing pricing to achieve these goals if successfully

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determines that such fee is not in the best interests of the fund, or determines that a lower or higher fee (not to exceed two percent) is in the best interests of the fund. *See* rule 2a-7(c)(2)(ii).

77 For example, retail and government money market funds are permitted to maintain a stable NAV, reflecting in part our understanding that investors in these products have a low tolerance for NAV volatility. *See* 2014 Money Market Fund Reform Adopting Release, *supra* footnote 38, at section III.B.3.c. Investors in floating NAV money market funds also could be sensitive to principal volatility, as we recognized in adopting requirements that all money market funds disclose their daily net asset value (rounded to the fourth decimal place) on their websites, and as we discussed in the economic analysis of the 2014 Money Market Fund Reform Adopting Release. *See id.*, at section III.E.9 and section III.K.

78 *See, e.g.*, BlackRock Fund Structures Paper, *supra* footnote 46, at 6; *see also supra* footnote 24 and accompanying and following text (discussing redemption fees that are currently permitted under rule 22c-2).

79 *See* BlackRock Fund Structures Paper, *supra* footnote 46, at 6.

implemented.[80] These commenters highlighted the value of swing pricing for investors, and noted that the tool may address the dilutive effect of shareholder transaction activity effectively and through a more efficient means than many other tools.[81]

Several commenters suggested that, in addition to mitigating potential dilution arising from purchase and redemption activity, swing pricing also could help deter redemptions motivated by any first-mover advantage.[82] That is, if non-transacting shareholders understood that redeeming shareholders—especially shareholders seeking to redeem large holdings—would bear the estimated costs of their redemption activity, it would reduce shareholders' incentive to redeem large holdings quickly because there would be less risk that non-transacting shareholders would bear the costs of other shareholders' redemption activity. We agree that this may be an additional useful effect of swing pricing for the funds that choose to use it.

As discussed in more detail in section II.A.3.d. below, swing pricing would require a fund, in determining whether the fund's level of net purchases or net redemptions has exceeded the swing threshold, to make such a determination based on receipt of sufficient information about the fund's net shareholder flows to allow the fund to reasonably estimate whether it has crossed the swing threshold with high confidence. We understand that, to the extent that funds engage in swing pricing, funds may be able to use the earlier receipt of net flow information in other ways, in particular, receiving net flow data earlier than current practice may provide

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80 *See, e.g.*, GARP Comment Letter; Comment Letter of J.P. Morgan Asset Management (Jan. 13, 2016) ("J.P. Morgan Comment Letter"); SIFMA Comment Letter II.

81 Some of these commenters noted investor and intermediary omnibus account issues, as well as systems and operational disadvantages associated with alternative tools, such as redemption fees, dual pricing and redemptions in kind. *See, e.g.*, Comment Letter of Charles Schwab Investment Management (Jan. 13, 2016) ("Charles Schwab Comment Letter"); Federated Comment Letter; Comment Letter of HSBC Global Asset Management (Jan. 13, 2016) ("HSBC Comment Letter").

82 *See, e.g.*, BlackRock Comment Letter; Comment Letter of CFA Institute (Jan. 12, 2016) ("CFA Comment Letter"); GARP Comment Letter.

valuable and improved information to fund managers for portfolio management and liquidity risk management, allowing them to better manage the portfolio. For example, the receipt of earlier net flow data will enable a more timely analysis of potential portfolio adjustments.[83] Even on days where a fund does not meet the swing threshold, the shareholder flow data that the fund receives may be useful, allowing portfolio managers to better manage the fund's portfolio in response to expected shareholder transaction activity.[84]

Some commenters also suggested that swing pricing and redemption fees can accomplish many of the same goals.[85] Although swing pricing has similar anti-dilutive effects as redemption or liquidity fees, swing pricing has the benefit of not requiring transfer agents or intermediaries to process, reconcile, and remit to funds the additional fees charged on shareholder transactions. The swing pricing adjustment would be applied when a fund calculates its NAV, thus potentially allowing for a more efficient and cost-effective tool.[86] We agree with commenters that swing pricing may have significant anti-dilutive benefits for the funds that choose to utilize it, and that it may be more advantageous to use in many respects than other potential tools designed to address the same concern, such as dual pricing.[87]

83 It is our understanding that most portfolio securities trading occurs early morning (when markets open) or close to the end of the trading day. Thus the best market prices may be missed if net flow information is not received by the fund until, for example, late morning on T+1 as often happens today with respect to some funds. *See* GARP Comment Letter.

84 We recognize that not all funds would be in a position to implement swing pricing quickly but note that such earlier receipt of shareholder flow data may provide an additional incentive for funds to adopt swing pricing beyond the anti-dilutive benefits it may provide.

85 *See* Federated Comment Letter; Eaton Vance Comment Letter.

86 However, as discussed in greater detail in section II.A.3.d. below, operational changes will need to be made in order to accurately apply the swing pricing factor. Funds would need to receive timely daily net shareholder flow information from intermediaries prior to the calculation of the NAV, in order to determine whether the swing threshold has been exceeded, and the NAV requires adjustment in accordance with the fund's policies and procedures.

87 *See* HSBC Comment Letter; Charles Schwab Comment Letter. *See also supra* footnote 24 and accompanying and following text (discussing rule 22c-2 and redemption fees).

We have noted that performance benefits have been identified in UCITs that use swing pricing, which suggests that it is consistent with swing pricing having the effect of mitigating dilution costs for the non-transacting shareholders in some funds, thus providing observable benefits to those investors.[88] One commenter disputed this notion, indicating that "the aggregate returns of fund shareholders, before expenses, are exactly the same whether or not a fund uses swing pricing" because "the observed improvement in fund pricing is sourced from, and equally offset by, the net transaction costs paid by buyers and sellers of fund shares . . . ."[89] We believe the commenter's analysis fails to take into account the value that the fund and its non-transacting shareholders realize by reallocating such costs to transacting shareholders (*i.e.*, we believe the commenter is disregarding the value of better aligning transaction costs to transacting, rather than non-transacting, shareholders).[90]

A few commenters advocated for the Commission to require all funds to adopt swing pricing policies and procedures.[91] These commenters suggested that swing pricing has significant benefits for investors, and that if left permissive, rather than mandatory, few funds

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88 *See* Association of the Luxembourg Fund Industry, Swing Pricing Guidelines (Dec. 2015) ("ALFI Swing Pricing Guidelines 2015"), at 6, *available at* http://www.alfi.lu/sites/alfi.lu/files/Swing-Pricing-guidelines-final.pdf ("Funds that apply swing pricing show superior performance over time compared to funds (with identical investment strategies and trading patterns) that do not employ anti-dilution measures. Swing pricing helps preserve investment returns."). We are not aware of differences between UCITs and US mutual funds or swing pricing practices that would cause performance benefits in U.S. mutual funds to be dissimilar, as swing pricing in UCITs regimes is also designed to reduce dilution and recapture the costs imposed by purchasing and redeeming shareholders on the fund. As discussed previously, commenters noting differences in the US and UCITs regimes largely pointed to differences in operational practice that made swing pricing easier to implement, and did not suggest that the benefits of swing pricing, once implemented, would differ.

89 *See* Eaton Vance Comment Letter.

90 We note that ETFs operating as open-end funds already externalize much of their transaction costs to their authorized participants.

91 *See* Comment Letter of Chris Barnard (Nov. 30, 2015) ("Barnard Comment Letter"); Invesco Comment Letter.

would be likely to undertake the operational costs and challenges of implementing it.[92] However, the majority of commenters argued that, if the Commission were to adopt swing-pricing rules, it should maintain the proposal's permissive (not mandatory) approach.[93] These commenters agreed that although swing pricing could mitigate potential shareholder dilution on days when a fund experiences heavy redemptions or purchases[94] and could help deter redemptions motivated by any first-mover advantage, it does so at a cost that may be significant for some funds.[95] They also argued that swing pricing may not necessarily be appropriate for all funds, as some funds may be more susceptible to significant and costly shareholder transaction activity than others, and thus requiring all funds to implement swing pricing and bear its associated costs is not justified. They argued that funds would be best situated to determine whether the benefits of swing pricing outweigh the costs.

We appreciate the commenters' concerns that swing pricing may have costs that, for some funds, may not be justified by the benefits.[96] We believe that as funds begin to implement swing pricing, they will be able to better evaluate the benefits and costs, and determine whether swing pricing is appropriate for each particular fund. Accordingly, we believe that the use of swing pricing by funds as an anti-dilution tool at this time should be optional rather than mandatory, and are adopting this permissive approach as proposed.

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92 *See* Invesco Comment Letter ("Partial swing pricing must be mandatory across open-end mutual funds if it is to be used effectively…Making implementation optional would enable gaming and permit conflicts of interest.").

93 *See, e.g.*, CFA Comment Letter; Comment Letter of Dechert LLP (Jan. 13, 2016) ("Dechert Comment Letter"); ICI Comment Letter I; J.P. Morgan Comment Letter.

94 *See, e.g.*, BlackRock Comment Letter; Comment Letter of MFS Investment Management (Jan. 13, 2016) ("MFS Comment Letter"); Charles Schwab Comment Letter; SIFMA Comment Letter II.

95 *See, e.g.*, BlackRock Comment Letter; GARP Comment Letter; MFS Comment Letter; Charles Schwab Comment Letter.

96 *See infra* section III.

While most commenters supported swing pricing in concept, a few opposed swing pricing outright, arguing that it may have negative effects on certain shareholders and may add to fund performance volatility.[97] Many commenters who expressed general support for swing pricing also raised other concerns and challenges, many of which were also discussed in the Proposing Release.

Operational Challenges

Commenters raised a variety of operational challenges with respect to the implementation of swing pricing.[98] As discussed in greater detail in section II.A.3.d. below, it is critical that funds obtain sufficient data about shareholder purchase and redemption activity from intermediaries in a timely manner in order to reasonably estimate with high confidence whether a fund should use swing pricing on any given day; this process presents operational challenges at the present time, particularly for some funds.

Several commenters noted that many current systems for processing fund orders are not set up to provide data on shareholder flows until well after a fund's NAV has already been struck, and that some of these systems depend on receiving the fund's NAV before the processing of shareholder purchase and redemptions transactions can begin.[99] Commenters

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97 *See* Comment Letter of Anonymous (Sept. 23, 2015); Eaton Vance Comment Letter (discussing a study it conducted that concludes that shareholder capital activity does not meaningfully impact the performance of most mutual funds); ETF Consultants Comment Letter; Voya Comment Letter.

98 *See, e.g.*, CRMC Comment Letter; Dechert Comment Letter; PIMCO Comment Letter; Comment Letter of Securities Industry and Financial Markets Association (Jan. 13, 2016) (Comments on Proposal to Require Liquidity Risk Management Programs and Related Liquidity Disclosures) ("SIFMA Comment Letter I").

99 *See, e.g.*, Eaton Vance Comment Letter; GARP Comment Letter; ICI Comment Letter I; Comment Letter of LPL Financial (Jan. 13, 2016) ("LPL Comment Letter"). Commenters noted that certain platforms of third-party distributors (*e.g.*, retirement plan record keepers, insurance companies, trust companies) require that actual fund NAVs are received before making trade allocations and processing transactions across accounts. For example, once orders in a retirement plan are created, investor transactions must be evaluated against the retirement plan's rules for determining a valid transaction, and the amounts invested are percentage allocations, using the NAV for each applicable fund when calculating the final transaction

pointed to systems issues and processing issues associated with swing pricing as their greatest concern, and suggested that few funds may adopt swing pricing immediately if the rule was effective upon adoption. Commenters suggested a variety of approaches to addressing these issues, including delayed effective dates for swing pricing to allow for systems changes and industry coordination efforts to be completed,[100] delaying the striking of a fund's NAV to allow more time for shareholder flow data to reach funds,[101] and potential regulatory action to require intermediaries to assist in providing necessary data to funds.[102]

We recognize that most current systems for funds and intermediaries are not set up to accommodate swing pricing, and that certain changes would need to be made before swing pricing can be adopted in the U.S. We also anticipate that certain funds are better positioned to reasonably estimate their net flows, and thus could be ready to implement swing pricing sooner than other funds.[103] As discussed in greater detail in section II.A.3.d. below, we believe that the challenges to implementing swing pricing can be addressed by the fund industry and overcome. Two commenters also noted that the aggregate long-term benefits to both shareholders and to the

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order. It was also noted that for some funds, a large percentage of purchases and redemptions are from the retirement channel (*e.g.*, approximately 30%)). *See* ICI Comment Letter I.

100 *See, e.g.*, BlackRock Comment Letter; CRMC Comment Letter; Fidelity Comment Letter; ICI Comment Letter I. *See also infra* footnote 212 and accompanying paragraph (discussing competitive concerns and an extended effective date).

101 *See* GARP Comment Letter; J.P. Morgan Comment Letter (also discussing potentially delaying NAV publication time from 6 p.m. ET to 8 p.m. ET, and generally concurring with GARP discussion of operational challenges).

102 *See, e.g.*, CRMC Comment Letter; GARP Comment Letter; Invesco Comment Letter; T. Rowe Comment Letter.

103 For example, we understand that some funds may have larger retail shareholder bases that transact directly with the fund's transfer agent or may be primarily distributed through affiliates or broker-dealers (that could potentially provide timely flow data) and/or do not have a substantial number of investors transacting in retirement plans or insurance products, where it may be more challenging to obtain timely estimates. Such funds may also have a high confidence in reasonable estimates used by back-testing their estimated flow information to actual trade flows.

stability of the overall financial system from swing pricing should be significant, likely outweighing the transition costs.[104] Although funds and intermediaries may incur costs in changing operational systems and developing new processes, because swing pricing is optional (not mandatory) these costs would only be incurred if funds elect to adopt swing pricing.

As mentioned above, the operational difficulties associated with swing pricing are not uniform among all funds. Certain funds that may have more direct relationships with shareholders, instead of being heavily intermediated, and funds that may have more transparency into shareholder flows due to different shareholder bases, or affiliate relationships, or more up-to-date systems may be more easily able to implement swing pricing. We believe, however, that an extended effective date can help ease the overall burden incurred by funds, intermediaries and service providers (and ultimately, the burden incurred by investors) by allowing sufficient time for the development and implementation of efficient and cost effective industry-wide operational solutions.[105] Further, we believe that even if only a limited number of funds adopt swing pricing immediately following the extended effective date, as funds begin to gain familiarity with the process, more funds may choose to adopt it over time.[106] In addition, once a few funds have adopted swing pricing, it may pave the way for other funds to leverage broader industry solutions implemented by intermediaries and service providers in support of swing pricing.[107] Finally, we are adopting swing pricing as a permissive tool, with no expectation that funds will utilize swing

104 *See* BlackRock Comment Letter; GARP Comment Letter.

105 *See infra* at footnotes 212-214 and accompanying text.

106 *See, e.g.*, ALFI Survey 2015, *supra* footnote 42, at 6-7 (noting the trend observed in 2011 towards greater adoption of swing pricing in the Luxembourg fund industry has continued).

107 We believe that the extended effective date for swing pricing mitigates competitive concerns by allowing time for funds that choose to implement swing pricing to confront the operational hurdles of doing so. This does not preclude, however, the possibility that certain funds will find it advantageous to wait until swing pricing is more widely established in the market before choosing to implement swing pricing.

pricing by a certain date. This means that as funds, service providers and intermediaries upgrade systems over time, they may re-evaluate their ability to use swing pricing, or build the necessary changes into new systems, allowing more funds to use it in the future, even if they do not make immediate changes in response to our final rule by the extended effective date.

Impacts on Current NAV and Performance Volatility

Several commenters voiced reservations about whether the swung NAV could appropriately be viewed as a fund's current NAV (particularly in light of the use of estimates to determine whether the fund has crossed the swing threshold and the swing factor) and may raise questions about the accuracy of the fund's NAV.[108] Although reasonable high-confidence estimates may be used to implement swing pricing, we believe the standards and guidance provided in this Release for establishing these estimates, as well as processes and procedures that funds may implement (including back-testing and adjusting estimates used based on actual or final data related to flows and transaction costs associated with subsequent portfolio trades), should mitigate concerns regarding the impact of using estimates for swing pricing on current NAVs.[109] We note that current NAV calculation processes already include subjective judgments and estimates, including, for example, fair-value determinations for assets that lack readily available market quotations. Additionally, we believe a swung NAV can reflect a more appropriate allocation of transaction costs to the redeeming shareholders whose redemptions caused these costs for those funds.

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108 *See* Eaton Vance Comment Letter ("In our view, the provisions of the Swing Pricing Proposal that would require funds adopting swing pricing to refer to their adjusted transaction prices as NAV are inconsistent with Chair White's recent statement emphasizing the importance of NAV accuracy."); *see also* ETF Consultants Comment Letter; ICI Comment Letter I; MFDF Comment Letter.

109 *See infra* footnote 187 and accompanying paragraph for further discussion on the nature of these estimates.

Commenters also noted concerns that swing pricing could lead to increased performance volatility.[110] The swing pricing requirements adopted today under rule 22c-1 aim to minimize NAV volatility (and related tracking error) associated with swing pricing to the extent possible. Swing pricing could increase the volatility of a fund's NAV in the short-term because NAV adjustments would occur when the fund's net purchases or net redemptions pass the fund's swing threshold. Thus, the fund's day-to-day NAV would show greater fluctuation than would be the case in the absence of swing pricing. This volatility might increase short-term tracking error (*i.e.*, the difference in return based on the swung NAV compared to the fund's benchmark)[111] during the daily period of NAV adjustment, and could make a fund's short-term performance deviate from the fund's benchmark to a greater degree than if swing pricing had not been used, especially if the NAV is swung on the first or last day of a performance measurement period.[112] However, swing pricing may also result in reduced tracking error over time, as benchmarks typically do not take into account transaction costs associated with responding to daily transactions, and if swing pricing recoups such costs, it may result in a fund that implements swing pricing better matching its benchmark on a long-term basis.

We recognize the desire to balance performance volatility with a fairer allocation of transaction costs. We believe that the use of swing pricing above a swing threshold, which we are permitting as proposed, may reduce the performance volatility potentially associated with

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110 *See* Federated Comment Letter; HSBC Comment Letter; Voya Comment Letter; Eaton Vance Comment Letter.

111 We note that tracking error created by allocating some liquidity costs to transacting investors is inevitable for an open-end fund conducting swing pricing just as it is for any fund whose transactions create liquidity costs.

112 *See* Proposing Release, *supra* footnote 6, at 196-198.

swing pricing.[113] In addition, we are not aware of investors in funds that utilize swing pricing in Europe negatively reacting to funds that swing price because of concerns related to performance volatility or tracking error.[114] Taking these considerations into account, we do not believe that potential volatility and tracking error will necessarily make funds conclude that the potential concerns about swing pricing outweigh its benefits, and thus we continue to believe that we should make this anti-dilution tool available to funds that choose to use it.

Shareholder Fairness Concerns

A number of commenters suggested that swing pricing could raise shareholder fairness concerns, as the proposed swing pricing rules would apply a single adjusted NAV per share to all shareholder orders, regardless of order size. These commenters maintained that swing pricing could thus penalize certain investors disproportionately or give other investors inappropriate "windfalls."[115] As noted in our proposal, we recognize that there are a variety of trade-offs that a fund would have to consider in determining to implement swing pricing.[116] These concerns, however, are partially mitigated by the fact that shareholders could be assured that the threshold level(s) of net purchase or net redemption activity (as included in a fund's swing pricing policies and procedures) would consistently trigger the use of swing pricing when applicable. A board is subject to duties of loyalty and care in the approval of policies and procedures implementing

113 *See id.*, at paragraph accompanying n.447 (discussing partial swing pricing in greater detail).

114 *See supra* footnote 88 and accompanying text.

115 *See, e.g.*, CFA Comment Letter; Eaton Vance Comment Letter; Federated Comment Letter. *But see* Morningstar Comment Letter (recognizing this concern, but noting that, when an investor sells fund shares during a time of heightened market volatility and wider bid-ask spreads for the fund's underlying holdings, selling the fund's investments to meet redemptions will necessarily result in costs to the fund, and it is fairer for those who are selling fund shares to bear these costs than those who remain in the fund).

116 *See* Proposing Release, *supra* footnote 6, at n.450 and preceding and accompanying text (noting, for example, that application of a swing factor could cause certain shareholders to experience benefits or costs, relative to the other shareholders in the fund, that otherwise would not exist).

swing pricing, and the fund's adviser is subject to a fiduciary duty to the fund. We believe that such policies, procedures, and controls, as well as board oversight, should help mitigate concerns raised by one commenter of potential fraud and abuses by unscrupulous fund managers and market timers.[117] Moreover, the final rule requires that the swing factor used must be reasonable in relationship to the near-term costs expected to be incurred by the fund as a result of net purchases or net redemptions that occur on the day the swing factor is used. It also requires that the board approve policies and procedures specifying the process for how the swing threshold(s), swing factor(s), and swing factor upper limit are determined,[118] and that the board review at least annually a report reviewing the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution.[119] This report also must describe the swing pricing administrator's review and assessment of the fund's swing threshold(s), swing factor(s), and swing factor upper limit considering the requirements of the rule, including the information and data supporting these determinations.[120] In addition, shareholders will have transparency into a fund's use of swing pricing because a fund will be required to establish and disclose a board-approved upper limit on the swing factor(s) used by the fund, which may not be greater than two percent of the fund's NAV per share.[121] All of these changes are designed to enhance the fair treatment of shareholders in any use of swing pricing and to prevent any abusive practices.

We also observe that transaction costs of purchasing and redeeming investors are today

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117 *See* Eaton Vance Comment Letter.

118 *See* rule 22c-1(a)(3)(ii)(A).

119 *See* rule 22c-1(a)(3)(ii)(D).

120 *See id*.

121 *See* rule 22c-1(a)(3)(i)(C) and rule 22c-1(a)(3)(ii)(B). *See infra* section II.B for further details on disclosure and reporting requirements for swing pricing.

allocated to all non-transacting investors in a mutual fund, and as a result, long-term investors may incur a more substantial burden of such costs than purchasing and redeeming shareholders.[122] However, partial swing pricing would allow funds to more closely align such transactions costs with purchasing and redeeming shareholders, and non-transacting investors would not be paying for the trading activity of such shareholders, which, as some commenters indicated, enhances shareholder fairness overall.[123] Furthermore, we believe that investors who purchase shares on a day that a fund adjusts its NAV downward would not create dilution for non-redeeming shareholders (even though the purchasing shareholders may be receiving a lower price than would be the case if the NAV was not adjusted downward). Under these circumstances, shareholders' purchase activity would provide liquidity to the fund, which could reduce the fund's costs in meeting shareholders' redemptions requests that day. We also note that in circumstances where the flows of purchases and redemptions are fairly balanced, it is unlikely that a fund will cross its swing threshold. Thus, purchasing shareholders are only likely to receive a NAV that is adjusted downward when the fund experiences substantial outflows. After considering the comments received, we believe it is appropriate to apply the swung NAV equally to all transacting shareholders in the fund.

<u>Swing Pricing Transparency and Disclosures</u>

Several commenters raised concerns regarding investor confusion to the extent that a fund's swing threshold and swing factor are not made transparent.[124] We agree that an adequate

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[122] We note that transacting investors on any given day also may remain long-term investors in a fund if they have not redeemed their entire position.

[123] *See* GARP Comment Letter; HSBC Comment Letter.

[124] *See, e.g.*, AFR Comment Letter; Eaton Vance Comment Letter; ETF Consultants Comment Letter; MFDF Comment Letter.

level of transparency about swing pricing is critical for investors to understand the risks associated with investing in a particular fund. However, we do not believe disclosure of a fund's swing threshold or swing factor is required to provide such transparency. As discussed in greater detail below, we are adopting, with some changes from the proposal, disclosure and reporting requirements regarding swing pricing to assist shareholders in understanding whether a particular fund has implemented swing pricing policies and procedures and whether the fund has utilized swing pricing.[125] As part of the disclosure changes, a fund will be required to disclose the fund's swing factor upper limit and include a description of the effects of swing pricing on a fund's performance.

Other commenters expressed concern that swing pricing could give rise to gaming behavior if certain shareholders were to attempt to time their trading activity to avoid (or take advantage of) pricing adjustments.[126] Requiring a fund to publicly disclose its swing threshold could create the potential for shareholder gaming behavior because a fund's shareholders could attempt to time their purchases and redemptions based on the likelihood that a fund would or would not adjust its NAV. One commenter suggested, for example, that certain vendors may have access to fund flow information through non-fund sources (such as by observing intermediary trading behavior) and that market timers may try to use any such information to detect patterns in swing pricing by funds, suggesting that those market timers might seek to transact on days when there is an advantageous change in the fund's NAV.[127]

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125 *See infra* section II.B. for further details on disclosure and reporting requirements for swing pricing. *See also infra* section II.A.3.g. for a discussion of swing pricing impacts on financial statement reporting, performance reporting and pricing errors.

126 *See* CFA Comment Letter; Federated Comment Letter; HSBC Comment Letter; Invesco Comment Letter.

127 *See* Eaton Vance Comment Letter.

For a shareholder to effectively game swing pricing, the shareholder would have to know the fund's swing threshold and net flow information on the day that the shareholder was purchasing or redeeming and that flow information would have to not materially change after the shareholder placed its order. Accordingly, without disclosure of this information, it will be difficult for shareholders to determine when the fund's net purchases or net redemptions exceed the swing threshold. After weighing these considerations, we are not requiring a fund to disclose its swing threshold or swing factor under the final rule, and we believe that a fund generally should not disclose its swing threshold unless it has determined that it is in the best interests of the fund to do so. In making this assessment, the fund should consider the nature of the fund's shareholders and whether disclosure of the swing threshold would result in significant shareholder harm. We note that, to the extent a fund does decide to disclose its swing threshold, we believe it would not be appropriate for a fund to disclose it selectively to certain investors (*e.g.*, to only disclose the fund's swing threshold to institutional investors), as we believe this could assist certain groups of shareholders in strategically timing purchases and redemptions of fund shares, potentially disadvantaging shareholders who do not know the fund's swing threshold.[128]

With respect to market timing concerns, we note that a fund's market timing policies and procedures should address and seek to resolve such issues for a fund that uses swing pricing. We note that funds have a variety of tools to prevent any such market timing should it occur, such as redemption fees, purchase blocks, and roundtrip restrictions, which we believe should mitigate

[128] The Commission has brought enforcement actions against fund managers for selective disclosure. *See* In the Matter of Evergreen Investment Management Company, LLC and Evergreen Investment Services, Inc., Investment Company Act Release No. 28759 (June 8, 2009) (settled order) ("Evergreen Order"); In the Matter of Alliance Capital Management, L.P., Investment Company Act Release No. 26312 (Dec. 18, 2003) (settled order).

this risk. In addition, investors will not be able to purposefully take advantage of swing pricing to obtain a better price without knowledge of contemporaneous intraday flows and a fund's swing thresholds, neither of which funds are required to publicly disclose under the rule.

c. <u>Swing Threshold</u>

Under the final rule, as under the proposed rule, a fund's swing pricing policies and procedures must provide that the fund is required to adjust its NAV once the level of net purchases or net redemptions from the fund has exceeded a set, specified percentage of the fund's net asset value known as the "swing threshold."[129] A fund must adopt policies and procedures that specify the process for how the fund's swing threshold is determined,[130] and the policies and procedures must be approved by the fund's board of directors.[131] In addition, the fund board will review a periodic report that describes, among other things, a review and assessment of the fund's swing threshold.[132] Finally, the fund board will be required to approve the fund's swing threshold and any changes thereto.[133]

In determining whether the fund's level of net purchases or net redemptions has exceeded the swing threshold, the person(s) responsible for administering the fund's swing pricing policies and procedures will be permitted to make this determination based on receipt of sufficient information about the fund shareholders' daily purchase and redemption activity to allow the

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[129] Rule 22c-1(a)(3)(i)(A). Under the rule, "swing threshold" is defined as "the amount of net purchases into or net redemptions from a fund, expressed as a percentage of the fund's net asset value, that triggers the initiation of swing pricing." Rule 22c-1(a)(3)(v)(D).

[130] Rule 22c-1(a)(3)(i)(B).

[131] Rule 22c-1(a)(3)(ii)(A).

[132] Rule 22c-1(a)(3)(ii)(D).

[133] Rule 22c-1(a)(3)(ii)(B).

fund to reasonably estimate whether it has crossed the swing threshold with high confidence.[134] This shareholder flow information may be individual, aggregated, or netted orders, may include reasonable estimates where necessary, and shall exclude any purchases or redemptions that are made in kind and not in cash.[135] The fund's policies and procedures should describe how such determinations will be made.[136] We are adopting a requirement that, in specifying the process for how the swing threshold is determined, a fund consider:

- The size, frequency, and volatility of historical net purchases or net redemptions of fund shares during normal and stressed periods;
- The fund's investment strategy and the liquidity of the fund's portfolio investments;
- The fund's holdings of cash and cash equivalents, as well as borrowing arrangements and other funding sources; and
- The costs associated with transactions in the markets in which the fund invests.[137]

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134 Rule 22c-1(a)(3)(i)(A).

135 *Id*. As noted in the Proposing Release, when a fund investor purchases or redeems shares of a fund in kind as opposed to in cash, this does not necessarily cause the fund to trade any of its portfolio assets. The risk of dilution as a result of shareholder purchase and redemption activity, therefore, is lower with respect to in-kind purchases and in-kind redemptions, and thus swing pricing would not be permitted unless a fund's net purchases or net redemptions that are made in cash (and not in kind) exceed the fund's swing threshold. *See* Proposing Release, *supra* footnote 6, at n.439 and accompanying paragraph.

136 *See infra* footnote 179.

137 Rule 22c-1(a)(3)(i)(B).

These factors overlap significantly with factors that we understand are commonly considered by funds that use swing pricing in other jurisdictions, in order to determine a fund's swing threshold. For example, the Luxembourg Swing Pricing Survey, Reports & Guidelines provides that factors influencing the determination of the swing threshold ordinarily include: (i) fund size; (ii) type and liquidity of securities in which the fund invests; (iii) costs (and hence, the dilution impact) associated with the markets in which the fund invests; and (iv) investment manager's investment policy and the extent to which the fund can retain cash (or near cash) as opposed to always being fully invested). *See* ALFI Survey 2015, *supra* footnote 42, We requested comment on the process a fund would use to determine its swing threshold, including the factors that a fund would be required to consider, and also requested comment on whether there were certain procedures that we should require a fund to use when reviewing its swing threshold. Commenters on the proposed rule expressed a variety of views regarding the factors a fund must consider in specifying the fund's swing threshold. Some commenters indicated that the Commission should be less prescriptive in establishing the factors, arguing that not all of the factors are equally applicable to all funds, that requiring funds to consider all these factors may lead funds to create overly mechanistic checklists, and that a principles-based approach would better allow funds to tailor their swing pricing processes to their unique circumstances.[138] Other commenters indicated that the rule's factors as proposed grant "excessive" discretion concerning the threshold for swing pricing,[139] and expressed concern that "fund shareholders will frequently bear swing pricing transaction costs that have little or no relation to the actual impact of their transaction on the fund and its continuing shareholders."[140] One commenter stated that the factors are in line with the commenter's expectations.[141]

We recognize the potential dangers of being overly prescriptive in this area, but believe that the factors reflect common areas that a fund would consider in establishing its swing pricing process and are consistent with factors that are considered by funds that use swing pricing in other jurisdictions.[142] In addition, we note that the rule does not preclude a fund from

at 14.

138 *See* ICI Comment Letter I; J.P. Morgan Comment Letter; Charles Schwab Comment Letter.

139 *See* AFR Comment Letter.

140 *See* Eaton Vance Comment Letter.

141 *See* HSBC Comment Letter.

142 *See supra* footnote 137.

considering other factors that the fund believes may be relevant.[143] Similarly, we recognize the potential dangers of providing complete discretion in this area, but note that further constraining funds' decision-making processes in setting the swing threshold may unduly restrict the ability of each fund to select an appropriate threshold that best suits the particular needs of the fund. Both extremes present a risk that transacting shareholders will bear swing pricing costs via the swing factor that are divorced from the fund's transaction costs. After considering commenters' concerns, therefore, we are adopting the factors related to setting a fund's swing threshold as proposed.

We continue to believe that evaluating all four factors will assist a fund in determining what level of net purchases or net redemptions would generally lead to the trading of portfolio assets that would result in material costs to the fund, and thus they are relevant to setting a fund's swing threshold.[144] Two of the factors a fund is required to consider in specifying the fund's swing threshold, relating to a fund's investment strategy and cash holdings, are similar (investment strategy factor) or the same (cash holdings factor) as two of the factors a fund is

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143 In contrast, we have given more limited discretion to funds when setting a fund's swing factor(s), but are not requiring board approval of the fund's swing factors. *See* rule 22(c)-1(a)(3)(i)(C) (providing that the person(s) responsible for administering swing pricing may take into account only the near-term costs expected to be incurred by the fund as a result of net purchases or net redemptions that occur on the day the swing factor(s) is used). Together, these modifications are designed to enhance the fair treatment of shareholders in the use of swing pricing and to prevent abusive practices, while also providing funds with the ability to tailor a fund's use of swing pricing after consideration of the swing threshold factors. *See also* AFR Comment Letter (expressing concern regarding the degree of discretion afforded to funds in setting both the swing threshold and swing factor).

144 Assessing the size, frequency, and volatility of historical net purchases and net redemptions of fund shares will permit a fund to determine its typical levels of net purchases and net redemptions and the levels the fund could expect to encounter during periods of unusual market stress, as well as the frequency with which the fund could expect to see periods of unusually high purchases or redemptions. We continue to believe that comparing the fund's historical flow patterns with the fund's investment strategy, the liquidity of the fund's portfolio holdings, the fund's holdings of cash and cash equivalents and borrowing arrangements and other funding sources, and the costs associated with transactions in the markets in which the fund invests will allow a fund to predict what levels of purchases and redemptions would result in material costs under a variety of scenarios.

required to consider in assessing its liquidity risk under rule 22e-4.[145] Overlap between the factors is not surprising, because evaluating a fund's liquidity risk may be relevant to determining the fund's swing threshold (*i.e.*, determining the appropriate circumstances under which the fund should employ swing pricing to combat shareholder dilution).[146] Such overlap may also lead to efficiencies in both analyses, as funds become more familiar with the interaction between the factors, the risk of dilution, and efforts to combat dilution. A third factor (the size, frequency, and volatility of historical net purchases or net redemptions of fund shares during normal and stressed periods) is a consideration in determining how frequently a fund may expect a specified swing threshold to be exceeded.[147] The fourth factor, the costs associated with transactions in the markets in which the fund invests, is a consideration in determining whether costs of responding to shareholder transaction activity are significant enough at a specified threshold level that the fund should utilize swing pricing to address their dilutive impact.[148]

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[145] *See* rule 22e-4(b)(2)(ii)(A) (requiring a fund to consider, in assessing its liquidity risk, the fund's "investment strategy and liquidity of portfolio investments during both normal and reasonably foreseeable stressed conditions (including whether the investment strategy is appropriate for an open-end fund, the extent to which the strategy involves a relatively concentrated portfolio or large positions in particular issuers, and the use of borrowings for investment purposes and derivatives)"; and rule 22e-4(b)(2)(ii)(C) (requiring a fund to consider, in assessing its liquidity risk, the fund's "holdings of cash and cash equivalents, as well as borrowing arrangements and other funding sources"). *See also* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8.

[146] *See* rule 22e-4(a)(11) (defining liquidity risk). We note that, in the Proposing Release, three of the factors a fund would have been required to consider in specifying the fund's swing threshold aligned with factors a fund is required to consider in assessing its liquidity risk. The change from three to two overlapping factors is due to a change in the liquidity risk assessment factors. *See* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8, at section III.B.2.

[147] This factor is similar to a factor for assessing liquidity risk, however, it has been tailored to be a more precise consideration for setting the swing threshold. *See id*.

[148] As discussed in the Proposing Release, a fund may wish to consider, as applicable, market impact costs and spread costs that the fund typically incurs when it trades its portfolio assets (or assets with comparable characteristics if data concerning a particular portfolio asset is not available to the fund). A fund also may wish to consider, as applicable, the transaction fees and charges that the fund typically is required to pay when it trades portfolio assets. These could include brokerage commissions and custody fees, as well as other charges, fees, and taxes associated with portfolio asset purchases or sales (for example, transfer taxes and repatriation costs for certain foreign securities, or transaction fees associated with portfolio investments in other investment companies).

In order to effectively mitigate possible dilution arising in connection with shareholder purchase and redemption activity, a fund's swing threshold should generally reflect the estimated point at which net purchases or net redemptions would trigger the fund's investment adviser to trade portfolio assets in the near term, to a degree or of a type that may generate material liquidity or transaction costs for the fund. We believe that a consideration of the factors set forth above will promote a fund estimating this threshold point.[149]

Full Swing Pricing vs. Swing Pricing Above a Threshold

Like the proposal, the final rule does not impose a minimum "floor" for a fund's swing threshold. We believe that different levels of net purchases and net redemptions would create different risks of dilution for funds with different strategies, shareholder bases, and other liquidity-related characteristics, and thus we do not believe that it would be appropriate to determine a single swing threshold floor to apply to all funds that elect to use swing pricing.[150] Rather, we believe it is appropriate to constrain the swing threshold through the factors that a fund must consider in setting the swing threshold, which are designed to prevent a fund from setting a swing threshold that is inappropriate and does not reflect the size and nature of the liquidity costs likely to be incurred by the fund. We believe that the consideration of the swing threshold factors would lead a fund to set a threshold at a level that would trigger the fund's investment adviser to trade portfolio assets in the near term to a degree or of a type that may generate material liquidity or transaction costs for the fund. We further believe that, after considering the swing threshold factors, a fund would be unable to set the swing threshold at

149 In circumstances where fund purchases and redemptions are fairly balanced, we believe that it is unlikely that the purchases or redemptions would trigger the fund's investment adviser to trade portfolio assets in the near term, to a degree or of a type that may generate material liquidity or transaction costs for the fund.

150 We note that, in Europe, there are no across-the-board swing threshold floors applicable to UCITS that use swing pricing.

zero.

Commenters generally supported the approach taken under the proposal of not setting a minimum threshold for swing pricing. Some commenters indicated that the Commission should permit full swing pricing because a fund may find it more appropriate for its particular circumstances[151] and would mitigate any potential first-mover advantage inadvertently caused by swing pricing.[152] One commenter also suggested that full swing pricing is more transparent and easier to understand than partial swing pricing.[153] On the other hand, some commenters stated that the Commission should permit only partial swing pricing, arguing that the tracking error and volatility associated with full swing pricing would outweigh its benefits.[154]

On balance, we continue to believe that setting a minimum threshold for all funds would not be appropriate, and that funds should be provided the flexibility to implement swing pricing at a threshold level that best fits their particular circumstances based on the required factors and the guidance set forth herein. We expect that as part of the process of determining whether the benefits of implementing swing pricing are justified given the costs, funds will evaluate the appropriate threshold level and select a level that is suitable for the fund, considering the

151 *See* Dechert Comment Letter. Full swing pricing is the process of adjusting the fund's NAV whenever there is any level of net purchases or net redemptions, instead of swing pricing above a threshold (*i.e.*, partial swing pricing).

152 *See* Federated Comment Letter.

153 *See* HSBC Comment Letter (noting advantages of full swing pricing but also acknowledging benefits of partial swing pricing, such as "a lower impact on net asset value volatility, tracking error and fund performance.").

154 *See* AFR Comment Letter ("We understand that full swing pricing—allowing NAV adjustments anytime there are net purchases or redemptions—may increase volatility, tracking errors, and investor misperceptions about funds' performance that could lead to market distortions. Instead, we support the proposed partial swing pricing that would allow NAV adjustments only when net purchases or redemptions exceed an established threshold. We agree that this approach will result in lower volatility than full swing pricing, while still reducing dilution on assets. To that end, we do not support an option allowing funds to choose to use full swing pricing."). *See also* MFS Comment Letter.

required factors. We believe that this approach strikes an appropriate balance between competing considerations by allowing tailored choices to be made for each fund but constrained by the factors that the fund must consider in setting the threshold. Therefore, we are adopting the threshold requirements as proposed.

Board Approval of Swing Threshold

We are also requiring the fund's board to approve a fund's swing threshold as proposed. Several commenters opposed the proposed requirement for a fund's board to approve the fund's swing threshold, stating that the determination of swing thresholds is more appropriately a management function.[155] One commenter noted that the determination of a fund's swing threshold would likely be a highly technical analysis "that requires intimate familiarity with the fund's daily operations."[156] Additionally, one commenter questioned whether the board should be required to approve changes to a fund's swing threshold(s), arguing that board approval could be detrimental to a fund's ability to respond quickly to changing market conditions.[157] One commenter, on the other hand, supported requiring that a fund's board, including a majority of independent directors, approve the swing threshold as "independent perspectives may more fully focus on shareholder interests."[158] Another commenter suggested that the proposed swing threshold requirements granted excessive discretion to fund managers notwithstanding the proposed board approval requirement.[159] As discussed in more detail below, several commenters

155 *See*, *e.g.*, BlackRock Comment ("Mutual fund boards should not be required to approval all swing thresholds."); Dechert Comment Letter (stating that board approval of the swing threshold "should instead be a management function, subject to board oversight").

156 Dechert Comment Letter.

157 Charles Schwab Comment Letter.

158 CFA Institute Comment Letter ("We also support the requirements that fund boards approve initial swing thresholds and any material changes to it…").

159 AFR Comment Letter.

also supported the idea that a fund's board should be given visibility into the process by which the swing threshold was determined via written reports.[160]

After considering commenters' concerns, we believe that board approval of a fund's swing threshold (and any changes thereto) is an important element of board oversight of a fund's swing pricing process. A fund's swing threshold(s) represents the trigger point at which the fund's NAV will be adjusted and thus the point at which swing pricing begins to affect fund shareholders. We believe board review and approval of this determination will help ensure that the fund's swing threshold(s)—and the point at which swing pricing begins to affect shareholders in the fund—is in the best interests of fund shareholders. While requiring board approval of changes to a fund's swing threshold may constrain a fund's ability to immediately or frequently change a fund's swing threshold, we believe that this requirement acts as an important check on the discretion afforded to the fund's swing pricing administrator. Moreover, under the final rule, a fund is permitted to set multiple swing threshold(s), which we believe may allow a fund to prepare for some changes in market conditions.

As described further below, we are also requiring that the board be provided with a written report from the fund's swing pricing administrator that describes, among other things, the administrator's review and assessment of the fund's swing threshold(s), including information and data supporting this determination.[161] We believe that the information provided in this report will help the board in overseeing this important element of the fund's swing pricing process, thereby addressing the concern some commenters expressed that the board may not have the necessary information or expertise to approve the swing threshold (and changes to the

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160 *See infra* footnote 276 and accompanying text.

161 *See infra* section II.A.3.f.

threshold).[162] At the same time, we believe that requiring board approval of a fund's swing threshold (and any changes to the threshold), combined with the board review requirement, serves to address concerns about granting excessive discretion to the swing pricing administrator.

Application of Swing Pricing to Purchases and Redemptions

Under the proposal, a fund that adopted swing pricing policies and procedures would have been required to adjust the fund's NAV whenever net redemptions or net subscriptions exceeded the swing threshold. In other words, a fund could not apply swing pricing only when it received net redemptions beyond the threshold. The proposal solicited comment on whether a fund should be permitted to apply swing pricing only when the fund's level of net redemptions exceeds the swing threshold. Commenters requested that the Commission permit funds the flexibility to adjust their NAV only when net redemptions (as opposed to both net subscriptions or net redemptions) exceed the swing threshold,[163] and permit a fund to set different swing thresholds for net redemptions versus net subscriptions.[164] Commenters argued that this additional flexibility was important because the dilution risks associated with net redemptions may be significantly different from the risks associated with net subscriptions, as funds may be able to manage inflows more effectively over time without as much cost.[165] For this reason, they

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162 *See id*.

163 *See* Dechert Comment Letter ("[A] fund should be permitted to apply swing pricing to net *redemptions* only, as opposed to applying it equally to net redemptions and net purchases, which would be the case under the proposed rule amendments.") (emphasis in original).

164 *See* BlackRock Comment Letter ("[T]he Commission should clarify that funds are permitted to create an 'asymmetric' swing threshold where the threshold for inflows is different than the threshold for outflows.") (internal citation omitted).

165 Unlike the requirement that funds meet redemptions within 7 days, there is no requirement for funds to immediately invest cash inflows. *See* ICI Comment Letter I ("[R]eceipt of new cash in a portfolio may not be as disruptive or problematic as large net redemptions."); Dechert Comment Letter (noting that there may be more significant issues regarding potential dilution for non-redeeming shareholders in connection with shareholder redemptions).

argued that funds may wish to only use swing pricing for net redemptions, and not subscriptions, or set differing thresholds for subscriptions versus redemptions.

While we agree with commenters that the impact of subscriptions may be different from that of redemptions and that funds have other tools to manage inflows over time,[166] the final rule continues to require a fund to adjust its NAV whenever net purchases or net redemptions exceed the swing threshold. Both purchases and redemptions may cause shareholder dilution in certain circumstances. Accordingly, we believe swing pricing will be a useful tool in mitigating shareholder dilution associated with shareholder purchase activity as well as shareholder redemption activity.

<u>Multiple Swing Thresholds</u>

In response to a comment request in the Proposing Release, a number of commenters suggested that we should permit a fund to set multiple escalating swing thresholds (wherein each threshold could be associated with a different swing factor) instead of only a single threshold.[167] Commenters argued that permitting multiple thresholds may allow funds to more effectively mitigate shareholder dilution, because the costs of managing shareholder activity may increase as redemptions increase, and would allow swing pricing to more precisely reflect different levels of costs associated with different levels of shareholder activity.[168]

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166 We note that a fund is not obligated to accept subscriptions, and so thus may be able to better manage dilution due to purchases.

167 *See, e.g.,* ICI Comment Letter I ("[F]unds may wish to apply more than one threshold to net redemptions (or purchases), and apply different swing factors depending on which threshold the net redemption (or purchases) exceeds. This could enhance the precision of a swing pricing methodology, allowing a fund to make larger downward adjustments to its NAV when it experiences larger net outflows.") (internal citation omitted).

168 *See* BlackRock Comment Letter ("Funds should also be permitted to set multiple swing threshold levels for a given fund, where each threshold could be associated with different swing factors. Such a sliding swing threshold would allow partial swing pricing to more precisely reflect different levels of costs associated with the disposition (purchase) of securities for different trade sizes.") (internal citation omitted).

We agree that permitting such multiple thresholds may allow funds to more precisely target the costs of managing shareholder activity and better mitigate shareholder dilution effects of such transactions. Accordingly, the final rule permits (but does not require) a fund to set multiple escalating swing thresholds, each associated with a different swing factor.[169] Whichever threshold is triggered on a given day would then determine the single swing factor that would be used to adjust the fund's NAV on that day. If a fund has more than one threshold, each should be established using the same factors discussed above, and if it has multiple swing factors, each should be set taking into account the same considerations discussed in section II.A.2.e. below.

Review Requirement

The proposed rule would have required a fund's swing pricing policies and procedures to provide for a periodic review, no less frequently than annually, of the fund's swing threshold. Beyond specifying certain factors that a fund would be required to consider in reviewing its swing threshold, the proposed rule did not include prescribed review procedures, nor did it specify the changes in a fund's circumstances over the course of the review period that a fund must consider as part of its review. One commenter suggested that the final rule make clear that the required review should be similar in nature to the review that led to the determination of a fund's swing threshold in the first place.[170] Another commenter suggested that the proposal provided little guidance to fund sponsors and boards in how to balance conflicting interests of shareholders in setting appropriate swing thresholds.[171] As discussed in more detail below, several commenters also supported the idea that a fund's board should be given visibility into the

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[169] As discussed in more detail below, however, a fund's swing factor(s) may not exceed two percent of NAV per share. *See infra* section II.A.3.e.

[170] *See* Comment Letter of the Federal Regulation of Securities Committee of the Section of Business Law of the American Bar Association (Feb. 11, 2016).

[171] *See* Eaton Vance Comment Letter.

process by which the swing threshold was determined via written reports.[172]

We agree that the review requirement should be more robust, and instead of requiring a fund to periodically review the fund's swing threshold, we have adopted in the final rule a requirement that the fund's board of directors, must review, no less frequently than annually, a written report prepared by the person(s) responsible for administering swing pricing for a fund that describes, among other things: (i) the swing pricing administrator's review of the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution; and (ii) its review and assessment of the swing threshold(s), swing factor(s), and swing factor upper limit considering the requirements in rule 22c-1(a)(3)(i)(B) and (C), including the information and data supporting these determinations.[173] We are also requiring, as proposed, that the fund board approve the fund's swing pricing policies and procedures, which must specify the process for how the fund's swing threshold is determined.[174] Finally, as discussed above, we are requiring that the fund board approve any changes to the fund's swing threshold as proposed. We believe that the written report requirement, which specifies certain information that must be provided to the board, provides additional guidance regarding the information that may be useful in assessing the fund's swing threshold.

A fund may consider whether to review and assess its swing threshold more frequently than annually (*e.g.*, semi-annually or monthly), and/or specify any circumstances that would prompt ad hoc review of the fund's swing threshold in addition to the periodic review required

[172] *See infra* footnote 276 and accompanying text.

[173] Rule 22c-1(a)(3)(ii)(D). *See also infra* section II.A.3.f. (discussing the board review requirements).

[174] *See infra* section II.A.3.f.

by the rule (as well as the process for conducting any ad-hoc reviews). We believe that funds should generally consider evaluating both market-wide and fund-specific developments affecting each of the rule 22c-1(a)(3)(i)(B) factors in developing comprehensive procedures for reviewing a fund's swing threshold.

Swing Threshold Considerations for Multiple Share Classes

The net purchase or net redemption activity of all share classes of a fund with multiple share classes is part of the determination of whether a fund has crossed its swing threshold. If a fund were to only include the transaction activity of a single share class, and were to swing one share class and not another, this would have the effect of having one share class pay transaction expenses incurred in the management of the fund's portfolio as a whole, expenses that are borne by all share classes and thus would generally be inconsistent with rule 18f-3.[175] Accordingly, a fund with multiple share classes may not selectively swing the NAV of certain share classes but not others.[176] Like a fund with only one share class, the purchase or redemption activity of certain shareholders (or a class of shareholders) within a multi-share-class fund could dilute the value of all shareholders' interests in the fund.[177] Further, because the economic activity causing dilution occurs at the fund level, it would not be appropriate to employ swing pricing at the share class level to target such dilution. We also note that because all share classes must utilize the same swing factor and ETFs cannot utilize swing pricing, funds structured to include ETFs as a

175 *See* rule 18f-3(a)(1)(ii) (stating that allocation of expenses related to the management of a fund's assets may not differ among a fund's share classes).

176 One commenter indicated that "swing pricing can be used successfully by the conventional share classes of a fund that also operates an ETF as a share class." *See* Vanguard Comment Letter. Because of the aforementioned 18f-3 concerns and the inability of ETFs to utilize swing pricing, we disagree. A swing pricing adjustment applied to certain share classes of a fund, but not applied to the ETF share class of that fund, would impermissibly allocate expenses related to the management of the fund's assets.

177 *See* ALFI Survey 2015, *supra* footnote 42, at 4 ("If swing pricing is applied, all share classes of a fund swing in the same direction (and typically by the same basis point amount), as dilution occurs at the fund level rather than at the share class level.").

share class would not be able to utilize swing pricing.[178]

d. Investor Flow Information

Critically important to the adoption of swing pricing is a fund's ability to obtain sufficient information about purchase and redemption activity that took place prior to striking the fund's NAV on a particular day in order to reasonably estimate whether it has crossed the swing threshold with high confidence, to determine whether swing pricing should be in effect that day. If the fund's applicable swing factor varies depending on the level of its net investor flows, sufficient investor flow information is also needed to determine the applicable swing factor that the fund will use to adjust its NAV. A fund using swing pricing will need to obtain reasonable estimates of investor flows daily, or the aggregate flows of money being invested in and redeemed out of the fund, for purposes of reasonably estimating with high confidence whether the fund's net purchases or net redemptions have crossed the swing threshold, thus resulting in an NAV adjustment under its swing pricing policies and procedures.[179]

We understand that the deadline by which a fund must strike its NAV may precede the time that a fund (or its pricing agent) receives final information concerning daily net investor transaction flows from the fund's transfer agent. As a result, funds engaging in swing pricing will likely need to develop processes and procedures to gather sufficient investor flow information from transfer agents that include transactions being conducted by intermediaries on

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178 *See* section 18 of the Act.

179 We have previously stated that a fund should adopt compliance policies and procedures that provide for monitoring shareholder trades or flows of money in and out of the fund for purposes of detecting market timing activity. *See* Compliance Programs of Investment Companies and Investment Advisers, Investment Company Act Release No. 26299 (Dec. 17, 2003) [68 FR 74714 (Dec. 24, 2003)] ("Rule 38a-1 Adopting Release"), at nn.66-69 and accompanying text. We also note the requirement that funds have shareholder information agreements under rule 22c-2 that require financial intermediaries to provide certain shareholder transaction data to funds upon their request, which may be helpful in estimating flows in some respects. *See* rule 22c-2.

behalf of fund investors.[180] This information could include actual transaction orders received by the transfer agent, as well as estimates of investor flows, which funds can use to reasonably estimate its aggregate daily net investor flows for swing pricing purposes.[181]

Reasonable Estimates

Several commenters asked for additional guidance regarding a fund's use of estimates in determining its net flows in order to determine whether a fund has crossed its swing threshold.[182] We acknowledge that full information about shareholder flows is not likely to be available to funds by the time such funds need to make the decision as to whether the swing threshold has been crossed, [183] but we do not believe that complete information is necessary to make a reasonable high confidence estimate.[184] Instead, a fund may determine its shareholder flows have

[180] As indicated in the proposal, a fund may wish to implement formal or informal policies and procedures regarding the timely receipt of shareholder flow information, and to establish effective communication between the persons charged with implementing the fund's swing pricing policies and procedures, the fund's investment professionals, personnel charged with the calculating the fund's daily NAV, and the fund's transfer agent. *See* Proposing Release, *supra* footnote 6, at section III.F.2.a.

[181] Under the current system, redemption and subscription orders from shareholders are typically accepted by funds and their intermediaries on any given trading day up until 4 p.m. Eastern time. Intermediaries typically begin processing, aggregating and submitting transaction orders to fund transfer agents (where transactions are not NAV dependent) in the late afternoon. Funds generally publish their NAVs between 6 and 8 p.m. Eastern time ("ET"). Following the publication and delivery of such NAVs, both intermediaries and fund transfer agents complete their transaction processing and conduct their nightly processing cycles, which update applicable recordkeeping systems for the day's activities. *See* rule 2a-4 (allowing the adjustment in outstanding fund shares as a result of purchase and redemption activity to be reflected on T+1).

[182] *See* BlackRock Comment Letter; ICI Comment Letter I (noting that swing pricing in the U.S. will likely involve the use of estimates with respect to current day net flows (as well as when determining factors) and that the Commission should further clarify that it is comfortable with fund managers and their administrators using such estimates in a disciplined and documented manner when employing swing pricing). Similarly, another commenter asked the Commission to clarify that there is an element of estimation in evaluating whether a fund has crossed its threshold, inherent in the proposed reasonable inquiry standard. *See* SIFMA Comment Letter II.

[183] The deadline by which a fund must strike its NAV may precede the time that a fund receives final information concerning daily net flows from the fund's transfer agent or principal underwriter.

[184] A fund should not employ swing pricing if the fund is unable to obtain sufficient information about the fund shareholders' daily purchase and redemption activity on the relevant date at the time it calculates the fund's NAV. *See supra* section II.A.3.c. We understand that many funds in Europe that use swing pricing may typically receive as much as 90% of net purchase/redemption data prior to deciding whether to adjust

crossed the swing threshold based on receipt of sufficient information about the fund shareholders' daily purchase and redemption transaction activity to allow the fund to reasonably estimate, with high confidence, whether it has crossed the swing threshold. The shareholder flow information used by funds may be individual, aggregated or netted orders and may include reasonable estimates where necessary[185] (made by funds and their intermediaries) and should exclude any purchases or redemptions that are made in kind and not in cash.[186]

As discussed below, we recognize in some cases, it may not currently be feasible for certain intermediaries to provide their actual orders (even in an aggregated or netted format) promptly enough for the fund to conduct swing pricing. However, we understand that a fund's reasonably estimated shareholder flows could include estimates for certain intermediary flows that are based on actual transaction orders received from investors prior to the fund's cut-off time, which would subsequently be submitted by intermediaries to the fund's principal underwriter and/or transfer agent for processing after receipt of the fund's final NAV. For example, in the European fund sector, swing pricing is feasible operationally as "actual" trade flows based on estimated prices (typically the prior day's NAV) and orders occurring on the trade date are available on a timely basis. Trading platforms collect all of that day's activity and supply it to the fund's transfer agent. An estimated fund price is then applied to generate

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the fund's NAV by a swing factor.

185 We understand that most intermediaries submit aggregated and/or netted transactions orders to funds. Such orders represent the transactions of underlying investors whose shares are held in omnibus accounts registered in the name of intermediaries (such as a broker-dealer, retirement plan record keeper, bank or trust) for the benefit of such shareholders on transfer agent recordkeeping systems for each share class in a fund. Intermediaries typically aggregate their individual customer daily transaction orders and also may net the total purchase and redemption orders, which are periodically transmitted for processing to fund transfer agents. *See* Investment Company Institute, *Navigating Intermediary Relationships*, (2009), at nn.3, 6-7, *available at* https://www.ici.org/pdf/ppr_09_nav_relationships.pdf.

186 *See* rule 22c-1(a)(3)(i)(A).

estimated trade values for that trading day. We also note that where transaction orders are NAV dependent, the application of estimated fund prices (such as the prior day's NAV) to the current day's orders to derive estimated shareholder flow information could be conducted by intermediaries or fund transfer agents.[187] Additionally, a fund may require different levels or types of information from each of its intermediaries depending on a variety of factors.[188]

Funds should consider utilizing policies and procedures to make the necessary estimates.[189] Such policies and procedures could describe the process by which the fund obtains shareholder flow information (including flows obtained from intermediaries), as well as the amount and kind of transaction data that the fund believes necessary to obtain before making its estimate of total net flows in order to determine whether the swing threshold has been exceeded, and applying swing pricing that day.[190] Funds (and their intermediaries) may also wish to consider regular back-tests of their daily estimated net flows used in determining whether a swing threshold has been crossed based on complete or final data obtained later, and then update

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187 *See* GARP Comment Letter.

188 Such factors might include the size of flows that ordinarily come through a particular intermediary, the nature of such orders (*i.e.*, subscriptions, redemptions, exchange transactions), or certain characteristics or additional information about the redeeming or purchasing shareholders and intermediaries conducting transaction processing (*e.g.*, large trade notifications). A fund may also choose to request flow data only from certain of its intermediaries if it determines that it can make a high confidence determination to swing its price with flow information provided by only a subset of its intermediaries (for example, if there are intermediaries that typically only conduct a very small volume of transaction activity with the fund).

189 One commenter requested that we "recognize that certain components of the swing pricing process will be based on estimates" and suggested that we "provide a safe harbor from liability for differences between estimates and what is observed ex-post if swing pricing procedures are followed properly." BlackRock Comment Letter. We decline to provide such a safe harbor given the facts and circumstances nature of this determination.

190 As discussed in section II.A.3.g. below, if a fund, pursuant to reasonably designed policies and procedures, determined with reasonable high confidence that it should apply swing pricing based on estimated information obtained after reasonable inquiry, the fund would not need to treat the application of swing pricing as a pricing error if it turned out, after the fact based on final data, that the swing threshold had not been crossed; similarly, the fund would not need to treat the failure to apply swing pricing as a pricing error if it turned out, after the fact based on final data, that the swing threshold had been crossed.

their estimation process over time based on the results of such back-tests. A fund may wish to consider whether having a process to back-test data, which would allow a fund to review whether the fund is appropriately considering and weighing the factors and, over time, may potentially improve the accuracy of the fund's estimation process. Back-testing data is a commonly utilized practice in the fund industry (and other industries) to continuously improve the quality of processes involving subjective judgments or estimates, and its use has been discussed in the context of swing pricing in Europe.[191]

We recognize that funds may take different approaches in determining whether they have sufficient flow data to make a reasonable high confidence estimate,[192] and that the completeness of data (such as the percentage of actual versus estimated net flow data), as well as the nature and types of estimates used may vary based on the particular circumstances of the fund. For example, a fund whose redemption levels have been very consistent in the past, and that has a large direct shareholder base that is made up of primarily small retail positions, may be better positioned to make a high confidence estimate of flows with less effort, than a fund that is primarily distributed through intermediaries, who has experienced volatile purchases and redemptions and has a mix of distribution partners and institutional and retail shareholders. Because many funds are primarily distributed through intermediaries, they will need to obtain sufficient information about shareholder flows (whether actual orders or estimated flows) in a timely manner to reasonably estimate with high confidence whether a fund should use swing pricing on a given day.

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191 *See, e.g.*, ALFI Swing Pricing Guidelines 2015, *supra* footnote 88 (discussing the value of back-testing).

192 *See infra* footnote 205.

Operational Issues

Many commenters on the swing pricing proposal discussed the operational difficulties that exist today for funds in obtaining timely enough information from intermediaries about shareholder flow data to determine whether or not a swing threshold has been crossed.[193] These commenters discussed operational challenges to implementing swing pricing in the United States as compared to Europe, where many funds have successfully implemented swing pricing.[194] Commenters noted that omnibus account structures and existing processing arrangements with intermediaries limit the ability of many funds to receive sufficient flow information prior to the time that the fund's NAV must be calculated, thus impeding the use of swing pricing as an anti-dilution tool currently in the U.S.[195] These commenters also highlighted that certain intermediaries (*e.g.*, retirement plan record keepers and insurance companies) typically require the receipt of actual fund prices (NAVs) to initiate the processing of fund trades, thus posing difficulties in getting final actual orders from these distribution channels to funds before the NAV has been struck.[196] Some commenters expressed concerns regarding funds' ability to

193 *See, e.g.*, CRMC Comment Letter; Invesco Comment Letter; ICI Comment Letter I; GARP Comment Letter.

194 *See* CRMC Comment Letter; Dechert Comment Letter; ICI Comment Letter I; IDC Comment Letter.

195 *See, e.g.*, BlackRock Comment Letter; Comment Letter of Financial Services Roundtable (Jan. 13, 2016) ("FSR Comment Letter"); J.P. Morgan Comment Letter; SIFMA Comment Letter II. Commenters also stated that the fund's agent (either the transfer agent or intermediaries authorized to distribute or transact fund shares) will take orders from shareholders for execution; typically until the fund's cut-off time (which is 4 p.m. ET for most U.S. funds). Thus, a large amount of flow information from intermediaries is currently provided to some funds after the close of business in the later evening hours, or the next business day after the investor transaction occurs (typically early morning on T+1), which is generally after a fund strikes its NAV. *Id.*

196 *See* Eaton Vance Comment Letter; GARP Comment Letter; ICI Comment Letter I; LPL Comment Letter; Charles Schwab Comment Letter; Comment Letter of Wells Fargo Funds Management, LLC (Jan. 13, 2016) ("Wells Fargo Comment Letter"). Commenters also pointed to the constraints of older (legacy) technology systems used by some service providers, which limit the ability of these intermediaries to deliver fund flow information prior to the time a fund strikes its NAV. *See* Dechert Comment Letter; Federated Comment Letter; GARP Comment Letter; SIFMA Comment Letter II. According to these commenters, these older systems batch process daily transactions received from fund investors throughout

obtain estimated shareholder flow information if requested from intermediaries.[197] Several commenters also suggested that large fund complexes with more influence over their distribution partners could be more successful than small complexes in obtaining such information.[198] In addition, funds also expressed concerns that intermediaries may choose not to offer funds that choose to implement swing pricing, due to the increased processing and technology burdens that swing pricing would impose on intermediaries, a consideration that funds will evaluate as they determine whether to adopt swing pricing. Several commenters stated that, although swing pricing is used relatively widely in European jurisdictions, certain differences between U.S. and European fund operations make swing pricing easier to implement in Europe than in the U.S.[199]

Some commenters provided specific ideas about initiatives the Commission could pursue to mitigate operational challenges and help facilitate implementation of swing pricing for funds and investors. For example, they stated that the Commission could require (or encourage) intermediaries to provide shareholder flow estimates prior to the deadline by which a fund must

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the evening, versus newer real-time or continuous and automatic systems that process and submit transactions to fund transfer agents throughout the day.

197 *See, e.g.*, ICI Comment Letter I; Comment Letter of T. Rowe Price (Jan. 13, 2016) ("T. Rowe Comment Letter") (expressing concerns regarding (i) funds' need to rely on estimated flows from intermediaries, (ii) the costs and burdens to provide sufficient estimated flows to allow a fund to accurately determine whether a swing threshold has been exceeded, and (iii) the potential for NAV errors). These issues are discussed throughout this section. As discussed below, commenters also encouraged the Commission to consider what changes to the regulatory framework are necessary to require intermediaries to provide accurate estimates of shareholder flows prior to funds striking their NAVs so that swing pricing can be an effective tool to mitigate potential dilution for shareholders.

198 *See* CRMC Comment Letter; Dechert Comment Letter; ICI Comment Letter I; Comment Letter of Independent Directors Council (Jan. 13, 2016) ("IDC Comment Letter").

199 *See, e.g.*, BlackRock Comment Letter; GARP Comment Letter; Eaton Vance Comment Letter; ICI Comment Letter I. In particular, commenters maintained that European funds are better able to receive timely flow information than U.S. funds because there are multiple or earlier trading cut-off times in Europe and that there is greater use of currency-based orders in Europe, which contributes to confidence in the accuracy of fund flows.

strike its NAV.[200] Some commenters stated that the Commission also could require (or encourage) funds and intermediaries to implement earlier cut-off times to buy and sell fund shares, but many acknowledged the downsides associated with this option, including limiting investors' ability to transact in funds up until the close of the U.S. equity markets.[201] One commenter representing a group of asset management risk professionals suggested a detailed roadmap to altering current fund and intermediary processes that they suggested may represent a feasible approach to implementing swing pricing in the U.S.[202] Many commenters suggested that the Commission should address the operational challenges to swing pricing before it is implemented in the U.S and suggested delaying the effective date and/or implementation date of such new rules to allow the industry to work together to make the necessary changes to their infrastructure to resolve these concerns.[203]

The Commission acknowledges the operational challenges noted by commenters that will need to be addressed by industry participants. Because of these concerns, we believe the adoption of swing pricing in the U.S. as a new (optional) anti-dilution tool will likely require considerable lead time for many funds that will need to coordinate and implement the necessary

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200 *See* CRMC Comment Letter; GARP Comment Letter; Invesco Comment Letter; T. Rowe Comment Letter.

201 *See* GARP Comment Letter; PIMCO Comment Letter; Charles Schwab Comment Letter; SIFMA Comment Letter II. Some commenters noted that funds could be put at a competitive disadvantage to other types of investment products (*e.g.*, hedge funds and collective trusts) that continue to accept trades throughout the day, and others stressed the fact that there is a long history in the U.S. mutual fund market of providing investors with flexibility to submit redemption and subscription requests until 4 p.m. ET. *See, e.g.*, ICI Comment Letter I; GARP Comment Letter; Wells Fargo Comment Letter.

202 *See* GARP Comment Letter. This roadmap involved action by funds and intermediaries to solve swing pricing operational issues by: 1) maintaining the dealing (intermediary and transfer agent) cut-off time for fund redemptions and subscriptions at 4 p.m. ET, as is current market practice; 2) requiring funds' NAV publication time to be shifted from 6 p.m. ET to 8 p.m. ET; 3) requiring providers of fund flows to provide "estimated" trading flows occurring each day by 6 p.m. ET, which would be used to determine whether to adjust the fund's NAV per share and calculate the adjusted NAV. *Id.*

203 *See, e.g.*, Blackrock Comment Letter; Dodge & Cox Comment Letter; SIFMA Comment Letter I; Vanguard Comment Letter.

operational changes with intermediaries and service providers in order to effectively conduct swing pricing for new or existing funds. Additionally, as noted by commenters, we understand that certain funds, intermediaries and service providers may incur substantial costs in doing so.[204]

We recognize that U.S. fund complexes differ widely in terms of their size, the types of funds they offer, the types of investors they serve (*e.g.*, retail and/or institutional), and their distribution models. Thus, we anticipate that there may be certain funds that could make the necessary adjustments and prepare to implement swing pricing sooner than other funds, because they have or may be able to more easily obtain sufficient net flow information. For example, we understand that certain funds with investors that primarily transact directly with the fund's principal underwriter or transfer agent, or that are primarily distributed through affiliates or broker-dealers (that could potentially provide timely flow data),[205] and/or do not have a substantial number of investors transacting in retirement plans or insurance products could more easily obtain sufficient net flow information. In addition, larger fund complexes with the ability to more easily get net flow information from their intermediaries, including those that have established large trade notification processes,[206] may have the leverage to negotiate operational

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204 *See, e.g.*, ICI Comment Letter I ("Building and maintaining additional systems would be quite costly, and even assuming that intermediaries at large would rework their systems to support swing pricing, they can be expected to seek the substantial costs of doing so from funds."); *see infra* section III discussing the potential costs and benefits. *See also* discussion throughout this section regarding funds' deliberative process in determining whether the costs and drawbacks of implementing swing pricing, including managing such operational challenges and any cost sharing requested by intermediaries, are justified by the anti-dilution and other benefits that may result as a consequence of implementing swing pricing.

205 We understand through staff outreach, and based on the time transaction order volumes are received and processed through the National Securities Clearing Corporation ("NSCC"), that many broker-dealer firms would have the ability to submit most of their actual transaction orders within a relatively short timeframe after the fund's order cut-off time (typically 4 p.m. ET). *See* Division of Investment Management, Memorandum re: Meeting with Representatives of SIFMA (June 13, 2016) *available at* https://www.sec.gov/comments/s7-16-15/s71615-152.pdf.

206 It is our understanding that today many [larger] fund complexes require their intermediaries to provide advance notification of "large trades" (*e.g.*, such as for asset allocation or wrap product rebalancing transactions) several days in advance of such trades so funds may anticipate and plan for sizable

solutions and the resources to implement swing pricing sooner for certain funds, which may result in inefficient one-off solutions rather than coordinated industry-wide operational solutions that may reduce costs for investors overall.[207]

We understand that in order to implement swing pricing in an efficient manner, many funds will need time to develop the infrastructure needed to obtain shareholder flow information for investors transacting through intermediaries (including banks, broker-dealers, retirement plan administrators, or insurance companies or platforms), whose shares are held in omnibus accounts registered in the name of such intermediaries on fund transfer agent recordkeeping systems.[208] We also recognize that because intermediaries allow customer trades to take place up until the 4 p.m. cut-off time, and because of the limitations of many current systems,[209] many fund transfer agents do not currently have sufficient information to reasonably estimate net shareholder flow activity for funds without changes to current processes and systems to facilitate timely receipt of

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redemptions and so the shareholder can avoid receiving a redemption in kind. We further understand that such large trade notification processes between funds and intermediaries are voluntary or may be specified in agreements. The industry is seeking to automate and standardized these communications, which are non-standard (often faxed) communications. *See BNY Mellon Automates Process for Brokers-Dealers to Notify Mutual Fund Complexes of Upcoming Large Trades*, PR Newswire (Oct. 13, 2015), *available at* http://www.prnewswire.com/news-releases/bny-mellon-automates-process-for-broker-dealers-to-notify-mutual-fund-complexes-of-upcoming-large-trades-300158615.html. Such large trade notification requirements are generally disclosed in a fund's statement of additional information pursuant to Item 23.

207 We understand that such funds likely would negotiate receipt of actual orders or make arrangements to receive estimated shareholder flow information from intermediaries (for investor orders received by intermediaries in accordance with the funds' applicable end-of-day cut-off times) prior to the striking of the funds' NAVs.

208 *See, e.g.*, GARP Comment Letter; ICI Comment Letter I; Charles Schwab Comment Letter; SIFMA Comment Letter II.

209 *See, e.g.*, Dechert Comment Letter; GARP Comment Letter. We understand that the industry primarily utilizes batch processing to execute shareholder transaction orders received by intermediaries with funds or their transfer agents though the NSCC's Wealth Management Services platform. Such fund orders are typically transmitted (grouped together and processed) through one of many NSCC "batch" order cycles throughout the day and evening. Batch processing systems are also used by funds, intermediaries and service providers for processing and keeping records of shareholder details, including number of shares, on transfer agency, sub-transfer agency and intermediary recordkeeping systems.

such information to conduct swing pricing.[210]

As noted above, we recognize that because the fund industry is diverse, it may take longer for certain funds to implement swing pricing than others. We also acknowledge that funds, intermediaries, and service providers use complex, integrated systems and technology, which supports the daily processing of shareholder transactions. We expect that implementing swing pricing will lead to process and systems changes to accommodate the additional processing that will be needed to support the provision of estimated shareholder flows to funds where necessary, and that such improvements may require additional capital investments to permit the implementation of swing pricing for funds that may choose to use it.[211] Importantly, we believe that an extended effective date, as discussed below, will allow most funds that may wish to implement swing pricing to work together with intermediaries and service providers in implementing efficient, cost effective, solutions to the operational challenges swing pricing presents that will assist in reducing overall costs and operational risks for industry participants, including funds and their investors.

Extended Effective Date

As discussed above, a number of commenters requested that we provide a delayed

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[210] In Europe earlier trade cut-off times have evolved and fund transaction orders must be received by the fund administrator/transfer agent by the earlier cut-off time. This factor eases the burdens of estimating net flows for European funds that swing price. *See* ALFI Survey 2015, *supra* footnote 42, at 7 ("In terms of the operational process for partial swing, nine promoters stated that their decision to swing the NAV was based on estimated shareholder activity. Three promoters were able to rely on final shareholder activity. An organization's ability to rely on confirmed activity depended to a large extent on the cut off times of the transfer agent in relation to the valuation point of the fund."); *see also e.g.*, BlackRock Comment Letter; GARP Comment Letter; Eaton Vance Comment Letter; ICI Comment Letter I.

[211] However, we note that the provision of such data likely would be facilitated through the industry fund transaction processing utility (the NSCC), and that once shareholder flow enhancements are established, any new NSCC capabilities, as well as those of service providers supporting funds' (and their intermediaries') swing pricing processes could be used by other funds that may be interested in implementing swing pricing.

effective date of two years for implementation of swing pricing, to allow the industry to address the necessary changes to operations and systems and, as a consequence, help alleviate competitive concerns by allowing all funds time to become familiar with swing pricing.[212] These commenters explained that, with a delayed effective date, all funds would have the opportunity to develop swing pricing capabilities in an orderly manner, and it would provide time for efficient operational solutions to be developed to help mitigate the challenges of implementing swing pricing.

We acknowledge that, if swing pricing were to be effective immediately, a limited number of funds might have the ability (*e.g.*, based on level of resources and leverage with intermediaries) to implement swing pricing sooner than others, and that as a result potential benefits could be provided to long-term investors in such funds. However, as noted above, most commenters requested a two-year extended effective date to coordinate the implementation of industry-wide operational changes to conduct swing pricing, which would provide time for funds, service providers and the NSCC to develop and implement standardized processing solutions that could be leveraged more broadly by the industry. This would be in contrast to certain funds proceeding immediately with one-off solutions to receive shareholder flow information directly from intermediaries, which could be a more costly, less efficient and less secure processing solution over the long-term. We believe that the benefits to investors that likely would result from a coordinated industry effort, as suggested by commenters,[213] including

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[212] *See, e.g.*, Invesco Comment Letter; BlackRock Comment Letter; GARP Comment letter (each suggesting a delayed effective date of two years); *see also* SIFMA Comment Letter I; T. Rowe Comment Letter (each requesting a delayed effective date and noting that "some fund managers already have extensive experience with swing pricing, while other fund managers will be approaching swing pricing for the first time and, hence, be at a disadvantage").

[213] *See* BlackRock Comment Letter; GARP Comment Letter (each recommending that "the Commission set the effective date of the swing pricing provisions to at least two years after the final rule is adopted"

the mitigation of operational risks associated with non-standardized processing and the promotion of more reliable and secure transmission of standardized data in an efficient and cost-effective manner, would likely outweigh short-term benefits that could be provided to a limited number of investors if we did not implement an extended effective date.

As discussed above and in section II.C. below, we agree with these commenters and believe it is appropriate to adopt an extended effective date for swing pricing. We expect that the extended effective date will allow funds, intermediaries and service providers to work towards orderly, efficient, industry-wide solutions to the operational challenges swing pricing presents,[214] mitigating the costs of such solutions to funds and their investors as compared to the development (and possible eventual reconciliation) of numerous, disparate solutions to swing pricing's operational challenges that might be implemented, if swing pricing were to be effective immediately, by a small number of funds potentially seeking to be among the first to engage in swing pricing. We are persuaded by commenters that two years should provide sufficient time to develop such solutions in an efficient manner. We expect that our staff will keep us informed of the industry's progress by engaging with market participants (*e.g.*, fund complexes, intermediaries, and service providers) on the implementation of swing pricing in the U.S.

because it "will permit an orderly and industry-wide process to make the necessary changes"); *see also* Fidelity Comment Letter (encouraging "industry-wide solutions" to operational challenges associated with swing pricing); Vanguard Comment Letter ("[C]ertain operational hurdles common across the industry currently prevent funds from effectively implementing swing pricing . . . We believe that any potential solution to this problem will result from increased collaboration and communication between funds, their service providers, and intermediaries. However, any industry solution will necessarily take time to develop. Therefore, the Commission should delay implementation of the swing pricing rule until such time as intermediaries can demonstrate an ability to transmit accurate and complete order information to funds in a reliable, cost-effective, and timely manner. Once the industry is able to implement swing pricing effectively, we believe that swing pricing will be a valuable tool funds may use to supplement the liquidity risk management practices that we propose above.").

214 *See id*.

Potential Further Commission Action to Facilitate Swing Pricing

As discussed above, a number of commenters pointed to a variety of competitive concerns and operational challenges in implementing swing pricing, and several suggested that the Commission take additional actions to facilitate its adoption. We recognize the challenges associated with implementing swing pricing in the U.S., but continue to believe that swing pricing may provide significant benefits to investors for funds that choose to use it. As discussed above, some commenters urged the Commission to adopt rules that would require intermediaries to provide timely estimates of shareholder flows to funds that chose to implement swing pricing, or to encourage such action through non-regulatory means.[215] However, commenters did not provide details as to the form such a regulatory requirement would take, and some noted that any such requirement would likely have to extend to certain entities not typically subject to regulation by the Commission.[216] Any such regulatory requirement would also be limited by the economic reality that intermediaries are free to choose whether or not to sell fund shares to their customers, and a requirement that intermediaries provide shareholder flow data to funds may

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215 *See* CRMC Comment Letter ("In order to create a level playing field for all funds, we instead urge the Commission to adopt rules requiring intermediaries to provide cash flow information prior to the deadline by which a fund is required to strike its NAV."); *see also* GARP Comment Letter ("SEC swing pricing provisions should incorporate additional requirements for financial intermediaries (as defined in rule 22c-2)…to provide, at the request of a fund, timely estimates of the net purchase or redemption activity to support the fund's reasonable inquiry."); Invesco Comment Letter ("We request that the Commission create a regulatory obligation that intermediaries provide trade information to fund sponsors on a time-table that allows all funds to use swing price…. The industry and our intermediaries are unlikely to make these changes voluntarily."); T. Rowe Comment Letter ("we strongly encourage the SEC to consider what changes are necessary to its regulatory framework to require (or otherwise provide funds with the ability to influence) intermediaries to provide accurate estimates of purchase and redemption information prior to funds striking their NAVs so that swing pricing can be an effective tool to mitigate potential dilution.").

216 *See, e.g.*, ICI Comment Letter I. In addition, unless only newly organized funds chose to implement swing pricing, any such regulatory requirement would require provisions to deal with intermediaries that were unable or unwilling to provide such flow data, which might lead to situations where shareholders owning fund shares through such intermediaries would either need to switch intermediaries or redeem their shares (both of which may have negative consequences for investors) or allow such intermediaries to continue to keep shareholders in a fund that swing prices, which may result in funds being unable to implement swing pricing effectively.

have the unintended consequence of leading certain intermediaries to choose to no longer sell funds that use swing pricing.

Other commenters suggested that the Commission could take action to require funds and intermediaries to implement earlier cut-off times to buy and sell fund shares (either through adoption of new rules or other means).[217] However many commenters recognized the significant downsides of such an approach, in that it would limit investors' ability to trade mutual funds until the markets close (a long-held expectation of mutual fund investors), and could put mutual funds at a competitive disadvantage with other investment products.[218] Still others took the approach of suggesting that the Commission seek input from industry or other regulators about what could be done to help facilitate adoption of swing pricing in the U.S. before taking further action.[219] Our staff has previously engaged in significant outreach to funds, intermediaries, and other regulators as we developed the swing pricing rule proposal, and we expect that such active dialogue will continue as swing pricing begins to be implemented.

Considering the diverse and varied recommendations on potential Commission action that we might take, as well as the potential limitations and downsides of the approaches that have been suggested to us, we are not proposing any further regulatory requirements to facilitate implementation of swing pricing at this time. As discussed previously, on balance, we believe that it is appropriate to permit usage of swing pricing as an optional tool subject to a two-year extended effective date at this time. We believe permitting this optional tool to be implemented for those funds that choose to do so may result in benefits for those funds and their investors if

[217] *See* GARP Comment Letter; PIMCO Comment Letter; Charles Schwab Comment Letter; SIFMA Comment Letter II.

[218] *See, e.g.*, ICI Comment Letter I; GARP Comment Letter; Wells Fargo Comment Letter.

[219] *See, e.g.*, Fidelity Comment Letter; Blackrock Comment Letter; Morningstar Comment Letter.

they believe the challenges of implementing swing pricing can be overcome and are justified by the resulting anti-dilution and other benefits associated with swing pricing. In addition, permitting the use of swing pricing encourages funds to begin working with intermediaries to overcome the operational challenges associated with swing pricing and may spur the development of efficient solutions that might not otherwise be created if swing pricing were not allowed.

e. The Swing Factor

We are adopting a requirement that a fund's swing pricing policies and procedures provide that, once the fund's level of net purchases or net redemptions has exceeded a swing threshold, the fund must adjust its NAV by an amount designated as the "swing factor" for that threshold.[220] "Swing factor" is defined as "the amount, expressed as a percentage of the fund's net asset value and determined pursuant to the fund's swing pricing procedures, by which a fund adjusts its net asset value per share when the level of net purchases into or net redemptions from the fund has exceeded the fund's applicable swing threshold."[221] A fund's swing pricing policies and procedures are required to specify the process for how the swing factor will be determined.[222] In determining the swing factor, the person(s) responsible for administering swing pricing may take into account only the near-term costs expected to be incurred by the fund as a result of net purchases or net redemptions that occur on the day the swing factor is used, including spread costs, transaction fees and charges arising from asset purchases or asset sales to satisfy those purchases or redemptions, and borrowing-related costs associated with satisfying redemptions.[223]

220 Rule 22c-1(a)(3)(i)(A).

221 Rule 22c-1(a)(3)(v)(B).

222 Rule 22c-1(a)(3)(i)(C).

223 *Id*.

A fund's swing pricing policies and procedures also must include an upper limit on the swing factor used, which may not exceed two percent of the fund's NAV per share.[224] The fund would be required to take into account certain considerations when determining the swing factor upper limit.[225] The swing factor upper limit is subject to new oversight provisions under the final rule, as further described below.

The policies and procedures shall also include the determination that the swing factor(s) used are reasonable in relationship to the fund's costs in meeting net shareholder subscriptions and redemptions.[226] We anticipate that, because these considerations could vary depending on facts and circumstances, the swing factor that funds will determine appropriate to use in adjusting its NAV also could vary.[227] A fund's policies and procedures for determining the swing factor should discuss how each of the considerations a fund is required to take into account under the rule will be used in determining the swing factor.

Setting the Swing Factor

Under the proposal, when setting its swing factor a fund would have been required to take into account two specific sets of considerations. Under the final rule amendments, a fund must take into account only one set of considerations in determining its swing factor(s), which has been modified in response to commenters. Under the final rule, the swing pricing administrator must take into account only the near-term costs expected to be incurred by the fund as a result of

[224] Rule 22c-1(a)(3)(i)(C).

[225] *Id*.

[226] *Id*.

[227] As discussed previously in section II.A.3.c. above, under the final rule a fund could also have more than one swing threshold, with varying swing factors associated with each threshold. In determining multiple swing factors, the fund would take into account the same factors it would use in establishing a single swing factor, but evaluate them based on the relevant swing threshold.

net purchases or net redemptions that occur on the day the swing factor is used, including spread costs, transaction fees and charges arising from asset purchases or asset sales to satisfy those purchases or redemptions, and borrowing-related costs associated with satisfying redemptions when determining the fund's swing factor(s).[228] As discussed below, the person(s) responsible for administering swing pricing must also determine that the swing factor used is reasonable in relationship to these costs. We have eliminated the consideration of market impact costs or changes in the value of assets purchased or sold as a result of net purchases or net redemptions. The required considerations are intended to limit a fund's ability to estimate the costs associated with purchase and redemption activity that could dilute the value of non-transacting shareholders' interests in the fund.[229]

i. Required Consideration of Certain Near-Term Costs

As noted above, as originally proposed, both sets of considerations were mandatory for setting a swing factor. In the Proposing Release, we requested comment on each of the considerations that a fund would be required to take into account in determining the swing factor, and specifically requested comment on whether any aspect of the proposed considerations should not be required. In response, some commenters argued that the proposed considerations for calculating a fund's swing factor should be guidance only.[230] On the other hand, one commenter

228 Rule 22c-1(a)(3)(i)(C).

229 The costs that a fund would be required consider in determining its swing factor overlap significantly with costs that we understand funds that use swing pricing in other jurisdictions commonly consider when determining their swing factor. For example, the Luxembourg Swing Pricing Survey, Reports & Guidelines provides that the following should be considered when determining the swing factor: (i) the bid-offer spread of a fund's underlying portfolio assets; (ii) net broker commissions paid by the fund; (iii) custody transaction charges; (iv) fiscal charges (*e.g.*, stamp duty and sales tax); (v) any initial charges or exit fees applied to trades in underlying investment funds; and (vi) any swing factors or dilution amounts or spreads applied to underlying investment funds or derivative instruments. *See* ALFI Survey 2015, *supra* footnote 42, at 7, 15-16.

230 *See* Dechert Comment Letter ("Generally, we believe that requiring funds to consider specific factors as

expressed concern that the proposed rules would grant funds too much discretion in calculating the swing factor.[231]

We continue to believe that mandating funds to take into account certain near-term costs when setting the swing factor strikes an appropriate balance between providing funds an appropriate amount of discretion and requiring that relevant costs be considered when setting the swing factor. However, in response to commenter concerns, we have eliminated certain of the proposed considerations and have clarified that a fund may only take into account those considerations set forth in the rule.

The final rule specifies that the determination of a fund's swing factor must take into account only the *near-term* costs expected to be incurred by the fund as a result of net purchases or net redemptions that occur on the day the swing factor is used (emphasis added). The phrase "near-term" is meant to reflect that investing proceeds from net purchases or satisfying net redemptions could involve costs that may not be incurred by the fund for several days. The rule text specifies that the costs to be considered are those that are expected to be incurred by the fund as a result of the net purchase or net redemption activity that occurred on the day the swing

part of the swing threshold and swing factor determinations is too rigid and prescriptive . . . Instead, we believe a better approach would be to outline in conceptual guidance the appropriate principles and factors a fund could consider in making the swing factor determinations."); *see also* ICI Comment Letter I ("[T]he SEC should permit funds to build their own methodologies, shaped broadly by SEC guidance within the adopting release."); Invesco Comment Letter (stating that, if a cost reflected in one of the proposed factors cannot be reasonably estimated, a fund should be able to exclude it from the swing factor calculation).

231 *See* AFR Comment Letter ("The proposal includes substantial discretion concerning the threshold for swing pricing and the actual level of the swing pricing adjustment. We believe this discretion is excessive. If SEC oversight of swing pricing is lax, this discretionary process holds the risk of near-arbitrary redemption fees charged to investors, fees that could become effectively a form of gating during periods of market stress."). We believe that requiring funds to set a swing factor pursuant to board-approved policies and procedures that are administered by an investment adviser subject to a fiduciary duty, and requiring that the policies and procedures provide that the swing factor(s) used must be reasonable in relationship to these costs, serve as a counterbalance to allowing funds to set the swing factor, and should help mitigate the risk that a fund sets a punitive or arbitrary swing factor that would inappropriately disadvantage redeeming shareholders.

factor is used; this specification is designed to help ensure that the only costs to be taken into account are those that are directly related to the purchases or redemptions at issue. Thus, while the term "near-term costs" does not envision a precise number of days, we believe that, in context, this term would not likely encompass costs that are significantly removed in time from the purchases or redemptions at issue.

The near-term costs required to be considered are limited to spread costs,[232] transaction fees and charges arising from purchasing or selling assets,[233] and borrowing-related costs associated with satisfying redemptions. We anticipate that the particular transaction fees and charges that a fund would likely consider, for example, would include mark-ups and mark-downs, brokerage commissions and custody fees, as well as other charges, fees, and taxes associated with portfolio asset purchases or sales (for example, transfer taxes and repatriation costs for certain foreign securities, or transaction fees associated with portfolio investments in other investment companies). A fund also must consider borrowing-related costs associated with satisfying redemptions, such as the interest charges or other costs paid if a fund were to draw on a line of credit or engage in interfund borrowing in order to pay redemptions. These borrowing costs, like the specific transaction costs associated with purchasing and selling portfolio assets, could dilute the value of the shares held by non-transacting shareholders, and also can leverage the fund.[234] A fund should consider near-term costs in developing its policies and procedures for

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232 *See* Proposing Release, *supra* footnote 6, at n.416 (defining "spread costs" as those "incurred indirectly when a fund buys a security from a dealer at the 'asked' price (slightly above current value) or sells a security to a dealer at the 'bid' price (slightly below current value). The difference between the bid price and the asked price is known as the 'spread.'").

233 "Transaction fees and charges" are defined in rule 22c-1(a)(3) to mean "brokerage commissions, custody fees, and any other charges, fees, and taxes associated with portfolio asset purchases and sales." Rule 22c-1(a)(3)(v)(E).

234 *See* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8, at section III.B.2.c for discussion regarding lines of credit.

determining a swing factor. The rule as adopted thus requires funds to incorporate an assessment of multiple sources of potential dilution when setting the swing factor.

ii. Elimination of Consideration of Market Impact Costs

Under the proposal, the costs a fund would have been required to consider would have included market impact costs[235] associated with the fund trading portfolio assets.[236] Many commenters addressing the proposed cost considerations indicated that we should not require a fund to consider market impact costs in determining its swing factor.[237] These commenters indicated that estimating market impact costs can be very difficult and requires an exercise of judgment that fund managers may not be comfortable undertaking. These commenters also noted that few funds in other jurisdictions that use swing pricing include market impact costs in their swing factors and indicated that estimated market impact costs would reduce swing factor precision.[238] We understand the difficulties in estimating market impact costs in other jurisdictions may also apply for some U.S. funds were we to require consideration of market

[235] *See* Proposing Release, *supra* footnote 6, at n.415 (defining "market impact costs" as those costs "incurred when the price of a security changes as a result of the effort to purchase or sell the security. Stated formally, market impacts are the price concessions (amounts added to the purchase price or subtracted from the selling price) that are required to find the opposite side of the trade and complete the transaction. Market impact cost cannot be calculated directly. It can be roughly estimated by comparing the actual price at which a trade was executed to prices that were present in the market at or near the time of the trade.").

[236] The proposed rule would have required a fund's policies and procedures for determining the swing factor to take into account all near-term costs that are expected to be incurred as a result of net purchases or net redemptions that occur on the day the swing factor is used to adjust the fund's NAV, including any market impact costs, spread costs, and transaction fees and charges arising from asset purchases or asset sales in connection with those purchases or redemptions, as well as any borrowing-related costs associated with satisfying those redemptions. *See* proposed rule 22c-1(a)(3)(i)(D)(1).

[237] *See, e.g.*, ICI Comment Letter I; Invesco Comment Letter; J.P. Morgan Comment Letter; T. Rowe Comment Letter.

[238] *Id.* *See also* ALFI Survey 2015, *supra* footnote 42, at 10 (indicating that 10% of survey respondents consider market impact costs).

impact costs when applying swing pricing here.[239] In light of concerns that many funds may not be able to readily estimate market impact costs, as well as concerns that subjective estimates of market impact costs could grant excessive discretion in the determination of a swing factor,[240] we have eliminated the consideration of market impact costs in setting the swing factor under the final rule. In making this determination, we have balanced our concerns regarding potential abusive practices against the fact that funds using swing pricing potentially may not capture all the costs that are likely to result from shareholder transactions on the trade date.

iii. Elimination of Consideration of Value of Assets Purchased or Sold

Under the proposed rule, a fund's policies and procedures for determining the swing factor would have been required to consider information about the value of assets purchased or sold by the fund as a result of the net purchases or net redemptions that occur on the day the swing factor is used to adjust the fund's NAV, if that information would not be reflected in the current NAV of the fund computed that day.[241] One commenter noted that obtaining this information on a timely basis may be difficult.[242] Another commenter objected to including this consideration, arguing that it is unclear and does not correspond to common swing pricing practices in Europe.[243] The commenter also suggested that taken literally, this consideration appears to reflect changes in prices attributable to a specific day, which is in tension with the

[239] We note that some fund complexes may utilize technological tools, such as best execution systems, that estimate trading cost information, including market impact, but that not all funds may have access to these tools and the quality of these estimation systems may vary.

[240] *See* AFR Comment Letter (questioning the degree of discretion afforded to funds in setting the swing factor adjustment under the proposal).

[241] Proposed Rule 22c-1(a)(3)(i)(D)(2).

[242] *See* Invesco Comment Letter.

[243] *See* SIFMA Comment Letter II.

proposal's treatment of a swing factor being allowed to be determined on a periodic basis.[244]

This consideration was meant to reflect the fact that a fund's NAV will generally not reflect changes in holdings of the fund's portfolio assets and changes in the number of the fund's outstanding shares until the first business day following the fund's receipt of the shareholder's purchase or redemption requests.[245] Thus, the price that a shareholder receives for his or her purchase or sale of fund shares customarily does not take into account market-related costs that arise even when the fund trades portfolio assets on the same day in order to meet shareholder purchases or redemptions. However, we recognize that requiring inclusion of such information may imply a level of precision in setting the swing factor tied to changes that occur each day that would undercut funds being able to set a swing factor on a periodic basis, with adjustments for more significant market movements or other more significant cost changes. Accordingly, we believe requiring consideration of such costs in setting the swing factor would be inappropriate at this time. In making this determination, we have balanced these concerns against the fact that funds using swing pricing potentially may not capture all the costs that are likely to result from shareholder transactions on the trade date.

<u>Reasonable in Relation to Costs</u>

The final rule now includes an explicit requirement that any swing factor used be reasonable in relation to the costs incurred by the fund. One commenter objected that as proposed, the swing pricing rule did not assign an explicit duty to fund sponsors or boards to limit NAV adjustments to amounts that are reasonable in relation to the estimated fund costs

[244] *See infra* footnote 268 and accompanying paragraph.

[245] *See* Proposing Release, *supra* footnote 6 at n.412 and accompanying text.

associated with the capital activity giving rise to the adjustment.[246] Another commenter was concerned that the substantial discretion provided in setting the swing factor could lead to potential abuse, and if set arbitrarily, could effectively serve as a form of gating.[247]

We believe that as required under the proposal, by requiring the swing factor be set based on the considerations discussed above, funds would have necessarily been evaluating the reasonableness of the swing factor and its relationship to costs (and their boards will provide oversight over this process, including through the approval of swing pricing policies and procedures).[248] We agree, however, that this requirement should be made explicit. Accordingly, we are requiring in the final rule to require that swing pricing policies and procedures include a requirement that the relationship between the swing pricing factor(s) used and the fund costs associated with the capital activity giving rise to the adjustment be reasonable in relationship to these costs.[249] We believe that requiring such an explicit requirement that a swing factor be reasonably related to the costs incurred by the fund should serve to address concerns of arbitrariness or potential abuse in the setting of a swing factor.

<u>Upper Limit on Swing Factor</u>

Under the final rule, the fund must establish an upper limit for the fund's swing factor, which may not exceed two percent of NAV per share. This swing factor upper limit (and any changes thereto) must be approved by the fund's board of directors. The proposal did not prescribe an upper limit or "cap" on the swing factor that a fund would be permitted to use, nor

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246 *See* Eaton Vance Comment Letter.

247 *See* AFR Comment Letter.

248 *See supra* footnote 231 and accompanying paragraph.

249 *See* rule 22c-1(a)(3)(i)(C).

did it mandate that funds' swing policies and procedures establish such an upper limit. Instead, the proposed rule would have permitted a fund to adopt an upper limit on the swing factor as part of its swing pricing policies and procedures, and the fund's board would have been required to approve any such upper limit. We requested comment on whether the Commission should require an upper limit on the swing factor that a fund would be permitted to use and whether two percent or some other limit would be appropriate.

Commenter responses in this area were mixed. One commenter agreed that it was appropriate for the proposed swing pricing rules to permit, but not require, funds to adopt a swing factor cap.[250] Another commenter stated that the Commission had appropriately not prescribed an upper limit in the proposal.[251] Other commenters, however, expressed investor protection-related concerns regarding the proposed swing pricing rules, indicating that the rules lacked sufficient transparency regarding swing factors and/or that the rules ignored economic incentives that would cause funds to employ swing pricing overly aggressively.[252] One of these commenters argued that the discretion provided to funds in setting the swing factor "could effectively form a gating during periods of market stress" and that "such de facto gating could harm investors."[253]

We are persuaded that the final rule must allow enough flexibility in the determination of

250 *See* HSBC Comment Letter (stating that a disclosed upper limit may provide useful guidance to investors, but arguing that "[i]n periods of market stress, spreads and swing factors may widen and a hardcoded regulatory limit could be detrimental to existing investors.").

251 *See* Invesco Comment Letter.

252 *See, e.g.*, AFR Comment Letter (arguing that the proposed swing pricing included excessive discretion regarding the level of the swing pricing adjustment); Eaton Vance Comment Letter (arguing that "buyers and sellers would never know, or be able to reasonably estimate, even the approximate impact of swing pricing on their transaction prices" and stating that "[e]xposing transacting shareholders to undisclosed and uncapped transaction costs that may bear little or no relation to the associated fund costs does not strike us as a fair deal.") (emphasis omitted).

253 *See* AFR Comment Letter.

a swing factor to keep the factor reasonably related to transaction costs. At the same time, however, we believe that it is appropriate to limit the swing factor that may be used to avoid placing an undue restriction or de facto gate on shareholders' ability to redeem their shares and to prevent potentially unfair treatment of shareholders and abusive practices. The Commission has limited redemption fees under rule 22c-2 to no more than two percent of the amount redeemed,[254] and in the context of money market funds, the Commission has given a money market fund's board the ability to impose a liquidity fee of no more than two percent.[255] In those cases, we sought to balance the fees imposed with shareholders' need to redeem without incurring disproportionate costs. In the context of swing pricing, placing an upper limit on the swing factor also provides transparency regarding the maximum amount that a shareholder could expect the share price that he or she receives upon purchase or redemption to be adjusted on account of swing pricing, even though it may result in a fund not recouping all of the transaction costs the fund may incur in connection with shareholder capital activity and thus not mitigating all dilution that may result from such activity. Additionally, an upper limit on the amount a fund adjusts its NAV could mitigate volatility and tracking error issues that could arise from the use of swing pricing.

Based on these considerations, we believe it is appropriate for the Commission to set a

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[254] *See* Redemption Fees Adopting Release, *supra* footnote 24, at 12 (stating that redemption fees in excess of two percent "could harm ordinary shareholders who make an unexpected redemption as a result of a financial emergency" and "would in our judgment impose an undue restriction on the redeemability of shares required by the Act.").

[255] *See* 2014 Money Market Fund Reform Adopting Release, *supra* footnote 38, at 95 ("[W]e are limiting the maximum liquidity fee that may be imposed by a fund to 2%. As with the default fee, we seek to balance the need for liquidity costs to be allocated to redemptions with shareholders' need to redeem absent disproportionate costs. We also believe setting a limit on the level of a liquidity fee provides notice to investors about the extent to which a liquidity fee could impact their investment. In addition, as recognized by at least one commenter, the staff has noted in the past that fees greater than 2% raise questions regarding whether a fund's securities remain 'redeemable.'") (internal citation omitted).

maximum amount for the swing factor, as we have done with redemption fees on funds and liquidity fees on money market funds, given our desire to balance the fair allocation of fund costs created by shareholder transaction activity with the redeemable nature of open-end funds. Nevertheless, we still consider it appropriate to require funds to establish an upper limit on the swing factor(s) the fund will use as part of their swing pricing policies and procedures, within the two percent of NAV per share confines, because for some funds a swing factor upper limit of less than two percent may be appropriate given that fund's redemption history and investment strategy.[256] Indeed, many funds may consider two percent of NAV per share to be a form of a "default" limit, but where the fund (with the approval of its board) can find that a lower limit is in the fund's best interest, similar to the approach we took regarding money market fund liquidity fees.[257] Because the upper limit would affect the swing factor a fund would use to adjust its NAV when net purchases or net redemptions exceed the fund's swing threshold, the fund is required to take into account the swing factor considerations when establishing a swing factor upper limit (while staying within the two percent maximum limit).[258]

We acknowledge that certain foreign jurisdictions that permit swing pricing do not place an upper limit on the swing factor that a fund may set. Instead, funds that use swing pricing within those jurisdictions may voluntarily limit the level of the swing factor to be applied, with such limits generally ranging from 1% - 3%.[259] We also acknowledge that certain funds,

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256 *See* rule 22c-1(a)(3)(i)(C).

257 *See* rule 2a-7(c)(2)(ii) (if a money market fund's weekly liquid assets fall below ten percent of its total assets, the fund must institute a liquidity fee of 1% of value of shares redeemed, unless the fund's board of directors, including a majority of the directors who are not interested persons of the fund, determines that imposing the fee is not in the best interests of the fund or that a higher (not to exceed 2%) or lower fee level is in the best interest of the fund).

258 Rule 22c-1(a)(3)(i)(C).

259 ALFI Survey 2015, *supra* footnote 42 at 7 (noting, however, that approximately half of respondents that

particularly funds that invest in asset classes with higher spreads and other associated transaction costs, may be unable to recoup all transaction costs or mitigate all potential dilution associated with shareholders' capital activity if the maximum upper limit is set at two percent. However, we believe that capping the maximum swing factor upper limit at two percent will permit funds to pass on some of the transaction costs to purchasing and redeeming shareholders without imposing an undue restriction on the redeemability of shares required by the Act.

The final rule requires the fund's board to approve the fund's swing factor upper limit and any changes thereto.[260] A number of commenters objected to the proposed requirement that, if the fund set a swing factor upper limit, the board must approve the upper limit. These commenters argued that the fund adviser is best suited for setting any cap, because it requires in-depth knowledge of the day-to-day management and administration of the fund—activities performed by the adviser and other service providers and not the board.[261] On the other hand, one commenter stated that the proposal granted excessively broad discretion to fund managers to design the swing pricing procedures, and excessive discretion in setting the swing factor. This commenter feared that excessive discretion could result in unequal treatment of investors that was not fully justified by differences in the market impact of their fund transactions.[262]

After considering comments, we believe board approval of a fund's swing factor upper limit (and any changes thereto), combined with required review of a written report from the administrator describing, among other things, the administrator's review and assessment of the

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use swing pricing cap the level of the swing factor applied on certain asset classes, with equity, fixed income and multi-asset funds most commonly capped at two percent).

260 *See* rule 22c-1(a)(3)(ii)(B).

261 *See, e.g.*, BlackRock Comment Letter; CRMC Comment Letter; Dechert Comment Letter; FSR Comment Letter.

262 *See* AFR Comment Letter.

fund's swing factor upper limit, including information and data supporting this determination, will serve to limit the degree of discretion granted to fund management, while providing management with the flexibility to manage the day-to-day administration of swing pricing. Obtaining board oversight of the swing factor upper limit will help ensure that a fund establishes a swing factor upper limit that is in the best interests of the fund's shareholders. We also believe it is appropriate for the fund board to approve the fund's specific upper limit given the important balancing that it effects between the redeemable nature of the fund's shares against the fair allocation of fund costs from shareholder transaction activity—a balance between various shareholder interests that we believe the board is best situated to judge. Requiring board oversight of the swing factor upper limit is also consistent with the approach the Commission took in rule 22c-2 under the Act, where the fund board is required to approve any redemption fee that the fund establishes.[263] We further believe that the board review requirement serves to address the concerns of those commenters that suggested the board may not have the necessary information or expertise to approve the swing factor upper limit (and changes to the swing factor upper limit).[264]

Finally, we are also requiring funds to disclose the swing factor upper limit on Form N-1A and Form N-CEN. We believe that an adequate level of transparency about swing pricing is critical for investors to understand the risks associated with investing in a particular fund, and that requiring disclosure of a fund's swing factor upper limit will provide important transparency to fund shareholders regarding the maximum amount that a shareholder could expect the share price to be adjusted on account of swing pricing. We also believe that this transparency could

263 *See* rule 22c-2(a)(1). *See also supra* footnotes 24-31 and accompanying text.

264 *See infra* section II.A.3.f.

serve as a check on funds that may seek to employ swing pricing overly aggressively.[265] Foreign domiciled funds that voluntarily limit the level of the swing factor to be applied typically disclose the swing factor upper limit in the fund's offering documents.[266]

Additional Considerations

A fund could take a variety of approaches to determining its swing factor, so long as the fund's process for how the swing factor is determined includes the considerations set forth in rule 22c-1(a)(3)(i)(C). For example, a fund may wish to set a "base" swing factor, and adjust it as appropriate if certain aspects required to be considered in determining the swing factor deviate from a range of pre-determined norms (for example, if spread costs generally exceed a certain pre-determined level). Alternatively or additionally, a fund that uses swing pricing may wish to incorporate into its policies and procedures a formula or algorithm that includes the required considerations for determining the swing factor.

With respect to the process for determining the swing factor, one commenter opined that the swing factor must be "quantitative and automatable,"[267] and another similarly suggested that the Commission should make clear that the swing factor may be determined on a periodic basis, rather than calculated anew each day that the swing factor is applied.[268] We agree that a swing factor could generally be determined on a periodic basis, as long as developments such as significant market developments prompt a quicker re-evaluation. We believe that these aspects of swing factor determination should be addressed by funds when designing their policies and

265 *See* Eaton Vance Comment Letter ("The Swing Pricing Proposal does not appear to recognize that fund sponsors will have an economic incentive to apply swing pricing aggressively, because doing so improves the competitiveness of the funds they manage by increasing reported returns.").

266 *Id*.

267 *See* Invesco Comment Letter.

268 *See* SIFMA Comment Letter II.

procedures relating to swing pricing, and are reflected in the final rule.

f. Governance, Oversight and Other Considerations

Although the final rule requires a fund that uses swing pricing to obtain approval of its swing pricing policies and procedures from the fund's board, including a majority of independent directors, in a change from the proposal, the final rule does not require the board to approve material changes to the policies and procedures. The rule provides that a fund's board-approved swing pricing policies and procedures must specify the process for how the fund's swing threshold(s), swing factor(s), and swing factor upper limit are determined. In addition, the final rule requires that the fund board approve the fund's swing threshold(s) and the upper limit on the swing factor(s) used by the fund, as well as any changes thereto. The rule requires that a fund's board designate the fund's investment adviser, officer or officers responsible for administering the fund's swing pricing policies and procedures.[269] Similar to the proposal, the final rule provides administration of the swing pricing policies and procedures must be reasonably segregated from portfolio management of the fund and may not include portfolio managers (although portfolio managers may provide data or other input used by those responsible for administering the policies and procedures). Finally, the fund board must also review a periodic written report prepared by the fund's swing pricing administrator that includes certain required information and the fund must meet certain recordkeeping requirements related to its swing pricing policies and procedures, as described below.

Board Role

As described above, consistent with the proposal, a fund's board of directors must approve two core elements of a fund's swing pricing program – the swing threshold(s) and the

[269] Rule 22c-1(a)(3)(ii)(C).

swing factor upper limit. The swing threshold establishes the point at which swing pricing begins to affect fund shareholders, and thus involves an important balancing of various shareholder interests. Similarly, the swing factor upper limit reflects a balancing of the redeemable nature of the fund's shares against the fair allocation of fund costs from shareholder transaction activity. In both cases, the board has an important role in balancing shareholder interests. This is consistent with the board's role in other contexts under the Act. For example, a fund's board has significant responsibility regarding valuation- and pricing-related matters.[270]

In addition, we believe that ongoing oversight of a fund's swing pricing program, which necessarily involves addressing a diverse range of issues, some technical, requires a calibrated balance between the role of the board and the role of management. Accordingly, under the final rule, a fund's board of directors must approve the fund's initial swing pricing policies and procedures, as proposed. However, in a change from the proposal, instead of the board approving any material changes to the swing pricing policies and procedures and instead of the fund performing a periodic review of the fund's swing threshold,[271] the board will provide its ongoing oversight of the fund's swing pricing by reviewing, no less frequently than annually, a written report prepared by the person(s) responsible for administering the fund's swing pricing

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[270] *See, e.g.,* section 2(a)(41)(B) of the Act and rule 2a-4 thereunder (when market quotations are not readily available for a fund's portfolio securities, the Investment Company Act requires the fund's board of directors to determine, in good faith, the fair value of the securities); rule 2a-7(c)(1)(i) and rule 2a-7(g)(1)(i)(A)-(C) (a stable NAV money market fund that qualifies as a retail or government money market fund may use the amortized cost method of valuation to compute the current share price provided, among other things, the board of directors believes that the amortized cost method of valuation fairly reflects the market-based NAV and does not believe that such valuation may result in material dilution or other unfair results to investors or existing shareholders). *See also* rule 18f-3(d) (requiring the board, including a majority of independent directors, to find that a fund's multi-class plan is in the best interests of each share class individually and the fund as a whole, and providing that before any vote on a fund's multi-class plan, the directors are required to request and evaluate such information as may be reasonably necessary to evaluate the plan).

[271] *See supra* section II.A.3.c.

policies and procedures. This written report must describe: (i) the swing pricing administrator's review of the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution; (ii) material changes to the policies and procedures since the date of the last report; and (iii) the swing pricing administrator's review and assessment of the fund's swing threshold(s), swing factor(s), and swing factor upper limit considering the requirements of the rule, including a review and assessment of information and data supporting these determinations.[272]

In the proposal, we asked comment on the extent to which the board oversight requirements we proposed would ensure that a fund establishes policies and procedures that are in the interest of all fund shareholders.[273] A number of commenters believed that appropriate board oversight of swing pricing is key to ensuring proper administration of swing pricing in the interest of fund shareholders,[274] and many generally supported the proposed requirement for a fund's board to approve its swing pricing policies and procedures.[275] Several commenters suggested, in particular, that regular reports on the administration of swing pricing would help the board in its oversight role, and facilitate the appropriate use of swing pricing.[276] Another commenter suggested that the board should periodically review whether adjustments should be

272 *See* rule 22c-1(a)(3)(ii).

273 *See* Proposing Release, *supra* footnote 6, at text following n.522.

274 *See, e.g.*, Blackrock Comment letter; CRMC Comment Letter.

275 *See* CRMC Comment Letter; CFA Comment Letter; HSBC Comment Letter; IDC Comment Letter; J.P. Morgan Comment Letter; MFDF Comment Letter; Charles Schwab Comment Letter.

276 *See, e.g.*, Blackrock Comment letter ("The Swing Pricing Committee should report to the mutual fund board at regular scheduled intervals…"); CRMC comment letter ("[W]e believe that fund boards should be given visibility to such determinations [of the swing threshold and swing factor limit] through written reports…").

made to swing pricing policies and procedures.[277]

However, a number of commenters objected to the particular methods we proposed for ongoing board oversight of swing pricing, including the proposed requirement that the board specifically approve the fund's swing threshold and any swing factor cap that that the fund adopts.[278] These commenters argued that the fund adviser, rather than the board, is best suited for setting these parameters, because it requires in-depth knowledge of the day-to-day management and administration of the fund—activities performed by the adviser and other service providers and not the board. Commenters also argued that fund boards should not be required to approve material changes to a fund's policies and procedures, as obtaining approval from fund boards may unnecessarily constrain management, considering the infrequency of board meetings and the significant changes in markets that may occur between them.[279] On the other hand, one commenter stated that the proposal granted excessively broad discretion to fund managers to design the swing pricing procedures, and excessive discretion in setting the swing pricing threshold and factor, which this commenter feared could result in unequal treatment of investors not fully justified by differences in the market impact of their fund transactions.[280]

As discussed above, after considering comments, we believe requiring the board to approve a fund's swing threshold(s) and swing factor upper limit (and any changes thereto) is an important, targeted means to help ensure that a fund's swing pricing policies and procedures are

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277 *See* Charles Schwab Comment Letter.

278 *See, e.g.*, BlackRock Comment Letter; CRMC Comment Letter; Dechert Comment Letter; FSR Comment Letter.

279 *See* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8, at section III.H.2 for a more detailed discussion regarding comments received regarding board approval of material changes to fund policies and procedures.

280 *See* AFR Comment Letter.

in the best interests of fund shareholders. In addition, with respect to oversight beyond these discrete elements, we believe that board approval of swing pricing policies and procedures combined with required review of a report laying out information and analyses supporting how the important components of swing pricing are determined—the swing factor(s), swing threshold(s), and swing factor upper limit—appropriately balances the concerns of some commenters that the board should not be involved in the day-to-day administration of swing pricing with the concerns of other commenters that the rule should prevent excessive discretion granted to fund management and inappropriate treatment of fund shareholders. Although we consider the adviser better suited to administering the fund's swing pricing policies and procedures, we believe that requiring board approval of the policies and procedures and requiring board review of the administrator's report that includes certain required information are integral to an effective ongoing assessment of swing pricing. We also believe these requirements will help ensure that a fund establishes and implements swing pricing policies and procedures that are in the best interests of the fund's shareholders. As noted above, a fund's board has significant responsibility regarding valuation- and pricing-related matters,[281] and it is required to approve valuation and compliance-related policies and procedures.[282] Additionally, in the past we have stated that a fund's compliance policies and procedures, which must be approved by the fund's board (including a majority of independent directors), should include procedures for the pricing

[281] *See supra* footnote 270.

[282] *See, e.g.*, Accounting for Investment Securities by Registered Investment Companies, Accounting Series Release No. 118 (Dec. 23, 1970) (a board, consistent with its responsibility to determine the fair value of each issue of restricted securities in good faith, determines the method of valuing each issue of restricted securities in the company's portfolio, and the actual valuation calculations may be made by persons acting pursuant to the board's direction; the board must continuously review the appropriateness of the method used in valuing each issue of security in the company's portfolio); and Rule 38a-1 Adopting Release, *supra* footnote 179, at text accompanying n.46 (stating that rule 38a-1 requires fund directors to approve written compliance policies and procedures that require each fund to "provide a methodology or methodologies by which the fund determines the fair value of the portfolio security").

of portfolio securities and fund shares.[283] In particular, we note that rule 38a-1 requires that a board receive a written report on the operation of the policies and procedures that the fund has adopted that are reasonably designed to prevent violation of the federal securities laws, which would include rule 22c-1.

The report the board must review contains several important elements. These elements are designed to provide the board with the types of information that the board would consider relevant and likely request if required to approve material changes to the fund's swing pricing policies and procedures. As noted above, in light of comments, we are replacing the proposed requirement that the board approve all material changes to the swing pricing policies and procedures and the proposed requirement of a fund review of the swing threshold with required board review of the swing pricing administrator's report. First, the report must describe the swing pricing administrator's review of the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution. This will help the board satisfy its fiduciary role that the fund pricing process is operating in the best interest of fund shareholders. It also is similar to the requirements of rule 38a-1[284] and thus should be a familiar process for funds and their boards. Second, the report must describe any material changes to the fund's swing pricing policies and procedures since the last report. Because the board is not required to approve these changes before they take effect, it is important that they nevertheless be informed of these changes to provide effective oversight of swing pricing. Finally, the final rule provides that a fund's swing pricing policies and

283 *See* Rule 38a-1 Adopting Release, *supra* footnote 179, at nn.39-47 and accompanying text.

284 *See* rule 38a-1(a)(3) and rule 38a-1(a)(4)(iii) (requiring that the fund's chief compliance officer provide a report to the fund's board, at least annually, covering certain specified matters relating to the fund's compliance program and requiring an annual review of the adequacy of the fund's compliance policies and procedures and the effectiveness of their implementation).

procedures must specify the process used by the fund to determine the fund's swing threshold(s), swing factor(s), and swing factor upper limit, and that the swing pricing administrator's report must describe the administrator's review and assessment of the fund's swing threshold(s), swing factor(s), and swing factor upper limit considering the requirements of the rule, including a review and assessment of information and data supporting these determinations. The swing threshold(s), swing factor(s), and swing factor upper limit are the key features of swing pricing practices and ultimately drive the prices at which fund shareholders will transact. Accordingly, providing boards with information on how these essential parameters are determined, and a review and assessment of how well these processes are leading to the right parameters, is important in enabling boards to satisfy their oversight role. In particular, this information may assist the board in its consideration of any recommended changes to the fund's swing threshold(s) or swing factor upper limit. These elements of the report—and the related board oversight—are also intended to address commenter concerns that the proposed swing pricing framework granted fund manager's excessive discretion in setting the swing threshold and swing factor, particularly given conflicting interests that fund personnel may have.[285] The board has traditionally provided oversight when there are potential conflicts at the fund.

We note that this report must include an assessment of the information and data supporting the fund's swing threshold(s), swing factor(s), and swing factor upper limit. We believe that the inclusion of this information in the board report should help provide the board

[285] Eaton Vance Comment Letter ("While the proposed rule specifies the factors that must be considered in establishing a fund's swing threshold and swing factor, it provides little guidance to fund sponsors and fund boards on how to balance the conflicting interests of continuing shareholders (benefiting from low swing thresholds and high swing factors) versus transacting shareholders (benefiting from high swing thresholds and low swing factors) in setting appropriate swing thresholds and applying reasonable swing factor adjustments each day that the swing threshold is exceeded."); AFR Comment Letter (stating that "[t]he proposal includes substantial discretion concerning the threshold for swing pricing and the actual level of the swing pricing adjustment. We believe this discretion is excessive.").

sufficient information about the inputs used in swing pricing to provide proper oversight of the fund's swing pricing processes and further address the concerns of commenters noted above. The information and data supporting these determinations may take a variety of forms, such as reviews or back-tests of shareholder flows and transaction costs in relation to the swing threshold(s), swing factor(s), and swing factor upper limit used by the fund. Back-testing of swing thresholds and factors, for example, is used in swing pricing practices in Europe,[286] and we expect it may enhance the accuracy and effectiveness of swing pricing as a tool to mitigate potential shareholder dilution.

Overall, we believe that the board approval and oversight requirements in the final rule will help a fund establish and implement swing pricing policies and procedures that are in the best interests of the fund and its shareholders. Because fund directors have an obligation to act in the best interests of the fund,[287] approving policies and procedures that are designed to disadvantage shareholders would not be consistent with their fiduciary duties. In fulfilling these duties, while the board bears ultimate responsibility for meeting its obligations under its fiduciary duty and our rules, the board may choose, where consistent with the prudent discharge of its fiduciary duties, to make its determinations while relying on reports it receives under this rule and such other information and data as it determines appropriate from the person(s) administering the swing pricing program.[288]

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286 *See* JP Morgan Comment Letter (discussing back-testing of cash flow projections it performed in confirming the accuracy of its swing pricing determinations); ICI Comment Letter (noting that the ALFI guidelines require regular back-testing of a fund's swing threshold and swing factor).

287 *See, e.g.*, Interpretive Matters Concerning Independent Directors of Investment Companies, Investment Company Act Release No. 24083 (Oct. 14, 1999) [64 FR 59877 (Nov. 3, 1999)] (discussing staff's views of directors' duties of care and loyalty).

288 *See also* Letter of Michael Didiuk, Division of Investment Management, Securities and Exchange Commission, to Dorothy Berry, Chair, Independent Directors Council, and Jameson Baxter, Chair, Mutual Fund Directors Forum (Nov. 2, 2010), *available at*

Designation of Administrator

As under the proposal, the board will be required to designate the fund's adviser, officer, or officers responsible for the administration of the fund's swing pricing policies and procedures. As discussed above, multiple commenters supported the proposal's approach that the fund's board should not be required to administer the fund's swing pricing policies and procedures,[289] and instead should designate a swing pricing administrator.[290] One commenter, however, suggested that the fund's adviser, not the board, should be responsible for designating the person responsible for administering the fund's swing pricing policies and procedures.[291] We believe that it is appropriate and consistent with the board's historical role and its responsibilities under other of our rules for the board to be responsible for designating the administrator. We believe that having the board approve the administrator should help enhance board oversight of swing pricing and allow for boards to better understand who is responsible for administering it. Accordingly, we are retaining this requirement in the final rule.

We note that it is currently common industry practice for foreign domiciled funds that use swing pricing to appoint a committee to administer the fund's swing pricing operations.[292] A fund's board may wish to consider requiring the fund's swing pricing policies and procedures to be administered by a committee, and to specify the officers or functional areas that comprise the committee (taking into account any possible conflicts for the fund and the adviser related to

https://www.sec.gov/divisions/investment/noaction/2010/idc-mfdf110210.pdf.

289 *See* Dechert Comment Letter; IDC Comment Letter; MFDF Comment Letter.

290 *See* CFA Comment Letter; HSBC Comment Letter.

291 *See* IDC Comment Letter.

292 *See, e.g.*, BlackRock Fund Structures Paper, *supra* footnote 46; J.P. Morgan Asset Management Swing Pricing Paper, *supra* footnote 60; and Franklin Templeton Investments, *Swing pricing: Investor protection against fund dilution* (last visited Apr. 15, 2015), *available at* http://www.franklintempletongem.com/downloadsServlet?docid=hm2t1yb7.

swing pricing). The persons or committee tasked with swing pricing oversight may wish to meet periodically to determine the swing factor(s) the fund would use in a variety of circumstances, taking into account the considerations discussed above in section II.A.3.e. A fund may wish to consider delineating the frequency with which these persons would meet in its policies and procedures; for example, a fund's policies and procedures might specify that these persons shall meet periodically, such as monthly or quarterly, and more frequently if market conditions require.

Segregation from Portfolio Management Function

As proposed, the swing pricing rule would have required that the determination of the swing factor must be reasonably segregated from the portfolio management function of the fund. The final rule as adopted, is similar to the proposed requirement; however, it has been modified to provide that administration of a fund's swing pricing policies and procedures must be reasonably segregated from portfolio management of the fund and "may not include portfolio managers."[293] We noted in the Proposing Release that portfolio managers may have conflicts of interest with respect to setting the swing factor, and therefore did not believe that they should be involved in setting the swing factor. We believe that requiring segregation of functions (and clarifying in the rule text that portfolio managers may not be involved) with respect to the administration of swing pricing generally, and not just with respect to setting the factor, will provide better clarity of roles and reduce the possibility of conflicts of interest in the administration of swing pricing.

We believe that, because of the potential conflict of interest that a portfolio manager who

[293] We recognize that smaller fund complexes may have different personnel choices available when determining who would be responsible for administering their funds' swing pricing policies and procedures. *See infra* section III.

may be compensated based on fund performance may have if they are involved in setting the swing factor (which if not set properly, may have the effect of increasing fund performance inappropriately rather than recouping the transaction costs associated with purchasing and redeeming shareholders' capital activity), portfolio managers should not be a part of the swing pricing administration.[294] For example, a fund's portfolio manager could have an incentive to determine a swing factor that is as low as possible, because the portfolio manager could be reluctant for the fund's short-term performance to deviate from the fund's benchmark or lag its peers; or set a swing factor that is too high to enhance the fund's performance relative to its benchmark or peers.[295]

Several commenters expressed support for the determination of the swing factor being reasonably segregated from a fund's portfolio management function, which as described in the Proposing Release, would exclude portfolio managers from administration of swing pricing factor.[296] Accordingly, we are adopting the requirements summarized above. We recognize that it would be appropriate for a committee tasked with the administration of a fund's swing pricing policies and procedures, including the determination of the swing factor(s) the fund would use in a variety of circumstances, to obtain appropriate inputs from the fund's portfolio manager, which could be used by that committee in determining the swing factor. However, portfolio managers could not be members of the committee, nor could they decide how their inputs would be

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294 We recognize that this approach differs from that taken in the administration of rule 22e-4 (as it did in the proposal) and believe this difference is justified by the higher potential for conflicts of interest in regards to portfolio managers and swing pricing as compared to liquidity risk management generally. *See* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8 at section III.H.1.

295 *See supra* section II.A.2.g (discussing performance reporting); s*ee also* Evergreen Order, *supra* footnote 128 (Commission found that a fund's portfolio management team withheld relevant negative information about certain fund holdings from a valuation committee, resulting in the fund substantially overstating its NAV for over one year).

296 *See* CRMC Comment Letter; CFA Comment Letter; HSBC Comment Letter.

employed in the swing factor determination.

Fund Merger Considerations

We stated in the Proposing Release that, when funds merge, and at least one of the merging funds uses swing pricing, there are a number of considerations relating to swing pricing that the funds generally should consider when determining the terms of the merger.[297] Commenters did not address these views, which we reiterate here. The boards of merging funds should consider whether a swing factor should be used to adjust the value of the absorbed fund's assets, if the absorbing fund uses swing pricing and it is applied on the day of the merger.[298] Although the manager of the absorbing fund may need to sell certain of the assets of the absorbed fund following the merger (*e.g.*, for consistency with the absorbing fund's investment strategy, or to comply with certain regulatory requirements), we do not believe that the NAV of either the absorbing fund or the absorbed fund should be adjusted to counter any dilution resulting from these sales, because costs associated with these sales would result from the merger and would not be caused by shareholders' purchase or redemption activity. In light of potential complications arising when funds using swing pricing merge, the boards of merging funds may want to consider whether to temporarily suspend a fund's swing pricing policies and procedures ahead of the merger.[299] Similarly, the swing threshold of the absorbing fund generally should be

[297] *See* Proposing Release, *supra* footnote 6, at n.533 and accompanying text.

[298] Directors overseeing fund mergers must take into account rule 17a-8 under the Act (which sets forth requirements for mergers of affiliated investment companies), if applicable, as well as any relevant state law requirements. Rule 17a-8 requires a board, including a majority of the independent directors, to consider the relevant facts and circumstances with respect to a merger of affiliated funds and determine that the merger is in the best interests of each of the merging funds and that the interests of the shareholders of both the fund being acquired and the acquiring fund are not being diluted. The board may want to consider the swing pricing policies and procedures of the merging funds including any appropriate modifications.

See ALFI Swing Pricing Guidelines 2015, *supra* footnote 88, at 19-20 (discussing issues associated with the use of swing pricing to adjust the value of the absorbed fund's assets).

[299] *See* Proposing Release, *supra* footnote 6, at n.536 and accompanying text.

reviewed following a merger, and the persons in charge of administering the absorbing fund's swing pricing policies and procedures should consider the effects of the merger when considering what swing factor would be appropriate to use if the fund's swing threshold is exceeded following the merger.[300]

Recordkeeping Requirements

Like under the proposal, the final rule requires a fund to maintain the swing pricing policies and procedures adopted by the fund that are in effect, or at any time within the past six years were in effect, in an easily accessible place.[301] Additionally, as proposed, we are expanding current rule 31a-2(a)(2), which requires a fund to keep records evidencing and supporting each computation of the fund's NAV,[302] to reflect the NAV adjustments based on a fund's swing pricing policies and procedures. Specifically, a fund that adopts swing pricing policies and procedures will be required to preserve records evidencing and supporting each computation of an adjustment to the fund's NAV based on the fund's swing pricing policies and procedures.[303] For each NAV adjustment, such records should generally include, at a minimum, the fund's unswung NAV, the level of net purchases or net redemptions that the fund encountered (and estimated) that triggered the application of swing pricing, the swing factor that was used to adjust the fund's NAV, relevant data supporting the calculation of the swing factor, and any back-testing data used by the fund in assessing the swing factor (and its relationship to

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300 *See id.*, at text following n.536.

301 Rule 22c-1(a)(3)(iii).

302 *See* rule 31a-2(a)(2) (every registered investment company shall . . . "[p]reserve for a period not less than six years from the end of the fiscal year in which any transactions occurred, the first two years in an easily accessible place . . . all schedules evidencing and supporting each computation of net asset value of the investment company shares").

303 *See* amendment to rule 31a-2(a)(2).

near term costs expected to be incurred by the fund as a result of net purchases or net redemptions that occur on the day the swing factor(s) is used). The records required under the amendments to rule 31a-2(a)(2) are required to be preserved for at least six years from the date that the NAV adjustment occurred, the first two years in an easily accessible place.[304] The six-year period for a fund to maintain a copy of its swing pricing policies and procedures in rule 22c-1(a)(3) corresponds to the six-year recordkeeping period currently incorporated in rule 31a-2(a)(2). We believe that consistency in these retention periods is appropriate in order to permit a fund or Commission staff to review historical instances of NAV adjustments effected pursuant to the fund's swing pricing policies and procedures in light of the policies and procedures that were in place at the time the NAV adjustments occurred. Commenters generally found these proposed requirements appropriate, and we are adopting them as proposed.[305]

In addition, and based on the same rationale as that of the other aforementioned swing pricing-related recordkeeping requirements, the final rule requires a fund to maintain all written periodic reports provided to the board under rule 22c-1(a)(3)(ii)(D) relating to swing pricing for six years, the first two years in an easily accessible place.[306]

g. Impacts on Financial Statements, Performance Reporting, and Pricing Errors

The application of swing pricing will impact a fund's financial statements and disclosures in a number of areas, including a fund's statement of assets and liabilities, statement of changes

304 *See id*.

305 *See, e.g.*, HSBC Comment Letter ("[HSBC] AMG believes the recordkeeping requirements are sufficient."). *But see* Voya Comment Letter (listing recordkeeping requirements as one of many aspects of the proposed rule that would make swing pricing too administratively burdensome to implement in a manner outweighed by swing pricing's benefits). We note that the rule amendments we adopt today permit, but do not require, a fund to implement swing pricing and allow a fund to weigh recordkeeping and other costs to administer swing pricing against swing pricing benefits as the fund deems appropriate.

306 *See* rule 22c-1(a)(3)(iii).

in net assets, financial highlights, and the notes to the financial statements. While commenters were generally supportive of the swing pricing disclosures in the notes to the financial statements required by the proposal,[307] commenters did ask for clarification and suggested the Commission also consider the impact swing pricing disclosures will have on other aspects of financial statement reporting,[308] which we address below.

Statement of Assets and Liabilities

Today we are clarifying, after consideration of the comments received, that for funds that utilize swing pricing the statement of assets and liabilities would continue to be presented as currently required by Regulation S-X rule 6-04.19[309] and U.S. Generally Accepted Accounting Principles or "GAAP." Under Regulation S-X and GAAP, funds are required to state on the statement of assets and liabilities their NAV per share, which is defined as "the amount of net assets attributable to each share of capital stock outstanding at the close of the period,"[310] and which we refer herein to as the "GAAP" NAV. We proposed to amend rule 6-04.19 to require presentation of the NAV per share as adjusted pursuant to its swing pricing policies and procedures (if applicable), the "Swung NAV," on the statement of assets and liabilities.[311] However, commenters questioned how the effects of swing pricing are captured within the financial reporting process and interact with the normal trade date reporting adjustments that go

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307 *See* ICI Comment Letter I.

308 *See* Comment Letter of Ernst & Young LLP (Jan. 14, 2016) ("EY Comment Letter"); Comment Letter of KPMG LLP (Jan. 26, 2016) ("KPMG Comment Letter"); Comment Letter of PricewaterhouseCoopers LLP (Jan. 13, 2016) ("PwC Comment Letter").

309 *See* 17 CFR 210.6-04.19.

310 *See* FASB ASC 946-10-20 for definition of NAV per share.

311 *See* proposed amendments to section 210.6-04 of Regulation S-X; *see also*, Proposing Release, *supra* footnote 6, at section III.F.1.g.

into a GAAP NAV.[312] Commenters also pointed out that a user of the financial statements would not be able to divide the net assets of the fund (or class) by the shares outstanding to arrive at the Swung NAV per share and that there was no proposed reconciliation of these amounts.[313] Generally, commenters suggested consideration of whether the GAAP NAV per share should be presented in addition to or in lieu of the Swung NAV, as proposed,[314] and asked for further clarification on how swing pricing would impact the financial highlights, including the total return calculations.[315]

One commenter also noted that, under the proposal, there would be a difference between the Swung NAV per share disclosed in accordance with proposed rule 6-04.19 and the GAAP NAV per share.[316] For a fund that chooses to implement swing pricing, the GAAP NAV would include both the effects of swing pricing throughout the period, if applicable, as well as any trade date financial reporting adjustments for portfolio transactions (including any related income, expense, gain and loss) and capital share transactions occurring on the balance sheet date. The Swung NAV would be the NAV that investors transacted at on the last day of the financial reporting period and would not include the GAAP trade date adjustments.[317] For funds that adopt

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312 *See* KPMG Comment Letter; EY Comment Letter; PwC Comment Letter. *See also* EY Comment Letter; PwC Comment Letter (on whether the NAV should be adjusted for trade date activity). Rule 2a-4 of the Act permits registered investment companies to record security transactions as of one day after the trade date for purposes of determining net asset value. However, FASB ASC 946-320-25-1 notes that for financial reporting purposes, security transactions should be recorded on trade date. Consistent with current practice, trade date adjustments for portfolio transactions or capital share transactions occurring on the balance sheet date (otherwise known as "as of" adjustments) are included in the GAAP NAV per share.

313 *See* KPMG Comment Letter.

314 *See* Proposing Release, *supra* footnote 6, at section III.F.1.g.

315 *See* EY Comment Letter; KPMG Comment Letter.

316 *See* KPMG Comment Letter.

317 We also note that today, without the use of swing pricing, there could be differences between the GAAP NAV and the transactional NAV calculated and used by funds to process investor orders, due to the fact that GAAP NAV is calculated as of T+0 for financial statement purposes (*i.e.*, includes trade date

swing pricing, if the NAV is swung on the last day of the reporting period it could be higher or lower than the GAAP NAV presented in the financial statements, depending on the direction of the swing. For example, as one commenter noted, if a fund on the last day of the financial reporting period (when considering subscriptions or redemptions that day) in calculating its daily NAV made a determination to adjust or swing the NAV according to its swing pricing policies and procedures, and applied the swing pricing factor to its unswung NAV of $10.00, which resulted in a Swung NAV of $9.90 (as a result of large redemptions), shareholder redemption (and subscription) transactions would be processed at the Swung NAV of $9.90 on the last day of the reporting period.[318] Assuming that the effect of processing transactions at $9.90 increases the fund's NAV to $10.01, and there were no other financial reporting trade date adjustments, the GAAP NAV would be $10.01.

To further clarify, for funds that implement swing pricing, the GAAP NAV would include any of the effects of swing pricing throughout the entire period (if applicable), and the Swung NAV (if it swings at period end) would represent the transactional NAV on the last day of the period, which has been adjusted by the swing factor.

Commenters questioned whether the GAAP NAV per share or the Swung NAV per share would be more meaningful to users of the financial statements.[319] After consideration of the concerns raised above, we believe that disclosure of the GAAP NAV per share (which will reflect the effects of swing pricing throughout the reporting period, if applicable), continues to be

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adjustments for portfolio investments and capital share activity as noted above) and fund complexes generally calculate NAV and transact on a T+1 basis in accordance with rule 2a-4. Thus, some of the adjustments between the GAAP NAV and the transactional NAV that currently exist are due to, among other things, the financial reporting adjustments for trade date (T+0) activity.

318 *See* KPMG Comment Letter.

319 *See* EY Comment Letter; KPMG Comment Letter.

the appropriate disclosure on the statement of assets and liabilities as it allows users of the financial statements to understand the actual amount of net assets attributable to the fund's remaining shareholders at period end. The population of investors that typically transact as of the financial reporting date is generally less than those investors that do not transact and are still invested in the fund as of the financial reporting date. Therefore, we believe that the GAAP NAV is likely to be more meaningful to a larger population of shareholders.

Furthermore, users of the financial statements can easily recalculate the GAAP NAV per share on the statement of assets and liabilities by dividing the net assets of the fund (or share class) by the outstanding shares of the fund (or share class) as presented on the statement of assets and liabilities. As proposed, users of the financial statements would not have been able to recalculate the Swung NAV disclosed based on the information on the statement of assets and liabilities. Therefore, we are not adopting the proposed amendment to Regulation S-X rule 6-04.19 to require funds to disclose the Swung NAV on the Statement of Assets and Liabilities in lieu of or in addition to the GAAP NAV on the balance sheet, and funds will continue to disclose the GAAP NAV as currently required.

However, as we discuss below in the financial highlights section, we believe that transparency of the Swung NAV is still meaningful for investors and should be disclosed in the financial highlights section of the financial statements in addition to the GAAP NAV. Furthermore, while we are not requiring funds to present the Swung NAV on the balance sheet, this does not preclude funds or preparers of financial statements from including the Swung NAV on the balance sheet or elsewhere in the financial statements if funds believe such disclosures are beneficial for investors and provided there is an explanation of the differences between the Swung NAV and the GAAP NAV as presented.

Statement of Changes in Net Assets

As we noted in the Proposing Release, swing pricing also impacts disclosures of capital share transactions included in a fund's statement of changes in net assets.[320] A fund using swing pricing to adjust its NAV makes payments for shares redeemed and receives payments for shares purchased net of the swing pricing adjustment. Using the example above, if a fund had an unswung NAV of $10.00 on a given day before considering swing pricing and the Swung NAV after applying the swing factor pursuant to the fund's swing pricing policies and procedures was $9.90, shareholders would transact at $9.90 multiplied by the number of shares purchased or redeemed. The $0.10 difference between the swung and unswung NAV would be retained by the fund for its net redemptions to offset transaction and liquidity costs. This $0.10 difference per share should be accounted for as a capital transaction and not included as income to the fund, because it is an adjustment made to offset the near-term transactional and liquidity costs incurred as a result of satisfying shareholder transactions. Funds are required by Regulation S-X rule 6-09.4(b) to disclose the number of shares and dollar amounts received for shares sold and paid for shares redeemed.[321] Thus, for funds that implement swing pricing (and in the example above where transactions were processed using the swung NAV of $9.90 per share), Regulation S-X would require the dollar amount disclosed to be based on the transactional NAVs used to process investor subscriptions and redemptions, including those processed using Swung NAVs during the reporting period. Commenters generally agreed with this approach and noted that the

[320] *See* Proposing Release, *supra* footnote 6, at section III.F.4.

[321] *See* 17 CFR 210.6-09.4(b).

statement of changes in net assets should reflect the actual amounts that would be received by the fund and that would be paid to its shareholders.[322]

Financial Highlights

We continue to believe, as we discussed in the proposal,[323] that a fund should include the impact of swing pricing in its financial highlights,[324] and the per share impact of amounts retained by the fund due to swing pricing should be included in the fund's disclosures of per share operating performance.[325] However, commenters also asked for clarification on how to present the cumulative impact of swing pricing on NAV throughout the year as opposed to the impact of swing pricing as of the financial reporting period end date. In response to these concerns, we are modifying our proposal and amending Item 13 of N-1A[326] to require disclosure of the Swung NAV per share, if applicable, as a separate line item below the ending GAAP NAV per share on the financial highlights.[327] We are also amending, as proposed, Item 13 of Form N-1A to specifically require that the per share impact of amounts related to swing pricing be disclosed below the total distributions line in a fund's financial highlights.[328] We are also requiring a general description of the effects of swing pricing on the fund's financial statements.[329] This presentation addresses commenters' questions around the impact of swing

322 *See* EY Comment Letter; Invesco Comment Letter.

323 *See supra* footnote 315.

324 *See* Item 13 of Form N-1A.

325 FASB ASC 946-205-50-7 requires specific per share information to be presented in the financial highlights for registered investment companies, including disclosure of the per share amount of purchase premiums, redemption fees, or other capital items.

326 *See supra* footnote 315. Funds follow the instructions to Item 13 of Form N-1A for the Financial Highlights presentation in fund registration statements.

327 *Id.* *See* Item 13(a) of Form N-1A.

328 *Id*.

329 *See infra* section II.A.3.g (Financial Statement Footnote Disclosure discussion).

pricing throughout the year and as of the period end date, as the cumulative impact of swing pricing during the period will be presented within the financial highlight's GAAP NAV per share roll-forward as a separate line item under total distributions, and the impact of swing pricing as of the period end date, if any, would be disclosed by presenting the Swung NAV. One commenter noted that presenting two NAVs is conceptually consistent with the current requirement for closed-end funds.[330] Item 4 of Form N-2 requires closed-end funds to present both the net asset value at the end of the period as well as the per-share market value at the end of the period, which is a transaction price, in the per-share operating performance.

Performance Reporting

We proposed to require funds to calculate total return within the financial highlights and performance information based on the Swung NAV.[331] Commenters questioned whether total return should be based on other measures such as the GAAP NAV, which as clarified above, would include the cumulative effect of swing pricing along with financial reporting adjustments, or an unadjusted NAV, which would not include any of the effects of swing pricing.[332] Commenters had mixed responses on what total return was more meaningful to users of the financial statements. Some commenters agreed with the proposed approach of presenting total return using only the Swung NAV as it was consistent with how funds in Europe present total return, while acknowledging that it would require investor education in the U.S.[333] We note that certain European funds disclose both the swung and unswung[334] total returns for financial

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330 *See* EY Comment Letter.

331 *See supra* footnote 315.

332 *See* EY Comment Letter; KPMG Comment Letter.

333 *See* ICI Comment Letter I; BlackRock Comment Letter.

334 *See* ALFI Survey 2015, *supra* footnote 42 (defining "unswung NAV" as the NAV without application of a

statement purposes. Other commenters pointed out that presenting total return based only on the Swung NAV introduced volatility unrelated to fund performance, and felt that performance benefits of swing pricing could lead to manipulation by managers and lead them to adopt aggressive swing policies.[335] Along the same lines, some commenters felt that total return based on an unadjusted NAV (that excludes the effects of swing pricing) may provide useful information for comparative purposes with other funds and benchmarks that do not use swing pricing.[336] Some commenters noted that total return calculated based on the GAAP NAV may also be meaningful for shareholders that remain in the fund and that did not transact or redeem shares during the year,[337] similar to the logic supporting presenting the GAAP NAV on the balance sheet.

After further consideration, we still believe that it is important for investors to understand the impact of swing pricing on the return they would have received for the period presented in the fund's financial statements, but we think this is best represented by the GAAP NAV, which does incorporate the effects of swing pricing if applicable throughout the period. Presenting a total return based on the transactional, or Swung NAV could introduce elements of variability depending on whether or not the fund had swung the NAV as of the last or first day in the reporting period. Thus, along the same lines for not requiring the Swung NAV on the balance sheet, we do not believe the total return based on the Swung NAV, if applicable, would provide any additional significant information to shareholders. Even those investors transacting as of the last day in the period would not receive the total return based on the Swung NAV for the period,

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swing factor).

335 *See* EY Comment Letter; Eaton Vance Comment Letter.

336 *See* ICI Comment Letter I.

337 *See* EY Comment Letter.

except in a rare circumstance in which they had bought into the fund on the first day of the period and sold out of the fund on the last day of the period and swing pricing was implemented on those days.

Therefore, we believe presenting the total return based on the GAAP NAV in the financial highlights, which will include the cumulative effects of swing pricing, if applicable, is more meaningful to shareholders that remain in the fund as of the end of the reporting period. Thus, we are not adopting the proposed amendments to Form N-1A with respect to the calculation of total return within Instructions 3(a) and 3(d) to Item 13, and to Item 26, which also would have required disclosure of the total return based on the Swung NAV.

However, we are including an additional disclosure requirement related to performance data presented in the prospectus, if a fund's swing pricing policies and procedures were applied during any of the periods presented. This new disclosure would require a fund to include a general description of the effects of swing pricing on a fund's annual and average total returns for the applicable periods presented in a footnote.[338] We requested comment in the Proposing Release on whether funds should be required to disclose additional information regarding swing pricing on Form N-1A and, if so, what information should be disclosed. We also requested comment on whether we should require disclosure of more information on amounts retained by the fund because of swing pricing and certain additional information that would highlight the effect of swing pricing on the fund's returns. Several commenters recommended that the Commission require additional transparency regarding a fund's use of swing pricing.[339] The additional disclosure would provide transparency to investors by highlighting that the cumulative

[338] Item 4(b)(2)(ii) and Item 4(b)(2)(iv)(E) of Form N-1A.

[339] *See* Eaton Vance Comment Letter; AFR Comment Letter.

effect of swing pricing, where applicable, is reflected in the performance data presented for the fund.

Furthermore, while we are not requiring total return to be presented based on the Swung NAV within the financial statements, we are not prohibiting funds from disclosing the total return based on the Swung NAV outside of the financial statements in other performance information. We also acknowledge that presenting total return based on an unadjusted NAV could be useful for comparative purposes, but we note that it is a hypothetical measure not derived from the NAV that shareholders would have transacted at or the GAAP NAV as presented in the financial statements which is attributable to the fund's remaining shareholders. Therefore, while we do not believe an unadjusted NAV should be disclosed in the audited financial statements, we are not prohibiting funds from disclosing an unadjusted NAV outside of the financial statements in other performance information.[340]

Financial Statement Footnote Disclosure

Commenters were generally supportive of the swing pricing disclosures in the notes to the fund's financial statements that would have been required by the proposal.[341] We are adopting the requirement, as proposed, for a fund that adopts swing pricing policies and procedures to disclose in a footnote to its financial statements: (i) the general methods used in determining whether the fund's net asset value per share will swing, (ii) whether the fund's net asset value per share has swung during the period, and (iii) a general description of the effects of

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340 Item 26 (b)(6) of Form N-1A, *Non-Standardized Performance Quotation,* notes that a fund may calculate performance using any other, non-standardized historical measure of performance (not subject to any prescribed method of computation) if the measurement reflects all elements of return. Funds should consider this provision when contemplating presentation of a total return based on an unadjusted NAV that does not reflect the effects of swing pricing for the period presented.

341 *See* ICI Comment Letter I.

swing pricing on the fund's financial statements.[342] This would include a description of the differences between the ending US GAAP NAV and ending NAV adjusted for its swing policies and procedures, if applicable, as presented in the financial highlights included in the financial statements. Based on comments received as noted above, we continue to believe that this information will be useful in understanding the impact of swing pricing on a fund.

NAV Pricing Errors

Commenters noted that certain components of the swing pricing process will be based on estimates. Commenters were concerned that swing pricing could introduce a new source of pricing errors and potentially cause a fund to misstate its NAV if these estimates were materially incorrect. These concerns primarily relate to estimating daily net investor transaction flows that would be used to determine whether a fund's swing threshold has been exceeded, which would require adjusting the fund's NAV in accordance with the fund's swing pricing policies and procedures.[343] Certain commenters called for additional Commission guidance regarding circumstances that would constitute pricing errors under the swing pricing rules, as proposed.[344] Other commenters suggested that the Commission provide guidance and/or adopt a "safe harbor" or a standard of liability with respect to any pricing errors that could result from a fund's use of flow estimates to determine whether to adjust the fund's NAV for swing pricing.[345] Several commenters also noted that certain components of the swing pricing process, such as thresholds and factors, will incorporate some degree of estimation in determining when transaction costs

342 *See supra* footnote 315; *see also* rule 6-03(n) of Regulation S-X.

343 *See* BlackRock Comment Letter.

344 *See, e.g.*, Dechert Comment Letter.

345 *See, e.g.*, BlackRock Comment Letter; MFS Comment Letter; Charles Schwab Comment Letter; SIFMA Comment Letter III.

(incurred as a result of the disposition or purchase of fund assets associated with net flows) will have a material impact on the fund.[346]

We believe fund management with oversight by the fund's board of directors is in the best position to tailor and oversee any error correction policies that may relate to conducting swing pricing for a fund. Accordingly, we believe funds should consider how their error correction policies and procedures will address swing pricing to the extent necessary to address the use of reasonable estimates related to swing pricing,[347] including appropriate parameters around what constitutes an error with respect to their swing pricing policies and procedures.

Funds should consider making any estimates with respect to the different swing pricing components (*e.g.*, net flows, thresholds and factors) utilizing reasonable processes and procedures. Such estimates generally should be based on sufficient and appropriate information.[348] We recognize that funds may take different approaches in determining such estimates, based on the particular circumstances of the fund and in developing formal or informal policies and procedures. Funds also may wish to conduct back-testing of estimated fund flows and other estimates using complete or final data to refine their estimation processes as appropriate over time and help ensure that estimates utilized for swing pricing are reasonable.

We acknowledge the concerns expressed above about the use of estimates, including that a fund following its swing pricing policies and procedures could gather sufficient information in

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346 *Id*.

347 *See supra* section II.A.3.d. (discussing the use of reasonable estimates in determining net transaction flows for swing pricing). The rule as adopted permits the person(s) responsible for administering the fund's swing pricing policies and procedures, in determining whether the fund's level of net purchase or net redemptions has exceed the applicable threshold, to make a determination based on receipt of sufficient information about a fund's daily shareholder flows to allow the fund to reasonably estimate whether it has crossed the swing threshold(s) with high confidence, and may include reasonable estimates where necessary.

348 *See id*.

order to make a reasonable estimate of investor flows in good faith in determining whether or not it has crossed the swing threshold with high confidence, which subsequently is determined to differ from its actual fund flows. For example, differences in actual versus estimated net flows could arise from adjustments subsequently made to certain transactions processed, or because certain fund flows were not included in the estimates received at the point the fund decided to swing or not swing the fund's NAV, or by using the prior day's NAV to estimate certain price-dependent transaction orders.[349] We believe that as long as the fund has followed reasonable practices, policies and procedures in gathering sufficient information in determining whether net investor flows (which may include reasonable estimates) have exceeded the applicable threshold used for swing pricing, such differences would not in and of itself result in a determination of a NAV pricing error requiring reprocessing of transactions or a financial statement adjustment to the fund's NAV.

A fund should follow its error correction policies, which likely would include a quantitative and qualitative analysis of the facts and circumstances of a particular scenario to determine whether a pricing error has occurred. In the context of swing pricing, such errors may result from inputs used, or the application of the decision to swing price or not, or when applying a factor in calculating the swung NAV. For example, differences in estimated net investor flows versus final flow data could result from a processing error, such as inadvertent exclusion of significant estimated flow data provided to the fund's transfer agent by an intermediary, impacting the fund's decision to swing or not on a particular day (or days). Or an error could occur in applying an incorrect swing factor to a fund's NAV, for example, if a fund's swing pricing policies and procedures incorporate multiple thresholds and factors. As with any other

[349] *See id*.

NAV calculation or processing error, the fund generally should consider these types of errors and whether it would be appropriate to adjust the fund's NAV and reprocess in accordance with their error correction policies.

Auditor's Role in Examining the Use of Swing Pricing

Certain commenters also expressed concerns with the auditor's role in evaluating the application of swing pricing, including that auditors do not have the expertise to assess the reasonableness of the swing threshold and the swing factor that are being used by a fund.[350] We agree that assessing the reasonableness of the swing threshold and the swing factor is the responsibility of the swing pricing administrator overseen by the board of directors. We do not believe the auditor should have the responsibility to assess the reasonableness of the swing threshold and swing factor provided there is no indication of noncompliance with the Commission's rule.[351] However, we believe that verifying that the swing policies and procedures have been approved by the fund's board and have been consistently applied, in all material respects, by the fund throughout the period, including as of the balance sheet date, is within the scope of an auditor's engagement and expertise.

B. Disclosure and Reporting Requirements Regarding Swing Pricing

Receiving relevant information about the operations of a fund and its principal investment risks is important to investors in choosing the appropriate fund for their risk tolerances. We are adopting, substantially as proposed, with some modifications in response to

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350 *See* EY Comment Letter; KPMG Comment Letter.

351 However, in evaluating the application of swing pricing the auditor must still comply with applicable professional standards (e.g., PCAOB Auditing Standard ("AS") No. 8, *Audit Risk*, AU sec. 316, *Consideration of Fraud in a Financial Statement Audit*, and AU sec. 317, *Illegal Acts by Clients*). This includes considering and addressing instances of noncompliance of which the auditor becomes aware, which includes but is not limited to indications of potential fraudulent practices.

comments, amendments to Form N-1A that require funds that use swing pricing to provide an explanation of the fund's use of swing pricing; including what it is, the circumstances under which the fund will use swing pricing, and the effects of using swing pricing.[352] A fund that uses swing pricing will also be required to disclose the upper limit the fund has set on the swing factor.[353] These form amendments are in addition to amendments to Form N-1A and Regulation S-X discussed above regarding financial and performance reporting related to swing pricing.[354] We are also adopting a requirement that a fund report on Form N-CEN information regarding the use of swing pricing, including a fund's swing factor upper limit.[355]

1. *Amendments to Form N-1A*

Form N-1A is used by open-end funds, including money market funds and ETFs, to register under the Investment Company Act and to register offerings of their securities under the Securities Act. Form N-1A currently requires a fund to describe its procedures for pricing fund shares, including an explanation that the price of fund shares is based on the fund's NAV and the method used to value fund shares.[356] If the fund is an ETF, an explanation that the price of fund shares is based on market price is required.[357] As discussed above, under rule 22c-1(a)(3), a fund (with the exception of a money market fund or ETF) is permitted, under certain circumstances, to use swing pricing to adjust its current NAV as an additional tool to lessen dilution of the value of

352 *See* Item 6(d) of Form N-1A.

353 *See id*.

354 *See* Item 4(b)(2)(ii); Item 4(b)(2)(iv)(E); Item 6(d); and Instructions to Item 13 of Form N-1A; *see also* rule 6-02(n); and rule 6-04.19 of Regulation S-X. We are also amending rule 6-02(e) of Regulation S-X to define the term "swing pricing" to have the meaning given in rule 22c-1(a)(3)(v)(C).

355 *See* Item C.21 of Form N-CEN.

356 *See* Item 11(a)(1) of Form N-1A.

357 *Id*.

outstanding redeemable securities through shareholder purchase and redemption activity.[358]

We are adopting, with some modifications from what was proposed, amendments to Item 6 of Form N-1A to account for this swing pricing procedure. Specifically, Item 6, as amended, requires a fund that uses swing pricing to explain the fund's use of swing pricing; including its meaning, the circumstances under which the fund will use it, and the effects of swing pricing on the fund and investors. Item 6, as amended, will also require a fund that uses swing pricing to disclose the swing factor upper limit it has set with respect to the fund's use of swing pricing.[359] For a fund that invests in other funds (*e.g.*, a fund-of-funds, a master-feeder fund) and those other funds use swing pricing, the fund is required to include a statement that its NAV is calculated based on the NAVs of the funds in which the fund invests, and that the prospectuses for those funds explain the circumstances under which those funds will use swing pricing and the effects of using swing pricing.

Together with the changes described above regarding financial and performance reporting on Form N-1A,[360] we believe these disclosures will improve public understanding regarding a fund's use of swing pricing as well as the potential advantages and disadvantages of using swing pricing to manage dilution arising from shareholder purchase and redemption activity. In particular, the disclosure regarding a fund's swing factor upper limit will provide transparency regarding the maximum amount that a shareholder could expect the share price that he or she receives upon purchase or redemption to be adjusted on account of swing pricing.

Some commenters expressed general support for the proposed swing pricing prospectus

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358 *See supra* section II.B.

359 *See* Item 6(d) of Form N-1A.

360 *See supra* section II.A.3.g. (discussing amendments to Item 4(b)(2)(ii), Item 4(b)(2)(iv)(E), Item 6(d), Instructions to Item 13).

disclosure requirements, explaining that swing pricing disclosures would provide investors with important general information about why and under what circumstances a fund would adjust its NAV and would complement existing Form N-1A disclosure requirements on how fund shares are priced.[361] One of these commenters, however, recommended that the Commission clarify what statements concerning swing pricing should be included in a fund's prospectus and require any additional information about swing pricing be disclosed in a fund's statement of additional information.[362] Other commenters, however, supported swing pricing disclosure requirements, as proposed, without any request for additional guidance from the Commission.[363] In response to these comments, we have modified the proposed Item 6 disclosure to require a fund that uses swing pricing to provide *an explanation of swing pricing* as well as its effects.[364] We agree with commenters that these requirements will provide investors with important general information about swing pricing.[365] Existing disclosure requirements in the prospectus and statement of additional information related to the pricing of fund shares, would apply to a fund's use of swing pricing.[366]

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361 *See, e.g.*, ICI Comment Letter I; *see also* CFA Comment Letter.

362 *See* CFA Comment Letter.

363 *See* Charles Schwab Comment Letter (recommending swing pricing policies be disclosed in the fund's prospectus and easily accessible to the public online); *see also* ICI Comment Letter I.

364 *See* Item 6(d) of Form N-1A. We are also making a technical revision to Item 6(d) to clarify that, if applicable, funds investing in other funds are required to state that prospectuses of the underlying funds provide swing pricing information only where underlying funds are using swing pricing.

365 *See, e.g.*, Instruction to Item 11(a)(1) of Form N-1A (disclosure requirements regarding a fund's use of fair value pricing).

366 *See, e.g.*, Item 11(a)(1) of Form N-1A (requiring a description of the procedures for pricing fund shares, including an explanation that the price of fund shares is based on a fund's NAV and the method used to value fund shares); and Item 11(a)(2) of Form N-1A (requiring a statement as to when calculations of NAV are made and that the price at which a purchase or redemption is effected is based on the next calculation of NAV after the order is placed); *see also* Item 23 of Form N-1A (requiring in the statement of additional information a description of the method followed or to be followed by a fund in determining the total offering price at which its shares may be offered to the public and the method(s) used to value the fund's assets).

As we proposed, we have determined not to require funds to disclose their swing pricing threshold or swing factor in their prospectus disclosures on Form N-1A. Some commenters supported this determination and, for example, expressed concerns that public disclosures of a fund's swing pricing threshold or swing factor could result in unfair trading practices, thereby creating a new type of material non-public information (*i.e.*, the trading intent of other shareholders).[367] One commenter recommended that the Commission prohibit funds from selectively disclosing swing thresholds to certain investors to prevent potential gaming where, for example, larger shareholders may attempt to take advantage of pricing adjustments when a swing threshold is crossed.[368] We share commenters' concerns regarding unfair trading, gaming, and other negative fund and market impacts that could occur if swing pricing thresholds were shared with the public and recommend that a fund consider these concerns (and determine that disclosure of a fund's swing threshold is in the best interests of the fund) before disclosing this information in its prospectus or elsewhere. Indeed, funds and advisers to funds generally should take into consideration the potential for gaming into account and any other potential consequences before making any such disclosure.[369] As noted above, we are requiring a fund to disclose the swing factor upper limit to provide shareholders with additional transparency regarding a fund's use of swing pricing and the potential impact of that usage.

[367] *See* Federated Comment Letter.

[368] *See* CFA Comment Letter.

[369] *See, e.g.*, In re Alliance Capital Management, L.P., Investment Advisers Act Release No. 2205A (Jan. 15, 2004) (settled action) (finding a mutual fund adviser willfully violated section 204A of the Advisers Act by failing to establish, maintain, and enforce written policies and procedures reasonably designed to prevent the misuse of material, nonpublic information by releasing material, nonpublic information about the portfolio holdings of certain mutual funds to select market timers in those funds and thereby defrauding mutual fund investors).

2. *New Item in Form N-CEN*

We proposed a new reporting item under Part C of Form N-CEN to allow the Commission and other users to track a fund's use of swing pricing.[370] We are adopting this reporting requirement substantially as proposed but with a modification to require funds to disclose the fund's swing factor upper limit.[371] Specifically, a fund, other than a money market fund or ETF, is required to disclose whether it engaged in swing pricing during the reporting period, and if so, the swing factor upper limit set by the fund.[372] This disclosure will inform our staff and potential users about whether funds use swing pricing as a tool to mitigate dilution of the value of outstanding redeemable securities through shareholder purchase and redemption activity and the potential maximum amount the fund's price may be swung. While several commenters expressed general support for the Form N-CEN reporting requirements included in the proposal,[373] we received no comments on this aspect of the proposal.

C. Effective and Compliance Dates

1. *Swing Pricing Rule*

Rule 22c-1(a)(3) permits (but does not require) a fund (with the exception of a money market fund or ETF) to adopt swing pricing policies and procedures. The Commission is

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370 *See* Proposing Release, *supra* footnote 6, at section III.G.3.

371 *See* Item C.21 of Form N-CEN. Under the proposal, questions regarding swing pricing were included as part of proposed Item C.44 of Form N-CEN. *See id*. We have modified the numbering convention for items within Form N-CEN from the proposal to be consistent with Form N-CEN as adopted in the Investment Company Reporting Modernization Adopting Release. *See* Investment Company Reporting Modernization Adopting Release, *supra* footnote 11. Reporting requirements regarding lines of credit, interfund lending, and interfund borrowing (which were included in the same item as swing pricing in the proposal), are now part of Item C.20 of Form N-CEN. *See* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8, at section III.M.3.a.

372 Item C.21 of Form N-CEN.

373 *See, e.g.*, CFA Comment Letter; Federated Comment Letter; SIFMA Comment Letter II; Vanguard Comment Letter.

delaying the effective date of rule 22c-1(a)(3) until 24 months after the date this release is published in the Federal Register. In the Proposing Release, the Commission stated that a fund could rely on the rule as soon as the fund could comply with the rule and related records, financial reporting, and prospectus disclosure requirements.[374] As discussed in section II.A.3. above, we agree with the commenters who suggested that funds, service providers and intermediaries may need to work through operational issues,[375] and believe that delaying the effectiveness of swing pricing may allow for the creation of industry-wide operational solutions in a more efficient manner and that therefore providing an extended effective date may more effectively facilitate the adoption of swing pricing. In light of the extended effective date and discretionary nature of swing pricing, we believe that a compliance period is unnecessary.

2. *Amendments to Form N-1A and Regulation S-X and New Item in Form N-CEN*

In the Proposing Release, the Commission expected to require all initial registration statements on Form N-1A, and all post-effective amendments that are annual updates to effective registration statements on Form N-1A, filed six months or more after the effective date, to comply with the proposed amendments to Form N-1A.[376] Few commenters discussed the Form N-1A amendments. One commenter agreed that 6 months was sufficient to comply with the amendments;[377] another commenter requested 30 months to comply.[378] Because we do not expect that funds will require significant amounts of time to prepare the additional disclosures regarding

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374 Proposing Release, *supra* footnote 6, at section III.H.

375 *See, e.g.*, BlackRock Comment Letter; CRMC Comment Letter; Fidelity Comment Letter; ICI Comment Letter I.

376 *See* Proposing Release, *supra* footnote 6, at section III.H. The proposal included amendments to Form N-1A related to swing pricing, as well as amendments to Form N-1A related to a fund's redemption practices. *See id*.

377 *See* ICI Comment Letter I.

378 *See* Vanguard Comment Letter.

swing pricing,[379] and we believe that a fund should disclose the use of swing pricing to investors before it is used, the compliance date for the amendments to Form N-1A discussed herein is the same as the effective date for rule 22c-1(a)(3). Likewise, we believe the additional disclosures regarding swing pricing within the financial statements related to the Regulation S-X amendments discussed above should be included in any financial statements in which swing pricing is implemented on or after the effective date. We note that only funds using swing pricing are required to provide the Form N-1A and financial statement disclosure amendments we are adopting today as part of this Release.

For Form N-CEN, we proposed a compliance date of 18 months after the effective date to comply with the new reporting requirements.[380] No commenters specifically addressed the compliance date for the reporting requirements applicable to swing pricing, but several commenters expressed concerns about operational limitations and requested 30 months for all entities to comply with the new reporting requirements on Form N-CEN.[381] As with the amendments to Form N-1A, the compliance date for the new reporting requirements related to swing pricing on Form N-CEN will be the same as the effective date for rule 22c-1(a)(3).

III. ECONOMIC ANALYSIS

A. Introduction and Primary Goals of Regulation

1. *Introduction*

As discussed above, the Commission is adopting regulatory changes to permit funds to

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379 *See* Proposing Release, *supra* footnote 6, at section III.H.

380 *Id*. The proposal included new items on Form N-CEN related to a fund's lines of credit, interfund lending, and interfund borrowing. *See also* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8, at section III.L.3.

381 *See* Cohen & Steers Comment Letter; Fidelity Comment Letter; ICI Comment Letter I; Vanguard Comment Letter.

use swing pricing under rule 22c-1(a)(3) and to require new disclosures regarding swing pricing (collectively, the "swing pricing regulations"). In summary, and as discussed in greater detail in section II above, the swing pricing regulations include:

- Final rule 22c-1(a)(3) will permit (but not require) a fund (except a money market fund or ETF) to establish and implement swing pricing policies and procedures that would, under certain circumstances, require the fund to use swing pricing to adjust its current NAV to lessen potential dilution of the value of outstanding redeemable securities caused by shareholder purchase and redemption activity. A fund that engages in swing pricing will be subject to certain disclosure and reporting requirements. Relative to the proposed rule, the final rule provides funds greater flexibility in setting multiple swing thresholds and threshold-specific swing factors, but imposes certain additional conditions, primarily a cap for the swing factor and limitations on how the swing factor can be set.
- Amendments to Form N-1A and Regulation S-X and an item on new Form N-CEN will require enhanced fund disclosure and reporting regarding swing pricing.
- Amendments to rule 31a-2 will require a fund that chooses to use swing pricing to create and maintain a record of support for each computation of an adjustment to the NAV of the fund's shares based on the fund's swing policies and procedures.

The Commission is sensitive to the economic effects of the swing pricing regulations, including the benefits and costs as well as the effects on efficiency, competition, and capital formation. The economic effects are discussed below in the context of the primary goals of the swing pricing regulations.

2. *Primary Goals*

The primary goals of the swing pricing regulations are to promote investor protection by allowing a fund, if it chooses, to use swing pricing to mitigate potential dilution of non-transacting shareholders' interests that could occur when the fund incurs costs as a result of other investors' purchase or redemption activity.[382] To the extent that such costs are not borne by redeeming or subscribing shareholders when exiting or entering a fund, such shareholders have no incentive to consider transaction costs that occur when the fund needs to sell or buy assets because they can do so at the daily NAV. Swing pricing allows a fund to address this dilution effect by allocating certain of the fund's anticipated transaction costs to redeeming and subscribing shareholders. Furthermore, because redeeming shareholders do not bear the cost of exiting a fund, shareholders might have an incentive for early redemptions in times of liquidity stress because of a first-mover advantage, which could result in further dilution of non-transacting shareholders' interests.[383] To the extent that such a first-mover advantage triggers the sale of less liquid portfolio investments at discounted or even fire sale prices, correlated investments and funds and other investors holding these and correlated investments will be negatively impacted.[384] For reasons discussed in detail below, we believe that the ability for a fund to adopt swing pricing policies and procedures should mitigate the risk of potential shareholder dilution and decrease the incentive for early redemption in times of liquidity stress.

Swing pricing regulations also are meant to address the significant growth in the assets managed by funds with strategies that focus on holding relatively less liquid investments (such as fixed income funds, including emerging market debt funds, open-end funds with alternative strategies, and emerging market equity funds), which could incur significant trading costs and

[382] We use the term "non-transacting shareholder" to reference shareholders that either remain in the fund or are already in the fund as opposed to redeeming or subscribing shareholders.

[383] *See supra* footnote 20 and accompanying text; *infra* sections III.B.1. and III.B.2.

[384] *See* Proposing Release, *supra* footnote 6, at n.54.

hence could give rise to increased dilution effects from redeeming and subscribing shareholders in those funds.[385] Furthermore, there has also been considerable growth in assets managed by funds that exhibit characteristics, for example high investor flow volatility, that also could give rise to increased dilution effects.[386] Collectively, these industry trends emphasize the importance of allowing funds to choose to use swing pricing.

B. Economic Baseline

The swing pricing regulations will affect, directly or indirectly, all funds and their investors, investment advisers and other service providers, all issuers of the portfolio securities in which funds invest, and other market participants potentially affected by fund and investor behavior. The economic baseline of the swing pricing regulations includes funds' current practices regarding swing pricing as well as the recent development of the fund industry.

1. *Funds' Current Practices Regarding Swing Pricing*

Commission rules and guidance do not currently address the ability of an open-end fund to use swing pricing to mitigate potential dilution of fund shareholders, and U.S. registered funds do not currently use swing pricing. However, as discussed above, certain foreign funds currently do use swing pricing.[387] We understand that some fund complexes that include U.S. registered funds also include foreign-domiciled funds that currently use swing pricing.

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385 *See supra* section II.C.1.*; infra* section III.B.2; *see also* Paul Hanouna, Jon Novak, Tim Riley & Christof Stahel, *Liquidity and Flows of U.S. Mutual Funds*, Division of Economic and Risk Analysis White Paper (Sept. 2015) ("DERA Study"), at 6-9, *available at* https://www.sec.gov/dera/staff-papers/white-papers/liquidity-white-paper-09-2015.pdf ("DERA Study"). Relevant statistics from the DERA Study were updated through 2015 using the CRSP US Mutual Fund Database.

386 *See infra* section III.B.2.

387 *See supra* footnotes 41-44 and accompanying text.

2. *Fund Industry Developments Related to Swing Pricing*

a. Overview

Below we discuss the size and growth of the U.S. fund industry generally, as well as the growth of various investment strategies within the industry. We show that the fund industry has grown significantly in the past two decades, and, during this period, funds with international strategies, fixed income funds, and funds with alternative strategies have grown particularly quickly. Generally, funds with these strategies are more likely to invest in assets that are less liquid, for example, when compared to domestic large capitalization equity, and therefore redeeming and subscribing investors are more likely to dilute non-transacting investors' interests. We also examine trends regarding the volatility of fund flows, discussing in particular those types of funds that demonstrate notably volatile flows. Because funds with larger flow volatility can experience higher levels of redemptions and subscriptions, which can dilute the interests of non-transacting shareholders, assessing trends regarding flow volatility can provide information about sectors of the fund industry that could be particularly susceptible to dilution effects.

b. Size and Growth of the U.S. Fund Industry and Various Investment Strategies Within the Industry

Open-end funds and ETFs manage a significant and growing amount of assets in U.S. financial markets. As of the end of 2015, there were 10,633 open-end funds (excluding money market funds, but including ETFs), as compared to 5,279 at the end of 1996.[388] The assets of these funds were $15.0 trillion in 2015, having grown from about $2.63 trillion in 1996.[389]

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388 *See* Investment Company Institute, 2016 Investment Company Fact Book (2016) ("2016 ICI Fact Book"), *available at* https://www.ici.org/pdf/2016_factbook.pdf, at 22, 176, 183. Specifically, as of the end of 2015, there were 9,039 open-end mutual funds (including funds that invest in other funds) and 1,594 ETFs. There were approximately 50 ETFs that invest in other ETFs, which are not included in our figures.

389 *See id.*, at 174, 182.

U.S. equity funds represent the greatest percentage of U.S. open-end fund industry assets.[390] As of the end of 2015, excluding ETFs, money market funds and variable annuities, open-end U.S. equity funds held 44.7% of U.S. fund industry assets. The investment strategies with the next-highest percentages of U.S. fund industry assets are foreign equity funds (16.7%), general bond funds (13.2%), and mixed strategy funds (12.3%).[391] Funds with alternative strategies[392] only represent a small percentage of the U.S. fund industry assets, but as discussed below, the number of alternative strategy funds and the assets of this sector have grown considerably in recent years.[393]

While the overall growth rate of funds' assets has been generally high (about 7.2% per year, between the years 2000 and 2015[394]), it has varied significantly by investment strategy.[395] U.S. equity funds' assets grew substantially in terms of dollars from the end of 2000 to 2015,[396] but this sector's assets as a percentage of total U.S. fund industry assets decreased from about 65% to about 45% during that same period.[397] Like U.S. equity funds, the assets of U.S. corporate bond funds, government bond funds, and municipal bond funds also increased in terms of dollars from 2000 to 2015, but each of these sectors' assets as a percentage of the fund

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390 DERA Study, *supra* footnote 385, at Table 1.

391 *Id*. The figure for general bond funds does not include assets attributable to foreign bond funds (1.9%), U.S. corporate bond funds (0.8%), U.S. government bond funds (1.4%), and U.S. municipal bond funds (4.7%).

392 Alternative funds are funds that seek total returns through the use of alternative investment strategies, including but not limited to equity market neutral, long/short equity, global macro, event driven, credit focus strategies.

393 *Id.*, at 7-8.

394 *Id.*, at Table 2.

395 The figures in this paragraph and the following paragraph, discussing the variance in growth rate of funds' assets by investment strategy, exclude ETF assets.

396 U.S. equity funds held about $5.6 trillion as the end of 2015, compared to about $2.9 trillion at the end of 2000. DERA Study, *supra* footnote 385, at Table 2.

397 *Id*., at Table 2.

industry decreased during this period.[398] On the other hand, the assets of foreign equity funds, general bond funds, and foreign bond funds increased steadily and substantially as a percentage of the fund industry over the same period.[399] For example, foreign equity funds increased steadily from 10.6% of total industry assets in 2000 to 16.7% in 2015. And within these three investment strategies, certain investment subclasses (emerging market debt and emerging market equity) have grown particularly quickly from 2000 to 2015.[400] The overall growth rate of funds' assets between the years 2000 and 2015 was greater for index funds (12.3%) than actively managed funds (4.9%).[401]

The assets of funds with alternative strategies[402] also have grown rapidly in recent years. From 2005 to 2015, the assets of alternative strategy funds grew from $366 million to $310 billion, and from the end of 2011 to the end of 2013, the assets of alternative strategy funds grew

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398 *Id*. U.S. corporate bond funds held about $95 billion at the end of 2015, as opposed to $66 billion in 2000; these funds' assets as a percentage of the U.S. fund industry decreased from 1.5% in 2000 to 0.8% in 2015. U.S. government bond funds held about $174 billion at the end of 2015, as opposed to $91 billion in 2000; these funds' assets as a percentage of the U.S. fund industry decreased from 2.1% in 2000 to 1.4% in 2015. U.S. municipal bond funds held about $592 billion at the end of 2015, as opposed to $278 billion in 2000; these funds' assets as a percentage of the U.S. fund industry decreased from 6.3% in 2000 to 4.7% in 2015.

399 *Id*. Foreign equity funds held about $2.1 trillion in 2015, as opposed to $465 billion in 2000. U.S. general bond funds held about $1.7 trillion at the end of 2015, as opposed to $240 billion in 2000; these funds' assets as a percentage of the U.S. fund industry increased from 5.4% in 2000 to 13.2% in 2015. Foreign bond funds held about $244 billion at the end of 2015, as opposed to $19 billion in 2000; these funds' assets as a percentage of the U.S. fund industry increased from 0.4% in 2000 to 1.9% in 2015.

400 *Id.*, at 9. Emerging market debt and emerging market equity funds held about $289 billion at the end of 2015, as opposed to $20 billion in 2000. The assets of emerging market debt funds and emerging market equity funds grew by an average of 18.1% and 19.8%, respectively, each year from 2000 through 2015.

These investment subclasses represent a small portion of the U.S. mutual fund industry (the combined assets of these investment subclasses as a percentage of the U.S. fund industry was 2.3% at the end of 2015).

401 *See* 2016 ICI Fact Book, *supra* footnote 388, at 174, 218.

402 While there is no clear definition of "alternative" in the mutual fund space, an alternative mutual fund is generally understood to be a fund whose primary investment strategy falls into one or more of the three following buckets: (i) non-traditional asset classes (for example, currencies or managed futures funds); (ii) non-traditional strategies (such as long/short equity, event driven); and/or (iii) less liquid assets (such as private debt). Their investment strategies often seek to produce positive risk-adjusted returns that are not closely correlated to traditional investments or benchmarks, in contrast to traditional mutual funds that historically have pursued long-only strategies in traditional asset classes.

by an average rate of almost 80% each year. However, as discussed above, funds with alternative strategies remain a relatively small portion of the U.S. fund industry as a percentage of total assets.[403]

c. Significance of Fund Industry Developments

The industry developments discussed above are notable for several reasons. The growth of funds generally over the past few decades demonstrates that investors have increasingly come to rely on investments in funds to meet their financial needs.[404] These trends also demonstrate growth in particular types of funds that may entail increased concerns about dilution of non-transacting shareholder interests. In particular, there has been significant growth in high-yield bond funds, emerging market debt funds, and funds with alternative strategies, which generally invest in less liquid assets. Commissioners and Commission staff have previously spoken about the need to focus on potential liquidity risks relating to fixed income assets and fixed income funds,[405] and within this sector, funds that invest in high-yield bonds could be subject to greater liquidity risk as they invest in lower-rated bonds that tend to be less liquid than investment grade fixed income securities.[406] Similarly, emerging market debt funds may invest

403 *See supra* footnote 393 and accompanying text.

404 *See* Proposing Release, *supra* footnote 6, at section II.A.

405 *Id.*, at n.62 and accompanying text.

406 The Commission and Commission staff have cautioned that high yield securities may be considered to be illiquid, depending on the facts and circumstances. *See* Periodic Repurchases by Closed-End Management Investment Companies; Redemptions by Open-End Management Investment Companies and Registered Separate Accounts at Periodic Intervals or with Extended Payment, Investment Company Act Release No. 18869 (July 28, 1992) [57 FR 34701 (Aug. 6, 1992)]; *see also* SEC Investor Bulletin, What Are High-Yield Corporate Bonds?, SEC Pub. No. 150 (June 2013), *available at* http://www.sec.gov/investor/alerts/ib_high-yield.pdf (noting that high-yield bonds may be subject to more liquidity risk than, for example, investment-grade bonds). *But see* BlackRock, *Who Owns the Assets? A Closer Look at Bank Loans, High Yield Bonds and Emerging Market Debt*, Viewpoint (Sept. 2014) ("Who Owns the Assets?"), *available at* https://www.blackrock.com/corporate/en-fi/literature/whitepaper/viewpoint-closer-look-selected-asset-classes-sept2014.pdf (discussing the liquidity characteristics of high-yield bond funds in depth, and noting that these funds have weathered multiple market environments, and are generally managed with multiple sources of liquidity).

in relatively illiquid securities with lengthy settlement periods.[407] Likewise, funds with alternative strategies may hold portfolio investments that are relatively illiquid.[408] Moreover, Commission staff economists have found that both foreign bond funds (including emerging market debt funds) and alternative strategy funds have historically experienced relatively more volatile flows than the average mutual fund,[409] which would indicate the possibility of increased dilution effects from redeeming and subscribing shareholders in these funds.

One commenter has argued that flow volatility, which staff economists have used as a measure of liquidity risk, does not necessarily translate into liquidity risk.[410] While we agree that flow volatility is not the sole determinant of liquidity risk for a fund, flow volatility reflects flows out of and into funds and hence is associated with transactions in fund investment assets, which can dilute non-transacting shareholders' interest.

C. Benefits and Costs, and Effects on Efficiency, Competition, and Capital Formation

Taking into account the goals of the final swing pricing regulations and the economic baseline, as discussed above, this section discusses the benefits and costs of the swing pricing regulations, as well as the potential effects of the swing pricing regulations on efficiency,

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407 *See, e.g.*, Comment Letter of the Global Foreign Exchange Division to the European Commission and the European Securities and Markets Authority re: Consistent Regulatory Treatment for Incidental Foreign Exchange (FX) Transactions Related to Foreign Securities Settlement—"FX Security Conversions" (Mar. 25, 2014), *available at* www.gfma.org/Initiatives/Foreign-Exchange-(FX)/GFMA-FX-Division-Submits-Comments-to-the-HKMA-on-the--Treatment-of-Securities-Conversion-Transactions-under-the-Margin-and-Other-Risk-Mitigation-Standards ("Typically, the settlement cycle for most non-EUR denominated securities is trade date plus three days ('T+3'). Accordingly, the bank custodian or broker-dealer would enter into a FX transaction on a T+3 basis as well. In some securities markets, for example in South Africa, the settlement cycle can take up to seven days (T+7)."). *But see* Who Owns the Assets?, *supra* footnote 406 (noting that emerging market debt funds tend to hold a portion of their assets in developed market government bonds (providing further liquidity), generally establish limits on less liquid issuers, and generally maintain allocations to cash for liquidity and rebalancing purposes).

408 *See* Proposing Release, *supra* footnote 6, at nn.71-72 and accompanying text.

409 DERA Study, *supra* footnote 385, at 16-24.

410 Comment Letter of Investment Company Institute (May 17, 2016).

competition, and capital formation. This section also discusses the disclosure, reporting, and recordkeeping requirements regarding swing pricing and reasonable alternatives to rule 22c-1(a)(3).

1. *Requirements of Rule 22c 1(a)(3)*

Under rule 22c-1(a)(3), a fund (with the exception of a money market fund or ETF) would be permitted to establish and implement swing pricing policies and procedures that would, under certain circumstances, require the fund to use swing pricing to adjust its current NAV as an additional tool to lessen potential dilution of the value of outstanding redeemable securities caused by shareholder purchase or redemption activity. In order to use swing pricing under the rule, a fund would be required to establish and implement swing pricing policies and procedures.[411] These policies and procedures must: (i) provide that the fund will adjust its NAV by amounts designated as the "swing factor(s)" once the level of net purchases or net redemptions from the fund has exceeded specified strictly positive percentage(s) of the fund's net asset value known as the "swing threshold(s)";[412] (ii) specify the process for how the fund's swing threshold(s) are determined, considering certain specified factors;[413] and (iii) specify the process for how the swing factor(s) are determined, which must include the establishment of an upper limit on the swing factor(s) used, taking into account certain considerations and not exceeding a maximum of two percent of the fund's NAV per share.[414]

A fund's board, including a majority of the fund's independent directors, will be required to approve the fund's swing pricing policies and procedures, which policies and procedures must

[411] Proposed rule 22c-1(a)(3)(i).

[412] Rule 22c-1(a)(3)(i)(A).

[413] Rule 22c-1(a)(3)(i)(B).

[414] Rule 22c-1(a)(3)(i)(C).

specify the process for setting swing thresholds, swing factor(s), and swing factor upper limits.[415] In addition, the board must approve the fund's swing threshold(s) and swing factor upper limit (including any changes thereto).[416] The board also will be required to designate the fund's investment adviser or officers responsible for administration of the fund's swing pricing policies and procedures.[417] Additionally, the board will be required to review, no less frequently than annually, a written report prepared by the swing pricing administrator that describes: (i) its review of the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution; (ii) any material changes to the fund's swing pricing policies and procedures since the date of the last report; and (iii) its review and assessment of the fund's swing threshold(s), swing factor(s), and swing factor upper limit considering the requirements of the rule, including the information and data supporting these determinations.[418]

A fund that adopts swing pricing policies and procedures will be required to keep certain records, including its swing pricing policies and procedures and a written copy of the periodic report provided to the board,[419] as well as records of support for each computation of an adjustment to the fund's NAV based on the fund's swing pricing policies and procedures.[420] A fund that engages in swing pricing will be required to make certain disclosures, including disclosure of the fund's swing factor upper limit, on Form N-1A and Form N-CEN.[421] A fund

415 Rule 22c-1(a)(3)(ii)(A).

416 Rule 22c-1(a)(3)(ii)(B).

417 Rule 22c-1(a)(3)(ii)(C).

418 Rule 22c-1(a)(3)(ii)(D).

419 Rule 22c-1(a)(3)(iii).

420 Amendment to rule 31a-2(a)(2).

421 *See* Item 4(b)(2)(ii), Item 4(b)(2)(iv)(E), and Item 6(d) of Form N-1A; Item C.21 of Form N-CEN.

that uses swing pricing will also be required to reflect its use of swing pricing in its financial statements and on Form N-1A.[422]

The final rule modifies the proposal's swing pricing provisions in several ways that may have economic consequences, including: (1) funds may establish multiple swing thresholds, each with a separate corresponding swing factor, and these factors can differ for subscriptions and redemptions; (2) a fund's board is still required to approve the fund's swing pricing policies and procedures, but the final rule also requires that the policies and procedures specify the process for determining a swing threshold(s), factor(s), and swing factor upper limit; (3) funds must report the upper limit of the swing factor(s)—but not swing factor(s) or threshold(s)—on Form N-CEN and in their prospectus, along with disclosure of the effects of swing pricing; (4) the fund board must approve the fund's swing threshold(s) and an upper limit on the swing factor(s) that are used by a fund (which may not exceed two percent of NAV per share), and any changes to the swing threshold or swing factor upper limit; and (5) the board must periodically review a written report from the swing pricing administrator that describes: (a) the swing pricing administrator's review of the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution; (b) any material changes to the fund's swing pricing policies and procedures since the date of the last report; and (c) the swing pricing administrator's review and assessment of the fund's swing threshold(s), swing factor(s), and swing factor upper limit considering the requirements of the rule, including the information and data supporting these determinations.

a. Benefits

We believe rule 22c-1(a)(3) will promote investor protection by providing funds with a

[422] *See* Item 13 of Form N-1A and amendments to Regulation S-X.

tool to reduce the potentially dilutive effects of shareholder purchase or redemption activity. Rule 22c-1 under the Investment Company Act, the "forward pricing" rule, requires a fund to price its shares based on the current market prices of its portfolio assets next computed after receipt of an order to buy or redeem shares.[423] Swing pricing may allow funds to more fairly distribute transactions costs, resulting from either subscriptions or redemptions, to the investors who initiate those transactions. For example, net redemptions may require a fund to sell a portion of its assets. Any difference between the sale price of these assets (which may occur on or after the redemption date depending on when fund flows are received) and the price at which they are valued when the fund's NAV is struck on the redemption date (which may not yet reflect transactions executed on that date under rule 2a-4) is shared across all fund shareholders. Non-transacting shareholders may benefit or suffer depending on this difference, but on average are likely to experience dilution because of the trading costs incurred when assets are sold. Similarly, while net subscriptions do not require a fund to purchase assets immediately, non-transacting shareholders will share the costs of investing the subscription proceeds if and when that occurs, and these costs will not be reflected in the NAV on the subscription date.

While swing pricing does not eliminate non-transacting investors' exposure to this dilution risk—for example, it is possible the swung adjusted NAV on a given day under or overestimates the costs incurred by the fund, or that the fund would not be able to swing in an amount sufficient to recoup all transactions costs because of the swing factor upper limit, or that costs related to redemptions or subscriptions other than the costs permitted to be considered in setting the swing factor are incurred—to the extent that funds are able to effectively calibrate their swing factors, non-transacting investors should, on average, pay a reduced share of the

423 *See* rule 22c-1(a).

trading costs imposed on the fund by redeeming and subscribing investors on days when swing pricing is triggered. Swing pricing provides funds with an additional tool to pass estimated near-term costs stemming from shareholder purchase or redemption activity on to the shareholders associated with that activity, and could therefore lessen dilution of non-transacting shareholders and limit any possible redemptions motivated by a potential first-mover advantage.

Commission rules and guidance do not currently address the ability of a fund to use swing pricing to mitigate potential dilution of fund shareholders, and the Commission's current valuation guidance could raise questions about making such a NAV adjustment. The swing pricing rule provides the regulatory framework that a fund can optionally apply to adjust its NAV in order to effectively pass on estimated trading costs to purchasing or redeeming shareholders, and requires a fund that conducts swing pricing to do so in accordance with policies, procedures, and other restrictions designed to promote all shareholders' interests. Because we cannot prospectively measure the extent to which the swing pricing policies and procedures that a fund may adopt would mitigate potential dilution, we are unable to quantify the total potential benefits discussed in this section.[424] However, analysis by fund groups of their funds domiciled in regions that allow swing pricing indicates that return performance is significantly improved for funds that use swing pricing,[425] which is consistent with a reduction in dilution, though some commenters did point out that swing pricing can lead to an improvement in fund performance even if the swing pricing policy is unrelated to costs incurred by the fund.[426]

Relative to the proposal, the final rule's additional flexibility in defining swing pricing

[424] There is no database currently available that identifies whether a foreign-domiciled fund uses swing pricing or the structure of a fund's swing pricing program (*e.g.*, full swing pricing versus partial swing pricing).

[425] *See* BlackRock Fund Structures Paper, *supra* footnote 46. The study does not show the extent to which the costs assessed to transacting investors via swing pricing accurately reflect realized trading costs.

[426] Eaton Vance Comment Letter.

policies—the options to employ multiple swing thresholds with attendant swing factors—should allow a fund to more accurately reflect its estimated trading costs when the fund chooses to swing its NAV, and may encourage funds that otherwise would not have employed swing pricing to use it, potentially reducing investor dilution further.

Requiring the fund to set an upper limit (which may not exceed two percent of NAV per share) on the swing factor(s), as the final rule does, could reduce the benefits of swing pricing to non-transacting investors in that funds are less able to use swing pricing to reallocate all of the costs of transactions to redeeming or subscribing shareholders, because costs would exceed the upper limit. However, transacting investors could benefit from an upper limit (and the required disclosure of an upper limit), in that there would be a maximum cost that they could face were they to purchase or redeem shares on a day when the fund swings its NAV and hence reduce some of the uncertainty when making the decision to enter or exit a fund.

The final rule's limitation on the types of costs that can be considered in setting a swing factor has similar trade-offs: the benefits of swing pricing to non-transacting shareholders are constrained, given that certain costs that are incurred as a result of the redemption or subscription activity could not be allocated to transacting investors. However, transacting shareholders could benefit from the limitation, in that the fund would have less flexibility to allocate to transacting investors costs that are less directly related to the fund's actual transaction costs. Constraining a fund's flexibility in this manner could limit potential abusive uses of swing pricing (*e.g.*, swinging in an amount greater than the costs of redemptions or subscriptions in order to artificially enhance fund returns). The final rule's express requirement that the swing factor reasonably relate to the cost of meeting subscriptions or redemptions could similarly help protect transacting investors against potential abusive uses of swing pricing.

Finally, investors should benefit from the increased accountability that the final rule provides in requiring a fund's board to approve swing pricing policies and procedures, approve the fund's swing factor upper limit (which may not exceed two percent of NAV per share), approve the fund's swing threshold(s), and approve any changes to a fund's swing factor upper limit or swing threshold(s). The final rule also requires the fund board to periodically review a written report from the swing pricing administrator describing: (i) its review of the adequacy of the swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution; (ii) any material changes to the fund's swing pricing policies and procedures since the date of the last report; and (iii) its review and assessment of the fund's swing threshold(s), swing factor(s), and swing factor upper limit considering the requirements of the rule, including the information and data supporting these determinations. Given that our rule permits the use of swing pricing for the first time in the U.S., additional board attention to the fund's swing pricing practices could be beneficial. Similarly, board review of a report that reviews and assesses the fund's swing threshold(s), swing factor(s), and swing factor upper limit considering the requirements of the rule, including the information and data supporting these determinations, could raise the quality and rigor of funds' formulating these important determinations, which also benefits investors.

Commenters generally agreed with the proposal's assessment of swing pricing's potential benefits, but they also brought up technological and operational hurdles that could impede its implementation by most funds, which we discuss below. Without a change in industry practice, the operational issues cited by commenters may prevent the benefits of swing pricing from being achieved by some funds, but it is still likely that a small fraction of funds will be able to implement it, and the rule does not require funds to use swing pricing (it is a discretionary tool).

Additionally, sufficiently high investor demand for implementing swing pricing after the rule is adopted may spur market-wide operational innovations which reduce these operational hurdles.

One commenter stated that the nature by which swing pricing reallocates costs was a "zero-sum game" across different investors (subscribing, redeeming, and non-transacting) and that in aggregate swing pricing reduces shareholder value after incurring the costs of operating the policy.[427] While it is true that swing pricing does transfer costs across different investors, the goal of swing pricing is to allow for a more fair allocation of these costs. Swing pricing is optional, so funds can decide whether a more fair allocation of costs justifies the operational costs associated with implementing swing pricing. The same commenter also suggested that depending on the ratio of purchases to redemptions for a given net fund flow, swing pricing does not allow non-transacting shareholders to capture all of the proceeds recovered from transacting shareholders when the NAV is swung, and shows using its own historical fund flows that this reduction can be significant (ranging as high as 91% when a swing threshold of zero was used). We acknowledge that swing pricing may not allow all of the costs assessed to transacting shareholders to be returned to the fund, though any reallocation of costs from transacting to non-transacting shareholders reduces dilution. Because swing pricing is optional, funds can determine whether this type of benefit reduction is likely given their historical fund flow patterns and whether the net reduction in shareholder dilution is expected to justify the costs of implementing swing pricing.

b. Costs

Generally, implementing swing pricing may increase a fund's return volatility and could increase the tracking error relative to a fund's benchmark. However, the impact of swing pricing

[427] Eaton Vance Comment Letter.

on volatility and tracking error should decrease as a function of the time over which returns and tracking errors are measured: for example, the impact of swing pricing on daily return volatility and tracking error will likely be much greater than the impact on monthly volatility and tracking error. Enabling funds to have multiple swing thresholds and factors, as well as limiting swing factors to be at most 2% of the funds NAV, also potentially lessens swing pricing's impact on volatility and tracking error.

In addition, swing pricing exposes transacting investors to additional uncertainty about the price at which their fund shares will ultimately be purchased or redeemed relative to the economic baseline. For example, under existing regulations, investors who submit purchase or redemption orders on a given date face uncertainty about the price they will transact at until the NAV is next struck. Under the adopted rule, investors face an additional source of uncertainty surrounding the eventual price they will transact at because this price will also depend on net fund flows on the trade date and any resultant NAV adjustment via swing pricing protocols. They may end up transacting at a better (*e.g.*, if they are subscribing on a day the NAV is adjusted downwards) or worse (*e.g.*, if they are redeeming on a day the NAV is adjusted downwards) price, but they are facing an additional source of uncertainty relative to current practices. This uncertainty is limited in that investors will know the fund's swing factor upper limit. Investors will not be able to purposefully take advantage of swing pricing to obtain a better price without knowledge of contemporaneous intraday flows and a fund's swing thresholds, neither of which funds are required to publicly disclose and will not be required to disclose under the rule.

If a fund's swing threshold(s) and factor(s) are accurately calibrated to reflect the costs incurred as a result of significant net subscriptions and redemptions, the increased execution price risk faced by investors who transact in a fund should be offset by a decrease in the dilution that non-transacting investors would otherwise face if the fund's NAV was never adjusted. The rule's limitation on a swing factor's maximum size may reduce the extent to which funds that face higher trading costs are able to reflect those costs in their swing factor(s), but it also reduces the execution risk faced by investors who transact in these funds. We acknowledge commenter concerns that estimating the trading costs associated with various redemption levels is not trivial, and swing pricing programs are unlikely to anticipate trading costs perfectly, so a given fund's swing factor may overstate or understate the expected transaction costs associated with a given transaction.[428] For example, the rule requires a fund to apply a swing factor when its net flows cross a certain threshold, but the actual costs to be incurred will vary with other factors such as the fund's portfolio on the date the NAV is swung, the trades they decide to execute to meet a given redemption, or any macroeconomic factors that affect bid-ask spreads. If a swing factor underestimates or is unable to capture the true trading costs for a fund, non-transacting shareholders of the fund will still benefit from swing pricing, but to a lesser extent. If a fund overestimates its swing factor, non-transacting shareholders will be enriched by its swing pricing program (and the fund's NAV will reflect it), but this increase in wealth will be at the expense of transacting shareholders, who are paying more than the true cost of their transactions. To the extent that a fund cannot perfectly estimate the swing factors appropriate for it, the fund may have an incentive to overestimate these factors because it will increase observed fund performance. Given the limited swing pricing disclosures a fund must make, it may also be difficult for investors to determine if the swing factor has charged them in excess of true trading costs, and may make it difficult for investors to disentangle true fund performance from swing

[428] Eaton Vance Comment Letter.

pricing effects.

Several of the provisions of the final rule could mitigate any incentive a fund has to overestimate its swing factor: (i) requiring board approval of a fund's swing pricing policies and procedures, which must specify the processes used to determine the swing threshold(s), swing factor(s), and swing factor upper limit; (ii) requiring board approval of the swing threshold(s) and swing factor upper limit, as well as any changes to these quantities; (iii) adding an express requirement that swing factors be reasonably related to the near-term costs resulting from subscriptions and redemptions and limiting the near-term costs that may be considered in determining the swing factor(s); (iv) requiring the establishment of an upper limit on the swing factor(s) used, which may not exceed two percent of NAV per share; (v) requiring that the investment adviser, officer, or officers responsible for administrating a fund's swing pricing policies and procedures must be reasonably segregated from portfolio management of the fund, and may not include portfolio managers; and (vi) requiring the board to periodically review a written report prepared by the swing pricing administrator that describes: (a) its review of the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution; (b) any material changes to the fund's swing pricing policies and procedures since the date of the last report; and (c) its review and assessment of the fund's swing threshold(s), swing factor(s), and swing factor upper limit considering the requirements of the rule, including the information and data supporting these determinations.

Each fund that chooses to adopt swing pricing policies and procedures pursuant to rule 22c-1(a)(3) will incur one-time costs to develop and implement the policies and procedures, as well as ongoing costs relating to administration of the policies and procedures, as will intermediaries and third party service providers. To the extent that fund advisers, intermediaries, and other service providers are able to pass their costs along to funds, we believe it is likely that these costs will also be passed on, at least in part, to fund investors.[429] As discussed above, while U.S. registered funds do not currently use swing pricing to mitigate potential dilution, certain foreign funds affiliated with U.S. fund families currently do use swing pricing.[430] In the proposal, we stated that U.S. registered funds in fund complexes that also include foreign-domiciled funds that use swing pricing may incur relatively lower costs to implement swing pricing policies and procedures pursuant to the rule. However, several commenters pointed out that fundamental differences exist between fund operations in the U.S. and Europe, including the more timely arrival of flow information in Europe due to earlier trading cut-off times, a higher portion of direct-sold funds in Europe, and the more prevalent use of currency-based orders in Europe (which removes the need for flow estimation cycles).[431] We acknowledge that these differences mean that it is less likely funds will be able to leverage preexisting systems from other jurisdictions, though they may still be able to leverage their general expertise with swing pricing in other countries in developing appropriate policies and procedures. They are still likely to face the same operational hurdles as other funds in obtaining timely fund flow information in the U.S.

Commenters also expressed concern that the analysis of costs did not consider the substantial costs and technology and operational hurdles that must be resolved for intermediaries

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[429] Commenters suggested this as well, *see* BlackRock Comment Letter; GARP Comment Letter; Charles Schwab Comment Letter.

[430] *See supra* section II.A.1.

[431] *See, e.g.*, ICI Comment Letter I; T. Rowe Comment Letter; IDC Comment Letter; PIMCO Comment Letter; GARP Comment Letter; Blackrock Comment Letter; Invesco Comment Letter.

to provide the net flow information necessary to perform swing pricing.[432] We agree that there may be significant costs for many fund complexes and intermediaries to implement swing pricing and have revised our estimates of the implementation costs discussed below to incorporate commenter suggestions. At the same time, commenters also suggested ways that funds, intermediaries, and other third parties could coordinate to make the implementation of swing pricing feasible, and stated that they believed the long-term benefits of swing pricing outweighed the one-time costs of enabling swing pricing in the U.S.[433]

The final rule's swing pricing provisions are being adopted with a two-year extended effective date, which, as discussed above, several commenters requested. With respect to costs, the extended effective date may result in more efficient industry-wide approaches to providing funds with timely flow estimates in determining whether and by how much their NAVs will be adjusted on a given date. For example, if funds and intermediaries are able to coordinate with each other to develop standards and timing conventions for how data is transmitted to enable the timely estimation of flows instead of developing ad-hoc individual processes, the aggregate costs of implementing swing pricing are likely to be lower on a per fund basis. However, to the extent individual funds or intermediaries do not participate on a coordinated approach, progress on a more efficient collective solution to swing pricing's operational challenges may be hindered and the extended effective date may simply postpone the adoption of swing pricing relative to an immediate effective date. On the other hand, if swing pricing were made effective immediately and a significant portion of funds wanted to adopt it, market pressures could spur industry-wide

432 Dechert Comment Letter; Eaton Vance Comment Letter; ICI Comment Letter I; IDC Comment Letter; Invesco Comment Letter; J.P. Morgan Comment Letter; Charles Schwab Comment Letter; T. Rowe Comment Letter.

433 *See, e.g.,* GARP Comment Letter.

solutions and innovations that reduce implementation costs and make swing pricing operationally feasible for a broader group of funds.

The costs of implementing swing pricing policies and procedures could vary depending on the level of liquidity risk facing the fund, as well as the sources of the fund's liquidity risk. To determine a fund's swing threshold, rule 22c-1(a)(3) would require a fund to consider certain of the factors required to be considered as part of the liquidity risk assessment required under rule 22e-4.[434] Therefore, the costs associated with developing policies and procedures for determining the swing threshold could also vary according to similar factors that could cause differences in the costs to funds associated with rule 22e-4.[435]

As noted above, commenters suggested the proposal underestimated the activities required for a fund, in conjunction with its intermediaries, to implement swing pricing. We acknowledge that the adoption of swing pricing could cause significant costs to be incurred by intermediaries (which are discussed below) and by funds in terms of the systems and processes they need to develop to receive timely flow data from intermediaries. A fund that adopts swing pricing will incur costs associated with the following activities: (i) developing swing pricing policies and procedures that include all of the elements required under the rule,[436] as well as policies and procedures relating to the recordkeeping requirements associated with swing

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[434] *See* rule 22c-1(a)(3)(i)(B). Specifically, the requirement for a fund to consider: (i) the size, frequency, and volatility of historical net purchases and net redemptions of fund shares during normal and stressed periods, (ii) the fund's investment strategy and the liquidity of the fund's portfolio investments, and (iii) the fund's holdings of cash and cash equivalents, and borrowing arrangements and other funding sources overlap with certain of the proposed liquidity risk assessment factors. *See* rule 22e-4(b)(iii)(A), (B), and (D). *See also* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8, at section III.B.

[435] *See* Liquidity Risk Management Programs Adopting Release, *supra* footnote 8, at section IV.C.1.c.

[436] Rule 22c-1(a)(3)(i).

pricing;[437] (ii) planning, coding, testing, and installing any system modifications for receiving, estimating, aggregating and transmitting sufficient shareholder flow information for the fund's transfer agent and pricing agent, in order to determine if the fund's NAV should be adjusted pursuant to the fund's swing pricing policies and procedures; (iii) integrating and implementing the fund's swing pricing policies and procedures, as well as policies and procedures relating to the financial reporting and recordkeeping requirements associated with swing pricing; (iv) developing any relevant compliance, control and testing procedures; (v) establishing procedures for the periodic review and back-testing of swing threshold(s), swing factor(s), swing factor upper limit, and flow estimates; (vi) preparing training materials and administering training sessions for staff in affected areas; (vii) board approval of the fund's swing pricing policies and procedures, which specify the processes used to determine the swing threshold(s), swing factor(s), and swing factor upper limit; (viii) board approval of the fund's swing threshold(s) and swing factor upper limit, and any changes to the swing threshold(s) and swing factor upper limit; and (ix) board periodic review of the written report prepared by the swing pricing administrator.

The proposal estimated the one-time costs of implementing a swing pricing program as being in the range of $1.3 million to $2.25 million per fund complex by assuming costs were similar to those associated with the fees and gates provision of the Commission's 2014 money market reform rule. The only alternative estimate of swing pricing implementation costs came from a commenter who stated that its experience complying with the money market reform rule suggested those estimates were severely understated, and that it believed that implementing a swing pricing program would be four to five times more costly than the proposal's estimate.[438]

[437] Rule 22c-1(a)(3)(iii); rule 31a-2(a)(2).

[438] Charles Schwab Comment Letter.

We extrapolate from this commenter's estimate to obtain estimates for all fund complexes, producing estimated one-time costs ranging from $2.4 million to $48.5 million per fund complex to implement swing pricing, with an average cost per fund complex of $3.4 million.[439] These costs estimates should be considered an upper bound for two reasons: (1) they assume a fund complex implements swing pricing for all of its funds; (2) they assume a fund develops all systems and processes associated with swing pricing in-house, but if third-party solutions become available funds may be able to reduce some of their swing pricing implementation costs.

In the proposal, we estimated that the ongoing costs of adopting a swing policy would range from 5% to 15% of the one-time costs. We recognize that, relative to our discussion of costs in the proposal, funds will have to maintain substantial systems and procedures to estimate fund flows, and believe it's reasonable to increase this range from 5% to 32.5%.[440] Again using the fund-by-fund cost approach above based on a commenter's estimate of the one-time costs, we estimate that ongoing costs to fund complexes would range from $120,000 to $15.8 million, with the average fund having costs in the range of $170,000 to $1.1 million. The low end of the range might be achieved by small complexes that are direct-sold, whereas the high end of the range could correspond to very large fund complexes that primarily distribute their funds through a wide variety of intermediaries and use swing pricing for many of their funds. These estimated

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439 The commenter, Charles Schwab Investment Management, has 52 funds. A multiple of 4-5 times the proposals estimate produces a range of $5.2 million to $11.25 million, and we assume the commenter's costs are in the middle of that range at $8 million. Assuming a fixed cost of 30%, and that costs beyond that scale with the number of funds, we arrive at an estimated one-time costs for each fund complex, and calculate the minimum, maximum, and average across those fund complexes.

440 *See* Invesco Comment Letter. The commenter estimated that the asset classification requirement of proposed rule 22e-4 would involve one-time costs of $2 million and ongoing costs of $650,000. This ongoing cost estimate represents 32.5% of the one-time cost estimate associated with that proposed requirement. *See also* Investment Company Liquidity Risk Management Programs, *supra* footnote 8, at n. 1097 and surrounding discussion. We assume swing pricing programs will, at the high end, involve on-going costs that are the same proportion of one-time costs (32.5%).

costs are attributable to the following activities, as applicable to each of the funds within the complex that adopts swing pricing policies and procedures: (i) costs associated with monitoring whether the fund's net purchases or net redemptions cross the swing threshold (which could include costs associated with obtaining shareholder flows from its transfer agent, including sufficient information on flows from the funds intermediaries, in order to reasonably estimate its daily net flows) (implicated by rule 22c-1(a)(3)(i)(A)); (ii) adjusting the fund's NAV when the fund's net purchases or net redemptions cross the swing thresholds, including costs associated with determining the swing factors that would be used to adjust the fund's NAV when the fund's swing thresholds are exceeded (rule 22c-1(a)(3)(i)(A), rule 22c-1(a)(3)(i)(C)); (iii) periodic review of the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution, as well as periodic review of fund's swing threshold(s), swing factor(s) and swing factor upper limit, and related board reporting requirements (rule 22c-1(a)(3)(ii)(D)); (iv) systems maintenance; (v) compliance costs and the back-testing of flow estimation procedures; (vi) additional staff training; and (vii) recordkeeping (rule 22c-1(a)(3)(iii), amendments to rule 31a-2(a)(2)).[441] Funds would also incur costs if they began distributing their fund through new intermediaries, as they would need to integrate that intermediary into the systems used to determine if fund flows have exceeded a swing threshold. We note that for purposes of our PRA analysis, we estimate that, relative to the proposal, half as many fund complexes (84 fund complexes) will implement swing pricing.[442]

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441 We anticipate that, depending on the personnel (and/or third-party service providers) involved in the activities associated with administering a fund's swing pricing policies and procedures, certain of the estimated ongoing costs associated with these activities could be borne by the fund, and others could be borne by the adviser.

442 *See infra* footnote 489 and surrounding discussion regarding the revision to the number of funds expected to implement swing pricing in the PRA analysis.

Based on this estimate and our estimate of the average per fund complex cost above, we estimate that the aggregate cost to implement swing pricing will be $286 million.[443]

While the proposal incorporated the costs to intermediaries and other third-party service providers into its estimates at the fund complex level, we recognize, based on the operational issues raised by commenters, that these parties will incur significant separate costs to make swing pricing feasible. Specifically, new processes and procedures will need to be established across a wide variety of intermediaries and service providers to gather and transmit sufficient flow information prior to the striking of the fund's NAV. Costs will be incurred by fund transfer agents, pricing agents, intermediaries and service providers to facilitate the movement of flow data to funds earlier in the evening. This will include new estimated flow data that will need to be generated by retirement plans and third-party administrators as intermediaries that will likely be sent via new files and processing cycles through the NSCC. Further changes to transaction processing and nightly processing may occur if the delivery of fund NAVs is pushed to later in the evening to accommodate swing pricing. Compressing processing times could increase risk and costs if there is less time for intermediaries to confirm transactions with funds and update shareholder records on a timely basis.

Commenters did not provide estimates for the costs that swing pricing will cause intermediaries to incur, which are likely to vary widely depending on the specific role each intermediary plays in the process of providing funds with the flow information swing pricing policies are dependent upon. For example, a small retirement plan that only needs to transmit data in a more timely fashion as a result of swing pricing might incur one-time costs in the tens

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[443] *See supra* footnote 439 and surrounding discussion regarding cost estimates on a per fund complex basis. The aggregate cost is estimated as 84 fund complexes x $3.4 million = $286 million.

of thousands of dollars to upgrade its systems, while a central fund transaction processing utility such as the NSCC might incur costs similar in magnitude to the largest fund complexes (in the tens of millions of dollars) to build systems that reliably process flow data for a broad range of their participants. Intermediaries such as broker-dealers and retirement plan administrators that use the services of the utility may incur costs in the middle of this range (in the hundreds of thousands to the millions of dollars) to enable the processing of flow data from any smaller intermediaries or clients they service in addition to any share of NSCC costs they pay.[444] Similarly, we would expect ongoing costs for a given entity to be a percentage of the entity's one-time costs, in the range of 10% to 25%.[445] To the extent intermediaries are able to pass on these costs to funds, it is likely that investors will ultimately pay some share of the expenses intermediaries incur in the form of higher operating expenses or management fees. Given these additional costs, each fund will need to determine whether the higher operational costs of swing pricing—including both external costs passed on from intermediaries and internal costs associated with their own systems, policies, and procedures—are justified by swing pricing's anti-dilutive benefits.

Commenters also emphasized that those costs went beyond needing to create systems, policies, and procedures. They suggested that total costs include potential damage to investors, investment advisers, and service providers that would occur if operational requirements are not

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444 The low end of this estimate, which is more likely to apply to broker-dealers than retirement plan administrators, is of the same order of magnitude as the costs to intermediaries associated with processing and reporting transactions in other SEC rulemakings. *See, e.g.* Regulation SBSR – Reporting and Dissemination of Security-Based Swap Information, Exchange Act Release No. 74245 (Feb. 11, 2015) [80 FR 14739 (Mar. 19, 2015)] (estimating the one-time costs for trade execution platforms and registered clearing agencies to develop transaction processing systems and report transaction-level information to swap data repositories).

445 There could also be additional costs incurred by more ancillary parties. For example, data providers that disseminate or third parties that analyze fund NAV may have to update their operations.

able to be effectively implemented because of current practices in the U.S. fund market.[446] We recognize that if funds use inaccurate estimates of daily flows because actual values are not available before funds must strike their NAV, then a fund may swing its price unnecessarily or fail to swing its price when necessary. Under the final rule, a fund is required to "reasonably estimate whether it has crossed the swing threshold with high confidence," which should reduce the probability that a fund swings its NAV based on inaccurate flow information and, in cases where this does happen, does not require the fund to consider it a NAV error as long as the flow estimates used were of "high confidence."

Relative to the proposal, the final rule also changes the role of a fund's board in its oversight of any swing pricing program. Under the final rule, the board is required to approve the swing pricing policies and procedures, which must specify the process for determining swing threshold(s), swing factor(s) and their upper limits, but is not required to approve all material changes to the fund's swing pricing policies and procedures. The fund board is also required to approve a fund's swing factor upper limit and its swing threshold(s). In order to facilitate these obligations, the final rule also requires the board to periodically review a written report prepared by the swing pricing administrator that includes certain required information. The revised cost estimates above use a commenter's cost estimates of adopting swing pricing under the proposal, which we assume included the board's obligations to approve swing threshold(s), any swing factor upper limit, swing pricing policies and procedures, and any material changes to those policies and procedures. The final rule's inclusion of a requirement that the fund's board periodically review a written report from the swing pricing administrator will impose certain

446 Dechert Comment Letter; Federated Comment Letter; ICI Comment Letter I; IDC Comment Letter; J.P. Morgan Comment Letter.

additional costs: (i) the costs incurred by the administrator in performing the analysis underlying the written report, including a review of the reasonableness of the swing threshold(s), swing factor(s), and upper limit; (ii) the cost of preparing the report itself; and (iii) the cost of the board's time to review the written report. While these activities are more explicitly required by the final rule, some of their associated costs, such as those associated with any analysis and document preparation as part of the proposal's periodic review requirements, as well as any time associated with board review of material changes, would have been incurred under the proposal. In addition, the final rule does not require board approval of all material changes to a fund's swing pricing policies and procedures, reducing costs relative to the proposal. On balance, we therefore believe that the revised costs estimates of the proposal above, which incorporate commenter feedback, are still reasonable estimates of the final rule's costs.

c. Effects on Efficiency, Competition, and Capital Formation

Rule 22c-1(a)(3) permits a fund, under certain circumstances, to adjust its NAV to effectively pass on the estimated costs stemming from shareholder purchase or redemption activity to the shareholders associated with that activity. Adjusting a fund's NAV in this way could reduce dilution to non-transacting shareholders arising from trading costs. We therefore believe that the rule could increase the efficiency of cost allocation among shareholders of funds that adopt swing pricing policies and procedures, provided that a fund's swing thresholds and swing factors are appropriately calculated.

If investors believe swing pricing to be valuable, funds that decide to implement swing pricing will be at a competitive advantage. Fund complexes currently using swing pricing in other jurisdictions may be at a slight advantage due to their familiarity with swing pricing procedures, but, as noted above, they will still face the same operational hurdles as other funds in obtaining timely fund flow information in the U.S. Similarly, funds that are predominantly sold directly or primarily through an affiliated broker-dealer may not be as impacted by these operational difficulties, and may be able to implement swing pricing more quickly. In addition, some funds may decide to forgo using swing pricing due to concerns that some intermediaries will not offer their funds due to the increased operational burden swing pricing places on those intermediaries.

The extended effective date reduces these competitive effects and provides funds not currently using swing pricing in other jurisdictions and funds that are not sold directly sufficient time to develop and implement their own swing pricing programs in conjunction with any broad industry efforts to provide fund flow data on a timely basis. Alternatively, if the rule's swing pricing provisions became effective immediately, while some funds would have an initial competitive advantage, if a significant portion of funds wanted to adopt swing pricing, market pressures could spur innovations that made swing pricing feasible for a broader groups of funds. We are unable to assess the relative likelihoods of these two potential outcomes.

Commenters also suggested that smaller fund complexes are less likely to have the resources necessary to implement swing pricing, may have less leverage in obtaining flow information from their distribution partners, and that if investors prefer funds that use swing pricing, smaller fund complexes would be at a competitive disadvantage.[447] We acknowledge that small funds (as well as other types of funds such as those that are not primarily sold directly or through an affiliated broker-dealer) may be at an initial disadvantage, and note that the delayed extended effective date should provide some fund complexes sufficient time and

[447] Dechert Comment Letter; ICI Comment Letter I; IDC Comment Letter; Charles Schwab Comment Letter; T. Rowe Comment Letter.

resources to overcome their initial competitive disadvantage before any fund can actually use swing pricing. For example, the extended effective date could provide third parties with time to develop tools to help smaller fund complexes perform swing pricing. However, it is possible that some fund complexes will not be able to effectively implement swing pricing, and to the extent investors prefer funds that use swing pricing, those fund complexes will be at a competitive disadvantage.

We anticipate that rule 22c-1(a)(3) could indirectly foster capital formation by bolstering investor confidence. Investors may be more inclined to invest in funds if they understand that funds will be able to use swing pricing to prevent the purchase or redemption activity of certain investors from diluting the interests of other investors (particularly long-term investors, who represent the majority of fund shareholders). To the extent that swing pricing increases investment returns to investors, particularly long-term investors, this could incentivize investment in funds that use swing pricing. If rule 22c-1(a)(3) enhances investor confidence in funds, investors are more likely to invest in funds, so to the extent that investors are not already invested in the capital markets (*e.g.*, via direct ownership of stocks or bonds), the rule could make additional assets available for investment in the capital markets.

To the extent that investors care about short-term volatility, they may be discouraged from investing in funds that use swing pricing because it will generally increase daily volatility and benchmark tracking error on those days when the NAV is swung. However, if a fund's swing thresholds and factors are properly calibrated, long-term tracking error relative to the fund's benchmark should improve. Additionally, as discussed above, investors might be slightly less inclined to transact in funds that use swing pricing because of the additional uncertainty it introduces surrounding the NAV at which their shares will ultimately be purchased or redeemed, as this NAV now depends on that day's net fund flows in addition to variations in the prices of the fund's portfolio positions. Investors also may be less inclined to invest in funds that use swing pricing if they are not confident that the fund's swing factors and thresholds appropriately reflect costs associated with transacting in the fund; specifically, a fund that uses a swing pricing program which overstates trading costs will effectively impose the equivalent of hidden purchase and redemption fees on transacting investors, which will increase the fund's NAV and benefit non-transacting shareholders at their expense. Investors will not be able to directly evaluate whether a fund's swing pricing policy is reasonably linked to its costs, and will only be able to determine how much of a fund's performance is attributable to swing pricing if funds voluntarily choose to publicly disclose both their swung and unswung NAVs on a daily basis. However, the additional restrictions in the final rule that are designed to reduce the ability of funds to overestimate swing factors to increase observed fund performance, should reduce such concerns and have a positive effect on capital formation. Because we do not have the information necessary to determine how investors will perceive swing pricing, or how they will evaluate the relative benefits or detriments of investing in funds that use swing pricing, we are unable to draw conclusions about the precise effects of rule 22c-1(a)(3) on capital formation. Moreover, the requirement for funds that use swing pricing to disclose the swing factor upper limit will provide transparency to investors regarding the maximum amount that a shareholder could expect the share price that he or she receives upon purchase or redemption to be adjusted on account of swing pricing.

The final rule enables funds to use multiple swing thresholds, and allows for different swing factors corresponding to each threshold, subject to a swing factor upper limit that may not exceed two percent of NAV per share, which increases a fund's ability to tailor swing pricing to the specific trading costs it anticipates incurring when facing significant net fund flows. To the extent that funds accurately reflect these costs in their swing pricing programs, and that the expense of operating a swing pricing program does not significantly increase fund expenses, this should improve the efficiency of trading cost allocation between transacting and non-transacting investors. The final rule's increased flexibility could, at the margin, lead to an increase in the use of swing pricing by funds that would not have otherwise employed it under the proposed rule's provisions; to the extent that investors perceive swing pricing as being a desirable feature of certain funds, and the extent to which they have assets that are not already invested in the capital markets, this could enhance capital formation relative to the proposed rule.

2. *Disclosure and Reporting Requirements Regarding Swing Pricing*

a. Disclosure and Reporting Requirements

We are adopting amendments to Form N-1A and Regulation S-X as well as adopting a new item to Form N-CEN to enhance fund disclosure and reporting regarding swing pricing. Specifically, amendments to Form N-1A will require a fund to explain the fund's use of swing pricing, including an explanation of what swing pricing is, the circumstances under which it will use swing pricing, and the effects of using swing pricing.[448] A fund that uses swing pricing will also be required to disclose the swing factor upper limit,[449] and include a general description of the effects of swing pricing on a fund's annual and average total returns for the applicable periods.[450] The GAAP NAV reported on the balance sheet of a fund's financial statements will include the effects of swing pricing throughout the reporting period, but it will not explicitly

[448] Item 6(d) of Form N-1A.

[449] *Id*.

[450] Item 4(b)(2)(ii) and Item 4(b)(2)(iv)(E) of Form N-1A.

reveal instances where the fund NAV was adjusted or the magnitudes of those adjustments.[451] A new item on Form N-CEN will require a fund to report whether the fund engages in swing pricing and, if so, the fund's swing factor upper limit.[452]

The final form amendments differ from the proposal in several ways that may have potential economic consequences. Specifically, funds that use swing pricing will be required to disclose the swing factor upper limit on Form N-1A and Form N-CEN, and will be required to include a general description of the effects of swing pricing on a fund's annual and average total returns for the applicable periods on Form N-1A. Any significant economic effects of these changes are discussed below.

b. Benefits

The disclosure and reporting requirements will increase shareholders' understanding of particular funds' swing pricing policies, which should assist investors in making investment choices that better match their risk tolerances. For example, disclosure of the swing factor upper limit will inform investors as to the maximum amount of costs they could be charged if they were to redeem or subscribe on a day where the fund is swinging its NAV in response to redemptions or subscriptions, respectively. Similarly, disclosures about the effects of swing

[451] Form N-1A as amended requires a fund to disclose both its GAAP NAV as well as its Swung NAV (if it swings at period end) in the financial highlights section of the fund's financial statements and the financial highlights information in the fund's registration statement. *See* Item 13(a) of Form N-1A. The financial highlights section, which details per share operating performance (by share class), rolls forward the GAAP NAV per share from beginning to end of period. The roll forward will require disclosure of the per share cumulative impact of amounts related to swing pricing (during the period) as a separate line item below the total distributions line in the roll forward. Funds also are required to disclose whether the fund's net asset value per share has swung during the period in the notes to the financial statements. Investors will not be able to fully disentangle the effects of swing pricing on fund performance from these figures, but Commission staff will have access to complete records of daily NAV adjustments and could look at the effects of swing pricing as part of the examination process. As noted above, the Commission is not prohibiting funds from disclosing an unadjusted NAV outside of the financial statements in other performance information, which may be useful information in understanding the impact of swing pricing on a fund.

[452] Item C.21 of Form N-CEN.

pricing on a fund's annual and average total returns should help investors understand the extent to which fund performance may have been impacted by the fund's use of swing pricing. However, as discussed above, while we are not requiring disclosure in the financial statements of the fund's total return based on the Swung NAV, we are not prohibiting funds from disclosing this information along with the total return based on the unswung NAV outside of the financial statements.[453] Finally, the presumption against disclosure of the swing factor or threshold should help protect against harm to investors that could potentially result from gaming of the fund's swing pricing, although as discussed above, the likelihood of gaming is mitigated by the lack of public availability of real-time flow data.

Because we cannot predict the extent to which the requirements will enhance investors' awareness of funds' swing pricing and its impact on investors, we are unable to quantify the potential benefits discussed in this section.

c. Costs

Funds will incur costs to comply with the disclosure and reporting requirements regarding swing pricing. Commenters' responses to the estimates of these costs are discussed in the PRA discussion below, and we have updated all estimates in this section to reflect changes in the PRA.[454]

We estimate that the one-time costs to comply with the amendments to Form N-1A for funds that choose to employ swing pricing will be approximately $648 per fund (plus printing costs).[455] Based on this estimate we further estimate that the total one-time costs for funds that

[453] See *infra* section II.A.iii.g.

[454] *See infra* section IV.

[455] This estimate is based on the following calculation: 2 hours (2 hour to update registration statement to include swing pricing-related disclosure statements) x $324 (blended rate for a compliance attorney ($340)

chose to employ swing pricing will be approximately $307,152 for all funds.[456] We estimate that each of these funds will incur an ongoing cost associated with compliance with the amendments to Form N-1A of approximately $324 each year to review and update the disclosure regarding swing pricing.[457] Based on these estimates we further estimate that the total ongoing annual costs for funds that chose to employ swing pricing will be approximately $153,576 for all funds.[458] In addition, we expect that there will be minor costs associated with the related amendments to Regulation S-X, which are discussed above.

We estimate compliance with the new item of Form N-CEN related to swing pricing will involve an annual hourly burden which is discussed in the PRA discussion below.[459] We estimate that 10,633 funds will be required to file responses on Form N-CEN.[460] We estimate that 9,039 funds will be required to file responses to Item C.21 of Form N-CEN regarding swing pricing.[461] We estimate an average annual hourly burden associated with providing additional responses to Form N-CEN as a result of the additional reporting requirement will be

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and a senior programmer ($308)) = $648. This figure incorporates the costs we estimated for each fund to update its registration statement to include the required disclosure about the fund's use of swing pricing, including an explanation of what swing pricing is, an explanation of the circumstances under which it will use swing pricing, the effects of using swing pricing; the fund's swing factor upper limit; and disclosures about the effects of swing pricing on a fund's annual and average total returns. The costs associated with these activities are all paperwork-related costs and are discussed in more detail *infra* at section IV.E.

456 This estimate is based on the following calculation: 948 hours x $324 (blended rate for a compliance attorney ($340) and a senior programmer ($308)) = $307,152. The costs associated with these activities are all paperwork-related costs and are discussed in more detail *infra* at section IV.E.

457 This estimate is based on the following calculations: 1 hours x $324 (blended hourly rate for a compliance attorney ($340) and a senior programmer ($308)) = $324. The costs associated with these activities are all paperwork-related costs and are discussed in more detail *infra* at section IV.E.

458 This estimate is based on the following calculation: 474 hours x $324 (blended hourly rate for a compliance attorney ($340) and a senior programmer ($308)) = $153,576. The costs associated with these activities are all paperwork-related costs and are discussed in more detail *infra* at section IV.E.

459 *See infra* section IV.

460 *See* 2016 ICI Fact Book, *supra* footnote 388, at 22, 176, 183.

461 *See supra* footnote 388.

approximately .5 hours per fund, for a total average annual burden of 4,519.5 hours.[462] We do not estimate any change to the external costs associated with the proposed Form N-CEN

d. Effects on Efficiency, Competition, and Capital Formation

We believe the disclosure and reporting requirements on Form N-1A and Form N-CEN could increase informational efficiency by providing additional information about a fund's use of swing pricing. To the extent that investors better understand a fund's swing pricing, including the upper limit of the swing factor, they can trade off the benefit from dilution protection with the increase in return volatility, as discussed above, when deciding on investing in a fund that choses to use swing pricing. To the extent that investors invest in funds that adopt swing pricing because of these disclosure and reporting requirements, the new disclosure and reporting requirements will also increase capital formation. However, we do not believe that this effect will be significant because such investors are more likely already investing in other funds and hence any reallocation will be a "zero-sum game."

Increased investor awareness of funds' swing pricing policies, including swing factor upper limits, improve the investors' ability to compare funds that elect to use swing pricing with each other as well as with funds that do not elect to implement swing pricing. Such a comparison could improve competition among funds, which could benefit investors. While this competition could unintentionally increase incentives for funds to overestimate the swing factors to improve and compete on performance, the additional safeguards required by the final rule should prevent such a negative impact.

D. Reasonable Alternatives

The following discussion addresses significant alternatives to the final swing pricing

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462 This estimate is based on the following calculation: 9,039 funds x .5 hour = 4,519.5 hours.

regulations. More detailed alternatives to the individual elements of the swing pricing regulations are discussed in detail above.[463]

Instead of permitting, but not requiring, funds to adopt swing pricing policies and procedures under rule 22c-1(a)(3), the Commission could have adopted a rule that would require all funds, or funds with certain strategies, to adopt swing pricing policies and procedures. This alternative approach would have the benefit of establishing a uniform regulatory framework to prevent potential shareholder dilution, and might lower the per fund cost of implementing swing pricing due to economies of scale. But because funds differ notably in terms of their particular circumstances and risks, as well as with respect to the tools funds use to manage risks relating to liquidity and shareholder purchases and redemptions, we decided to adopt a rule that would permit swing pricing as a voluntary tool for funds. The adopted approach will allow funds to weigh the advantages of swing pricing (*e.g.*, improved allocation of trading costs) against potential disadvantages (*e.g.*, the potential for swing pricing to increase the volatility of a fund's NAV in the short term and its operational costs). Some commenters advocated for the Commission to require all funds to adopt swing pricing policies and procedures,[464] but most commenters supported the permissive (not mandatory) approach.[465]

While rule 22c-1(a)(3) enables partial swing pricing (that is, a NAV adjustment would not be permitted unless net purchases or redemptions exceed a positive threshold set by the fund), the Commission instead could have adopted a rule that would permit full swing pricing (that is, a NAV adjustment would occur any time the fund experiences net purchases or net

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463 *See supra* sections II.A and II.B.

464 Barnard Comment Letter; Invesco Comment Letter.

465 *See* CFA Comment Letter; Dechert Comment Letter; ICI Comment Letter I; IDC Comment Letter; J.P. Morgan Comment Letter; Morningstar Comment Letter.

redemptions, or equivalently allowed zero percent thresholds). Full swing pricing would result in *any* estimated costs associated with purchases or redemptions being passed along to the shareholders whose actions created those costs, whereas the partial swing pricing contemplated by the rule will only allocate costs related to purchase and redemption activity to purchasing or redeeming shareholders when net purchases or net redemptions exceed the fund's positive swing threshold. Most commenters supported permitting only "partial" swing pricing,[466] but some commenters did suggest that funds should have the option to use full swing pricing.[467] Nevertheless, we believe that the partial swing pricing policy choice is, on balance, preferable to the full swing pricing option. We expect that partial swing pricing, as opposed to full swing pricing, will reduce any performance volatility potentially associated with swing pricing and could reduce operational costs associated with swinging a fund's NAV (*e.g.*, record keeping requirements) when fund flows are not significant enough to cause significant shareholder dilution. Also, the use of partial swing pricing recognizes that purchases or redemptions below a certain threshold are less likely to require a fund to trade portfolio assets, and therefore a NAV adjustment might be less appropriate if purchases or redemptions might not result in costs associated with asset purchases or sales (in which case, a NAV adjustment could unfairly penalize purchasing or redeeming shareholders).

We considered permitting funds to use swing pricing only to adjust their NAV downward in the event that net redemptions exceeded a particular threshold, as there may be more significant issues regarding potential dilution for non-transacting shareholders in connection with shareholder redemptions, because funds are obligated to satisfy redemption requests pursuant to

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466 Many commenters implicitly agreed with only permitting partial swing pricing, but some explicitly agreed with only permitting partial swing pricing. CFA Comment Letter; SIFMA Comment Letter II.

467 *See* Dechert Comment Letter; Federated Comment Letter; HSBC Comment Letter; MFS Comment Letter.

section 22(e) of the Act. In this regard, we note that unlike redemptions, funds may reserve the right to decline purchase requests. For example, a fund may decline purchase requests from shareholders who engaged in frequent trading, and it also may decline large purchase requests that would negatively impact the fund. However, the final rule contemplates that funds will use swing pricing to adjust their NAV upward or downward because we believe that swing pricing could be a useful tool in mitigating dilution associated with shareholder purchase activity as well as shareholder redemption activity.

We considered exempting investors with small investments in a fund from the NAV adjustments permitted under rule 22c-1(a)(3). However, we believe that the costs of exempting those investors from the NAV adjustment could be significant, particularly the operational costs that could result from the relatively complex process of applying the NAV adjustment only to some investors and not to others. Exempting small investors from the NAV adjustment also may not be beneficial to a fund because such exemption could lead to large investors engaging in gaming behavior—that is, structuring their investments in funds using multiple small accounts—in order to use the exemption. This could contravene the purpose of the exemption and be costly for funds to detect. In addition, while small investors' trading activity might not incur significant costs individually, their aggregate trading in the fund could incur costs, just as it would if they were trading directly in, for example, the stock market, and it would not be fair to impose those collectively generated costs on non-transacting shareholders.

Some commenters suggested that redemption fees may have a better combination of potential cost and benefits compared to swing pricing.[468] Redemption fees are already permissible under existing rules, subject to certain conditions, so swing pricing is an alternative

[468] ICI Comment Letter I; PIMCO Comment Letter.

tool funds can use to mitigate dilution.[469] To the extent they are permissible under existing rules, purchase fees allow funds to recoup the costs associated with fund subscriptions in the same way redemption fees recoup costs associated with fund redemptions. Both swing pricing and purchase and redemption fees can pass on trading-related costs to transacting shareholders, but they accomplish this in different ways. The specific implementation of a redemption fee can vary—funds can impose a constant fee that applies to all redemptions or can apply it more selectively to transactions of a given size in order to reduce dilution of the fund's outstanding shares. In theory, purchase fees can be applied in a similar manner.

The key characteristic of a redemption or purchase fee, relative to swing pricing, is that it is imposed on a given investor's transaction independent of other investors' transactions in a fund, which means, for example, that investors may pay a fee even when their transactions do not result in significant net flows or any corresponding dilution for the fund's non-transacting investors. On the other hand, swing pricing allows funds to condition when they recover costs from transacting investors on the net flows to their fund on a given trading date, which could allow funds to more fairly allocate the actual costs created by investor flows and prevent shareholder dilution. As with redemption and purchase fees, it is still possible that investors pay a cost via the swing factor that ends up being larger than the costs they impose on the fund—for example, if the discount at which assets are sold to cover redemptions turn out to be smaller than what was anticipated on the redemption date—but if funds are able to properly calibrate their swing factors, investors should end up paying the ex-ante expected cost associated with a given level of fund flows. The extent to which swing pricing is able to recover the expected costs

469 As discussed above, funds are currently permitted under rule 22c-2 to impose redemption fees under certain circumstances. *See also* Redemption Fees Adopting Release, *supra* footnote 24.

associated with a given transaction is limited by the maximum swing factor size of 2% of a fund's NAV, but redemption fees are subject to the same limitation. Purchase fees and redemption fees, relative to swing pricing, have the benefit of being simple for investors to understand, they do not produce the same short-term volatility and tracking error concerns as swing pricing, and they provide more transparency to potential investors regarding the expected performance impact of anti-dilutive measures on a fund's NAV (the proceeds from both redemption fees and swing pricing eventually make their way into the NAV).

If purchase or redemption fees are made contingent on the size of a transaction, a fund may be able to tailor these fees to transactions that are more likely to impose costs on non-transacting investors. For example, a large redemption may make it more likely that a fund experiences significant net redemptions on a given day. Targeting purchase and redemption fees in this manner could allow a fund to achieve some of the benefits of swing pricing without its potentially redistributive effects.[470] For example, if a fund experiences gross subscriptions of 10 shares and gross redemptions of 20 shares on a given day, and recovers trading costs from redeeming investors via swing pricing, roughly half of those proceeds will be returned to non-transacting shareholders in the fund (the other half goes to subscribers), and some dilution will still occur. To the extent that fund flows on that day are driven by large redemptions, a targeted redemption fee may allow a fund to assess estimated costs to redeeming investors while returning all proceeds to the fund.

In terms of direct costs, redemption fees may require more coordination with a fund's service providers because these fees need to be imposed on an investor-by-investor basis—which may be particularly difficult with respect to omnibus accounts. While there are funds that

[470] *See supra* footnote 427 and related discussion on distributional issues with swing pricing.

currently utilize redemption fees and have built systems to support them, these redemption fees are generally constant fees that are not tailored to the costs of a given redemption. Swing pricing, on the other hand, will require some funds and intermediaries to create new systems and operational procedures (discussed above), but once those are in place swing pricing will be incorporated in the process by which a fund strikes its NAV, and will not require any additional investor-specific infrastructure to assess trading costs to them.

Finally, a closely related alternative to swing pricing that the Commission could have adopted would be to permit funds to employ dual pricing, which has been used in certain European funds.[471] Instead of swinging the NAV in one direction based on net flows and establishing a single price at which investors transact, dual pricing would allow the fund to set a "spread" around the fund's true NAV: a bid price at which the fund redeems shares and an offer price at which the fund issues new shares. This spread could be set in a manner similar to the rule's swing factor (*e.g.*, based on a threshold of net flows), or on an ad-hoc basis based on the fund's portfolio and any relevant market conditions on the trade date. Dual pricing is an alternative that shares many costs and benefits with the rule's swing pricing component. The major benefit of dual pricing relative to the rule is that it does not allow one type of fund investor to benefit at the expense of another. For example, under swing pricing, if the NAV is adjusted downwards when a fund experiences net redemptions, any subscribing investors are able to purchase the fund at a discount at the expense of some of the redeeming investors, and this reduces the proceeds that are recovered by non-transacting shareholders in the fund. Under the same scenario with dual pricing, subscribers do not receive a discount (if anything, they may pay

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[471] *See* BlackRock Fund Structures Paper, *supra* footnote 46 for a high level comparison of some of the differences between dual pricing and swing pricing.

a premium which benefits non-transacting shareholders), and all of the proceeds from redeeming investors are returned to the fund. The primary cost of dual pricing relative to the rule is that it may impose additional requirements and risks on fund intermediaries, service providers, and other third parties as they now need to handle two NAVs on each trade date. Furthermore, to the extent that dual pricing is implemented using a constant spread around a fund's NAV, it may not be able to reflect the costs associated with fund redemptions or subscriptions on a given day as well as swing pricing.

IV. PAPERWORK REDUCTION ACT ANALYSIS

A. Introduction

The amendments to rule 22c-1 contain "collections of information" within the meaning of the Paperwork Reduction Act of 1995 ("PRA").[472] In addition, the amendments to rule 31a-2, Regulation S-X and Form N-1A will impact the collections of information burden under those rules and form.[473] The new reporting requirements on Form N-CEN will impact the collections of information burden associated with the form described in the Investment Company Reporting Modernization Adopting Release.[474]

The titles for the existing collections of information are: "Rule 31a-2 Records to be preserved by registered investment companies, certain majority-owned subsidiaries thereof, and other persons having transactions with registered investment companies" (OMB Control No. 3235-0179); and "Form N-1A under the Securities Act of 1933 and under the Investment

[472] 44 U.S.C. 3501 through 3521.

[473] The paperwork burden from Regulation S-X is imposed by the rules and forms that relate to Regulation S-X and, thus, is reflected in the analysis of those rules and forms. To avoid a PRA inventory reflecting duplicative burdens and for administrative convenience, we have previously assigned a one-hour burden to Regulation S-X.

[474] *See* Investment Company Reporting Modernization Adopting Release, *supra* footnote 11, at section IV.A.

Company Act of 1940, Registration Statement of Open-End Management Investment Companies" (OMB Control No. 3235-0307). In the Investment Company Reporting Modernization Adopting Release, we submitted new collections of information for Form N-CEN.[475] The title for the new collections of information is: "Form N-CEN Under the Investment Company Act, Annual Report for Registered Investment Companies."

We are submitting new collections of information for the amendments to rule 22c-1 under the Investment Company Act of 1940. The title for the new collections of information will be: "Rule 22c-1 Under the Investment Company Act of 1940, Pricing of redeemable securities for distribution, redemption and repurchase." The Commission is submitting these collections of information to the OMB for review in accordance with 44 U.S.C. 3507(d) and 5 CFR 1320.11. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number.

The Commission is adopting amendments to rule 22c-1, rule 31a-2, Regulation S-X, and Form N-1A. The Commission also is adopting a new item to Form N-CEN. The amendments are designed to prevent potential dilution of interests of fund shareholders in light of shareholder purchase and redemption activity and enhance disclosure and Commission oversight of funds' use of swing pricing. We discuss below the collection of information burdens associated with these reforms. In the Proposing Release, the Commission solicited comment on the collection of information requirements and the accuracy of the Commission's statements in the Proposing Release.

B. Rule 22c-1

We are adopting, largely as proposed, amendments to rule 22c-1 that will enable a fund

[475] *See id*.

(with the exception of a money market fund or ETF) to choose to use "swing pricing" as a tool to mitigate shareholder dilution.[476] This will be a new collection of information under the PRA. We believe that rule 22c-1 will promote investor protection by providing funds with an additional tool to mitigate the potentially dilutive effects of shareholder purchase or redemption activity and provide a set of operational standards that will allow funds to gain comfort using swing pricing as a new means of mitigating potential dilution.[477]

In order to use swing pricing under rule 22c-1, as amended, a fund is required to establish and implement swing pricing policies and procedures that meet certain requirements.[478] The policies and procedures must specify the process for how the fund's swing threshold(s) and swing factor(s) are determined, which must include the establishment of an upper limit on the swing factor(s) used (which may not exceed two percent of NAV per share).[479] The amendments require a fund's board of directors to approve the fund's swing pricing policies and procedures, as well as the fund's swing threshold and swing factor upper limit (and any changes to the swing threshold or swing factor upper limit).[480] The fund's board is also required to review, no less frequently than annually, a written report prepared by the persons responsible for administering swing pricing that describes: (i) its review of the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution; (ii) any material changes to the fund's swing pricing policies and procedures since the date of the last report; and (iii) its review and assessment of the fund's swing threshold(s), swing

476 *See supra* section II.A. *See also* rule 22c-1(a)(3).

477 *See supra* section II.A.

478 *See* rule 22c-1(a)(3)(i).

479 *See* rule 22c-1(a)(3)(i)(B) and (C).

480 *See* rule 22c-1(a)(3)(ii)(A) and (B).

factor(s), and swing factor upper limit considering the requirements of the rule, including the information and data supporting these determinations.[481] A fund is required to maintain the fund's swing pricing policies and procedures and a written copy of the periodic report provided to the board.[482] The requirements that funds adopt policies and procedures, obtain board approval and periodic review, provide a written report to the board, and retain certain records related to swing pricing are collections of information under the PRA. The respondents to amended rule 22c-1 will be open-end management investment companies (other than money market funds or ETFs) that engage in swing pricing. Compliance with rule 22c-1(a)(3) will be mandatory for any fund that chooses to use swing pricing to adjust its NAV in reliance on the amendments. The information required under rule 22c-1 regarding swing pricing when provided to the Commission in connection with staff examinations and investigations and oversight programs will be kept confidential subject to the provisions of applicable law.

In the Proposing Release, we estimated that 167 fund complexes include funds that would adopt swing pricing policies and procedures pursuant to the rule.[483] For purposes of the PRA analysis, we estimated that each fund complex would incur a one-time average burden of 24 hours to document swing pricing policies and procedures. Under the proposal, rule 22c-1 would have required fund boards initially to approve the swing pricing policies and procedures (including the swing threshold) and any material changes to them, and we estimated a one-time burden of five hours per fund complex associated with the fund board's review and approval of swing pricing policies and procedures. Amortized over a 3-year period, we estimated that this

[481] *See* rule 22c-1(a)(3)(ii)(D).

[482] *See* rule 22c-1(a)(3)(iii).

[483] *See* Proposing Release, *supra* footnote 6, at n. 766 and accompanying text.

would be an annual burden per fund complex of about 10 hours. Accordingly, we estimated that the total burden associated with the preparation and approval of swing pricing policies and procedures by those fund complexes that we believed would use swing pricing would be 4,843 hours.[484] We also estimated that it would cost a fund complex $21,710 to document, review and initially approve these policies and procedures, for a total cost of $3,625,570.[485]

As discussed above, many commenters expressed general concerns about the operational and technology costs associated with swing pricing and recommended that the Commission consider the substantial costs and technology challenges that need to be overcome to implement swing pricing.[486] One commenter expressed the belief that the Commission significantly underestimated the costs associated with developing and implementing the systems and procedures necessary to comply with rule 22c-1 swing pricing requirements and stated that its implementation costs for swing pricing would likely be four or five times more costly than the Commission's estimates in the proposal.[487] We appreciate the information provided by the commenter and, in consideration of their comment, have extrapolated from this commenter's

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484 This estimate was based on the following calculation: (24 +5) hours x 167 fund complexes = 4,843 hours.

485 These estimates were based on the following calculations: 12 hours x $198 (hourly rate for a senior accountant) = $2,376; 12 hours x $455.5 (blended hourly rate for assistant general counsel ($426) and chief compliance officer ($485)) = $5,466; 3 hours x $4,400 (hourly rate for a board of 8 directors) = $13,200; 2 hours (for a fund attorney's time to prepare materials for the board's determinations) x $334 (hourly rate for a compliance attorney) = $668; ($2,376 + $5,466 +$13,200 + $668) = $21,710; $21,710 x 167 fund complexes = $3,625,570. The hourly wages used were from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified to account for an 1800-hour work-year and multiplied by 5.35 to account for bonuses, firm size, employee benefits, and overhead. *See also infra* footnote 492 (discussing basis for estimated hourly rate for a board of directors).

486 *See supra* section II.A.2. *See also e.g.*, Dechert Comment Letter; Eaton Vance Comment Letter; ICI Comment Letter I; IDC Comment Letter; Invesco Comment Letter; J.P. Morgan Comment Letter; Charles Schwab Comment Letter; T. Rowe Comment Letter.

487 *See* Charles Schwab Comment Letter (stating that the Commission based its estimated costs to establish and implement swing pricing policies and procedures in part on the costs associated with implementing the fees and gates provisions of the 2014 money market fund reform rule and that, in the commenter's experience, the implementation costs for the money market fund reform rule were severely understated).

estimate increased cost estimates for the amendments to rule 22c-1 adopted today.[488]

The Commission has modified the estimated increase in burden hours associated with a fund documenting its swing pricing policies and procedures in consideration of commenters' concerns that such burdens were underestimated as well as modifications made to the proposal and updates to data figures that were utilized in the Proposing Release. We estimate that 84 fund complexes, rather than 167 fund complexes (half as many fund complexes as estimated in the proposal), include funds that will adopt swing pricing policies and procedures pursuant to the rule.[489] While one commenter suggested that the burden to comply with the amendments to rule 22c-1 would be four or five times more costly than in the proposal, we believe that with respect to the PRA analysis, the estimated burdens for documenting swing pricing procedures will not be as high as the commenter's estimate of the costs associated with the entire implementation of swing pricing policies and procedures. Based on our review of the adopted requirements, we estimate that each fund complex will incur a one-time average burden of 48 hours, rather than 24 hours, to document swing pricing policies and procedures. We further estimate that each fund complex will spend 2 hours, on average, preparing the required written report to the board. Since a fund board will approve the fund's swing pricing policies and procedures, swing threshold, and swing factor upper limit as well as review, no less frequently than annually, a written report that includes certain required information, we estimate a one-time burden of 7 hours, rather than 5 hours per fund complex associated with the fund board's review and

488 *See supra* section III.C.1.b.

489 *See supra* section III.C.1.b. As we discussed in section III.C.1.b, commenters noted a variety of challenges associated with the immediate implementation of swing pricing. Accordingly, we have revised our estimated number of fund complexes that will implement swing pricing within the three-year period discussed below. Additionally, the two-year extended effective date means that no fund may implement swing pricing until the third year, which will likely further reduce the number of funds for purposes of this estimate.

approval of swing pricing policies and procedures.

Amortized over a 3-year period, we estimate that this will be an annual burden per fund complex of about 19 hours, rather than 10 hours.[490] Accordingly, we estimate that the total burden associated with the preparation and approval of swing pricing policies and procedures by those fund complexes that we believe will use swing pricing will be 4,788 hours, rather than 4,843 hours.[491] We also estimate that it will cost a fund complex $35,496, rather than $21,710, to document, review and initially approve these policies and procedures, for a total cost of $2,981,664, rather than $3,625,570.[492]

We are adopting, as proposed, amendments to rule 22c-1 to require a fund that uses swing pricing to maintain the fund's swing policies and procedures that are in effect, or at any time within the past six years were in effect, in an easily accessible place.[493] In a modification to the proposal, we also are requiring a fund to retain a written copy of the periodic report provided to the board prepared by the swing pricing administrator that describes, among other things, the swing pricing administrator's review of the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating

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490 This estimate is based on the following calculations: 48 hours +2 hours + 7 hours ÷ 3 = 19 hours.

491 This estimate is based on the following calculation: (48 +2 +7) hours x 84 fund complexes = 4,788 hours.

492 These estimates are based on the following calculations: 24 hours x $201 (hourly rate for a senior accountant) = $4,824; 24 hours x $463 (blended hourly rate for assistant general counsel ($433) and chief compliance officer ($493)) = $11,112; 4 hours x $4,465 (hourly rate for a board of 8 directors) = $17,860; 5 hours (for a fund attorney's time to prepare materials for the board's determinations) x $340 (hourly rate for a compliance attorney) = $1,700; ($4,824 + $11,112 +$17,860 + $1,700) = $35,496; $35,496 x 84 fund complexes = $2,981,664. The hourly wages used are from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified by Commission staff to account for an 1800-hour work-year and inflation, and multiplied by 5.35 to account for bonuses, firm size, employee benefits, and overhead. The staff previously estimated in 2009 that the average cost of board of director time was $4,000 per hour for the board as a whole, based on information received from funds and their counsel. Adjusting for inflation, the staff estimates that the current average cost of board of director time is approximately $4,465.

493 *See* rule 22c-1(a)(3)(iii).

dilution and any back-testing performed.[494] The retention of these records is necessary to allow the staff during examinations of funds to determine whether a fund is in compliance with its swing pricing policies and procedures and with rule 22c-1, as amended.

In the Proposing Release, we estimated that the burden would be three hours per fund complex to retain the proposed swing pricing records, with 1.5 hours spent by a general clerk and 1.5 hours spent by a senior computer operator. We estimated a time cost per fund complex of $216.[495] We estimated that the total for recordkeeping related to swing pricing would be 501 hours, at an aggregate cost of $36,072 for all fund complexes that we believe include funds that would adopt swing pricing policies and procedures.[496] Amortized over a three-year period, we believed that the hour burdens and time costs associated with the proposed amendments to rule 22c-1, including the burden associated with the requirements that funds adopt policies and procedures, obtain board approval and retain certain records related to swing pricing, would result in an average aggregate annual burden of 2,115 hours and average aggregate time costs of $1,244,595.[497] We estimated that there were no external costs associated with this collection of information.

We did not receive any comments on the estimated hour and cost burdens for this record retention requirement. The Commission has modified the estimated increase in annual burden hours and total time costs that will result from the amendments based on the modification to the

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494 *See id*.

495 This estimate was based on the following calculations: 1.5 hours x $57 (hourly rate for a general clerk) = $85.5; 1.5 hours x $87 (hourly rate for a senior computer operator) = $130.5. $85.5 + $130.5 = $216.

496 These estimates were based on the following calculations: 3 hours x 167 fund complexes = 501 hours. 167 fund complexes x $216 = $36,072.

497 These estimates were based on the following calculations: 4,843 hours (year 1) + (3 x 501 hours) (years 1, 2 and 3) ÷ 3 = 2,115 hours; $3,625,570 (year 1) + (3 x $36,072) (years 1, 2 and 3) ÷ 3 = $1,244,595.

proposal to require funds to retain a written copy of the annual report provided to the board from the swing pricing administrator. We have also modified the estimated increase in annual burden hours and total time costs in light of updated data concerning funds and fund personnel salaries. We estimate that the burden will be four hours, rather than three hours, per fund complex to retain these records, with 2 hours, rather than 1.5 hours, spent by a general clerk and 2 hours, rather than 1.5 hours, spent by a senior computer operator. Based on updates to the industry data figures that were utilized in the Proposing Release, we estimate a time cost per fund complex of $292, rather than $216.[498] We estimate that the total for recordkeeping related to swing pricing will be 336 hours, rather than 501 hours, at an aggregate cost of $24,528, rather than $36,072, for all fund complexes that we believe include funds that would adopt swing pricing policies and procedures.[499]

Amortized over a three-year period, we believe that the hour burdens and time costs associated with the amendments to rule 22c-1, including the burden associated with the requirements that funds adopt policies and procedures, obtain board approval, and periodic review of an annual written report from the swing pricing administrator, and retain certain records and written reports related to swing pricing, will result in an average aggregate annual burden of 1,932 hours, rather than 2,115 hours, and average aggregate time costs of $1,018,416, rather than $1,244,595.[500] We continue to estimate that there are no external costs associated with this collection of information.

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498 This estimate is based on the following calculations: 2 hours x $58 (hourly rate for a general clerk) = $116; 2 hours x $88 (hourly rate for a senior computer operator) = $176. $116 + $176 = $292.

499 These estimates are based on the following calculations: 4 hours x 84 fund complexes = 336 hours. 84 fund complexes x $292 = $24,528.

500 These estimates are based on the following calculations: (4,788 hours (year 1) + (3 x 336 hours) (years 1, 2 and 3)) ÷ 3 = 1,932 hours; ($2,981,664 (year 1) + (3 x $24,528) (years 1, 2 and 3)) ÷ 3 = $1,018,416.

C. Rule 31a-2

Section 31(a)(1) of the Investment Company Act requires registered investment companies and certain of their majority-owned subsidiaries to maintain and preserve records as prescribed by Commission rules. Rule 31a-1 under the Act specifies the books and records that must be maintained. Rule 31a-2 under the Act specifies the time periods that entities must retain certain books and records, including those required to be maintained under rule 31a-1. The retention of records, as required by rule 31a-2, is necessary to ensure access by Commission staff to material business and financial information about funds and certain related entities. This information is used by the staff to evaluate fund compliance with the Investment Company Act and regulations thereunder. The Commission currently estimates that the annual burden associated with rule 31a-2 is 220 hours per fund, with 110 hours spent by a general clerk at a rate of $52 per hour and 110 hours spent by a senior computer operator at a rate of $81 per hour.[501] The current estimate of the total annual burden for all funds to comply with rule 31a-2 is approximately 766,480 hours at an estimated cost of $50,970,920.[502]

We are adopting amendments to rule 31a-2 to require a fund that chooses to use swing pricing to create and maintain a record of support for each computation of an adjustment to the NAV of the fund's shares based on the fund's swing policies and procedures.[503] This collection of information requirement is mandatory for any fund that chooses to use swing pricing to adjust

501 The estimated salary rates were derived from SIFMA's Office Salaries in the Securities Industry 2011, modified to account for an 1800-hour work-year and multiplied by 2.93 to account for bonuses, firm size, employee benefits, and overhead.

502 These estimates were based on the following calculations: 220 hours x 3,484 funds (the estimated number of funds the last time the rule's information collections were submitted for PRA renewal in 2012) = 766,480 total hours; 776,480 hours ÷ 2 = 383,240 hours; 383,240 x $52/hour for a clerk = $19,928,480; 383,240 x $81 rate per hour for a computer operator = $31,042,440; $19,928,480 + $31,042,440 = $50,970,920 total cost.

503 Proposed amendment to rule 31a-2(a)(2).

its NAV in reliance on the adopted amendments to rule 22c-1. To the extent that the Commission receives confidential information in connection with staff examinations and investigations and oversight programs pursuant to this collection of information, such information will be kept confidential, subject to the provisions of applicable law.

In the proposal, we estimated that approximately 947 funds would use swing pricing and that each fund that uses swing pricing generally would incur an additional burden of 1 hour per year in order to comply with the proposed amendments to rule 31a-2.[504] Accordingly, we estimated that the total average annual hour burden associated with the proposed amendments to rule 31a-2 would have been an additional 947 hours at a cost of $68,169.[505]

Based on updates to industry data figures that were utilized in the Proposing Release and the reduction in our estimate of the number of funds in fund complexes that will choose to use swing pricing, for purposes of the PRA analysis, we estimate that approximately 474 funds (half as many funds as proposed) will use swing pricing.[506] In light of the concerns expressed by commenters that the Commission underestimated the operational costs associated with swing pricing discussed above,[507] we estimate that each fund that uses swing pricing generally will incur an additional burden of 3 hours, rather than 1 hour per year in order to comply with the amendments to rule 31a-2. Accordingly, we estimate that the total average annual hour burden associated with the amendments to rule 31a-2 will be an additional 1,422 hours, rather than 947

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504 *See* Proposing Release, *supra* footnote 6, at section V.D.

505 These estimates were based on the following calculations: 1 hour x 947 funds = 947 total hours; 474 hours x $57 rate per hour for a general clerk = $27,018; 473 hours x $87 rate per hour for a senior computer operator = $41,151; $27,018 + $41,151 = $68,169 total cost.

506 *See also, supra* footnote 489 and accompanying text.

507 *See, e.g.*, Dechert Comment Letter; Eaton Vance Comment Letter; J.P. Morgan Comment Letter; T. Rowe Comment Letter.

hours, at a cost of $103,806, rather than $68,169.[508]

The Commission currently estimates that the average external cost of preserving books and records required by rule 31a-2 is approximately $70,000 per fund at a total cost of approximately $243,880,000 per year,[509] but that funds would already spend approximately half this amount to preserve these same books and records, as they are also necessary to prepare financial statements, meet various state reporting requirements, and prepare their annual federal and state income tax returns. Therefore, the Commission estimated that the total annual cost burden for all funds as a result of compliance with rule 31a-2 is approximately $121,940,000.[510] In the proposal, we estimated that the annual external cost burden of compliance with the information collection requirements of rule 31a-2 would increase by $300 per fund that engages in swing pricing, for an increase in the total annual cost burden of $284,100.[511] We are modifying this figure in response to commenters' general concerns that the Commission as underestimated the operational costs associated with swing pricing and the reduction in the number of funds we estimate will use swing pricing, as discussed above. We estimate that the annual external cost burden of compliance with the information collection requirements of rule 31a-2 would increase by $600 per fund, rather than $300 per fund that engages in swing pricing, for an increase in the total annual cost burden of $284,400, rather than $284,100.[512]

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508 These estimates are based on the following calculations: 3 hour x 474 funds = 1,422 total hours; 711 hours x $58 rate per hour for a general clerk = $41,238; 711 hours x $88 rate per hour for a senior computer operator = $62,568; $41,238 + $62,568 = $103,806 total cost.

509 This estimate is based on the following calculation: 3,484 funds (the estimated number of funds the last time the rule's information collections were submitted for PRA renewal in 2012) x $70,000 = $243,880,000.

510 *See* Submission of OMB Review; and Comment Request, Extension: Rule 31a-2, OMB Control No. 3235-0179, Securities and Exchange Commission, 77 FR 66885 (Nov. 7, 2012).

511 This estimate was based on the following calculation: 947 funds x $300 = $284,100.

512 This estimate is based on the following calculation: 474 funds x $600 = $284,400.

D. Form N-CEN

On May 20, 2015, we proposed to amend rule 30a-1 to require all funds to file reports with certain census-type information on proposed Form N-CEN with the Commission on an annual basis. Proposed Form N-CEN would have been a collection of information under the PRA, and was designed to facilitate the Commission's oversight of funds and its ability to monitor trends and risks. The collection of information under Form N-CEN would be mandatory for all funds, and responses would not be kept confidential.

In the Investment Company Reporting Modernization Proposing Release, we estimated that the average annual hour burden per response for proposed Form N-CEN for the first year would be 32.37 hours and 12.37 hours in subsequent years.[513] Amortizing the burden over three years, we estimated that the average annual hour burden per fund per year would be 19.04 and the total average annual hour burden would be 59,900 hours.[514] We also estimated that all applicable funds would incur, in the aggregate, external annual costs of $1,748,637, which would include the costs of registering and maintaining LEIs for funds.[515]

We are adopting, substantially as proposed, a new reporting item on Form N-CEN to require funds to report information regarding swing pricing.[516] Specifically, the new item on

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513 Investment Company Reporting Modernization Proposing Release, *supra* footnote 11, at n.762 and accompanying text.

514 *Id*. at n.765 and accompanying text.

515 In the Investment Company Reporting Modernization Adopting Release, we continue to estimate that the average annual hour burden per response for Form N-CEN for the first year will be 32.37 hours and 12.37 hours in subsequent years. Amortizing the burden over three years, we continue to estimate that the average annual burden per fund year will be 19.04 hours but that the total aggregate annual hour burden will be 59,272 hours, rather than 59,900 in light of updates to the industry data figures that were utilized in the Investment Company Reporting Modernization Proposing Release. *See* Investment Company Reporting Modernization Adopting Release, *supra* footnote 11, at section IV.B.1.

516 In the Proposing Release, we also proposed to add to Form N-CEN a requirement for funds to report information concerning lines of credit, interfund lending, and interfund borrowing. We are adopting those

Form N-CEN will require funds (other than money market funds and ETFs) to report whether they used swing pricing during the reporting period and, if so, the fund's swing factor upper limit.[517]

In the Proposing Release, we estimated that 8,734 funds would be required to file responses on Form N-CEN. We estimated that the average annual hour burden per additional response to Form N-CEN as a result of the proposed new reporting requirements would be 0.5 hour per fund per year for a total average annual hour burden of 4,367 hours.[518] We did not estimate any change to the external costs associated with proposed Form N-CEN.

We did not receive any comments on these estimated hour and cost burdens. The Commission has modified the estimated increase in annual burden hours and total time costs based on the modification to the proposal to address separately in this Release the requirement to report whether a fund used swing pricing during the reporting period and require funds report the swing factor upper limit if swing pricing was used during the reporting period. The estimated increase in annual burden hours and total time costs also has been modified in light of updated data concerning funds and fund personnel salaries. We estimate that 9,039 funds will be required to file responses to Item C.21 of Form N-CEN regarding swing pricing.[519] For these funds, we estimate that the average annual hour burden per additional response to Form N-CEN as a result of the adopted swing pricing-related additions to Form N-CEN will be 0.5 hour per

reporting requirements and discuss related PRA burdens and costs in the Liquidity Risk Management Programs Adopting Release. *See supra* footnote 8, at section V.G.

517 *See* Item C.21 of Form N-CEN.

518 This estimate was based on the following calculation: 8,734 funds x 0.5 hours = 4,367 hours.

519 *See supra* footnote 388.

fund per year for a total average annual hour burden of 4,519.5 hours.[520] We do not estimate any change to the external costs associated with proposed Form N-CEN.

E. Form N-1A

Form N-1A is the registration form used by open-end investment companies. The respondents to the amendments to Form N-1A adopted today are open-end management investment companies registered or registering with the Commission. Compliance with the disclosure requirements of Form N-1A is mandatory, and the responses to the disclosure requirements are not confidential. We currently estimate for Form N-1A a total hour burden of 1,579,974 hours, and the total annual external cost burden is $124,820,197.[521]

We are adopting amendments to Form N-1A that require funds that use swing pricing to disclose that they use swing pricing, and, if applicable, an explanation of what swing pricing is, the circumstances under which swing pricing is used, and the effects of using swing pricing.[522] Funds that use swing pricing will also be required to disclose the swing factor upper limit.[523] We also are adopting amendments to Form N-1A that require funds to include, if applicable, a footnote that describes the effects of swing pricing on the fund's annual total return bar chart and average annual total returns table, and additional disclosures in the prospectus financial highlights with respect to the per share impact of amounts related to swing pricing in the NAV per-share roll-forward, as well as the Swung NAV per share.[524,525]

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520 This estimate is based on the following calculation: 9,039 funds x .5 hour = 4,519.5 hours.

521 These estimates are based on the last time the rule's information collections were submitted for PRA renewal in 2014.

522 *See* Item 6(d) of Form N-1A.

523 *See id*.

524 *See supra* section II.B. *See also* Item 4(b)(2)(ii); Item 4(b)(2)(iv)(E); Item 13(a); and Instructions 2(d) and (e) of Item 13(a).

We believe that requiring funds to provide this additional disclosure regarding swing pricing will provide Commission staff, investors, and market participants with improved information about the conditions under which swing pricing procedures will be used to mitigate the effects of dilution as a result of shareholder purchase or redemption activity.

Form N-1A generally imposes two types of reporting burdens on investment companies: (i) the burden of preparing and filing the initial registration statement; and (ii) the burden of preparing and filing post-effective amendments to a previously effective registration statement (including post-effective amendments filed pursuant to rule 485(a) or 485(b) under the Securities Act, as applicable). In the Proposing Release, we estimated that each fund would incur a one-time burden of an additional 2 hours,[526] at a time cost of an additional $637,[527] to draft and finalize the required disclosure and amend its registration statement in response to the proposed Form N-1A disclosure requirements. In aggregate, we estimated that funds would incur a one-time burden of an additional 17,468 hours,[528] at a time cost of an additional $5,563,558,[529] to comply with the Form N-1A disclosure requirements originally proposed. We estimated that amortizing the one-time burden over a three-year period would result in an average annual

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525 *See supra* section II.B. In the Proposing Release, we also proposed to amend Form N-1A to require funds to disclose additional information concerning the procedures for redeeming a fund's shares. We are adopting those disclosure requirements and discuss related PRA burdens and costs in the Liquidity Risk Management Programs Adopting Release. *See supra* footnote 8, at section V.H.

526 This estimate was based on the following calculation: 1 hour to update registration statement to include swing pricing-related disclosure statements + 1 hour to update registration statement disclosure about redemption procedures = 2 hours.

527 This estimate was based on the following calculation: 2 hours x $318.5 (blended rate for a compliance attorney ($334) and a senior programmer ($303)) = $637.

528 This estimate was based on the following calculations: 2 hours x 8,734 funds = 17,468 hours.

529 This estimate was based on the following calculation: 17,468 hours x $318.50 (blended rate for a compliance attorney ($334) and a senior programmer ($303)) = $5,563,558.

burden of an additional 5,823 hours at a time cost of an additional $1,854,519.[530]

In the Proposing Release, we also estimated that each fund would incur an ongoing burden of an additional 0.25 hours, at a time cost of an additional $80,[531] each year to review and update the proposed disclosure in response to Item 11 and Item 28 of Form N-1A regarding the pricing and redemption of fund shares and the inclusion of credit agreements as exhibits, respectively. In aggregate, we estimated that funds would incur an annual burden of an additional 2,184 hours,[532] at a time cost of an additional $695,604,[533] to comply with the proposed Form N-1A disclosure requirements.

In the Proposing Release, we further estimated that amortizing these one-time and ongoing hour and cost burdens over three years would result in an average annual increased burden of approximately 0.50 hours per fund,[534] at a time cost of $265.42 per fund.[535]

In total, we estimated in the Proposing Release that funds would incur an average annual increased burden of approximately 8,007 hours,[536] at a time cost of approximately $2,550,123,[537] to comply with the proposed Form N-1A disclosure requirements. We did not estimate any change to the external costs associated with the proposed amendments to Form N-1A.

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530 This estimate was based on the following calculation: 17,468 hours ÷ 3 = 5,823 average annual burden hours; $5,563,558 burden costs ÷ 3 = $1,854,519 average annual burden cost.

531 This estimate was based on the following calculations: 0.25 hours x $318.50 (blended hourly rate for a compliance attorney ($334) and a senior programmer ($303)) = $79.63.

532 This estimate was based on the following calculation: 0.25 hours x 8,734 funds = 2,183.5 hours.

533 This estimate was based on the following calculation: 2,184 hours x $318.50 (blended hourly rate for a compliance attorney ($334) and a senior programmer ($303)) = $695,604.

534 This estimate was based on the following calculation: 1 burden hour (year 1) + 0.25 burden hour (year 2) + 0.25 burden hour (year 3) ÷ 3 = 0.50 hours.

535 This estimate was based on the following calculation: $637 (year 1 monetized burden hours) + $79.63 (year 2 monetized burden hours) + $79.63 (year 3 monetized burden hours) ÷ 3 = $265.42.

536 This estimate was based on the following calculation: 5,823 hours + 2,184 hours = 8,007 hours.

537 This estimate was based on the following calculation: $1,854,519 + $695,604 = $2,550,123.

One commenter stated that the cost estimates under the proposal were overly optimistic, including as an example our estimated $637 cost per fund to implement the proposed Form N-1A disclosure requirements.[538] As discussed above, the amendments to Form N-1A, discussed in this Release, concern disclosure requirements related to swing pricing only. We recognize that certain disclosure requirements related to swing pricing have been modified from the proposal and that these disclosure requirements were not contemplated in the burden hours and costs we estimated in the Proposing Release. For example, we are adopting a requirement that a fund include in its financial highlights presentation in Form N-1A two NAV calculations (*i.e.*, the Net Asset Value adjusted for GAAP and the Net Asset Value adjusted pursuant to Swing Pricing, End of Period) rather than a single Swung NAV as proposed.[539] We are also adopting a requirement that funds include a general description of the effects of swing pricing on the fund's annual total returns bar chart and average annual total returns table if swing pricing policies and procedures were applied during any of the periods represented.[540] We are also requiring funds that use swing pricing to disclose the swing factor upper limit.[541] In addition, we recognize that one commenter suggested that we had understated the cost estimates associated with amendments to Form N-1A although they did not provide alternative quantitative estimates.[542]

The Commission has modified the estimated increase in annual burden hours and total

538 *See* FSR Comment Letter (noting that changes to a fund's disclosure typically involve a number of stakeholders and several rounds of drafting and review, such that costs associated with even modest changes to fund disclosure can have a serious cost component). With the exception of this comment, we did not receive comments on the estimated hour and costs burdens associated with the disclosure amendments to Form N-1A under the proposal.

539 *See* Item 13 of Form N-1A. *See also supra* section II.B.

540 *See* Item 4(b)(2)(ii) and Item 4(b)(2)(iv)(E) of Form N-1A.

541 *See* Item 6(d) of Form N-1A.

542 *See* FSR Comment Letter.

time costs that will result from the amendments to Form N-1A based on the modifications to the proposal discussed in this Release. Furthermore, we have considered the concern expressed by one commenter that the burdens and costs estimated in the proposal were overly optimistic. We also have estimated an increase in the aggregate annual burden hours that will result from the amendments to Form N-1A in light of updated data regarding the number of funds subject to the disclosure requirements.

In the Proposing Release, we estimated that approximately 947 funds would use swing pricing.[543] Based on updates to industry data figures that were utilized in the Proposing Release and the reduction in our estimate of the number of funds in fund complexes that will choose to use swing pricing, for purposes of the PRA analysis, we estimate that approximately 474 funds (half as many funds as proposed) will use swing pricing.[544] We estimate that each fund will incur a one-time burden of an additional 2 hours, rather than 1 hour, to draft and finalize the required swing pricing-related disclosures and amend its registration statement accordingly,[545] but at a time cost of an additional $648, rather than $637,[546] based on updated data concerning funds and fund personnel salaries. In aggregate, we estimate that funds will incur a one-time burden of an additional 948 hours,[547] rather than 17,468 hours, at a time cost of an additional $307,152,[548] rather than $5,563,558, to comply with the Form N-1A disclosure requirements as adopted. We

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543 *See* Proposing Release, *supra* footnote 6, at section V.D.

544 *See supra* footnote 489.

545 This estimate is based on the following calculation: 2 hours to update registration statement to include swing pricing-related disclosure statements.

546 This estimate is based on the following calculation: 2 hours x $324 (blended rate for a compliance attorney ($340) and a senior programmer ($308)) = $648.

547 This estimate was based on the following calculations: 2 hours x 474 funds) = 948 hours.

548 This estimate is based on the following calculation: 948 hours x $324 (blended rate for a compliance attorney ($340) and a senior programmer ($308)) = $307,152.

estimate that amortizing the one-time burden over a three-year period will result in an average annual burden of an additional 316 hours, rather than 5,823 hours at a time cost of an additional $102,384, rather than $1,854,519.[549]

In addition, we estimate that each fund will incur an ongoing burden of an additional one hour, but at a time cost of an additional $324,[550] each year to review and update disclosures required in response to the amendments to Form N-1A related to swing pricing. In aggregate, we estimate that funds will incur an annual burden of an additional 474 hours,[551] at a time cost of an additional $153,576,[552] to comply with the Form N-1A disclosure requirements related to swing pricing adopted today.

Furthermore, we estimate that amortizing these one-time and ongoing hour and cost burdens over three years will result in an average annual increased burden of approximately 1.33 hours per fund,[553] but at a time cost of $432 per fund.[554]

In total, we estimate that funds will incur an average annual increased burden of approximately 790 hours,[555] at a time cost of approximately $255,960,[556] to comply with the Form N-1A disclosure requirements related to swing pricing adopted today. We do not estimate

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549 This estimate is based on the following calculation: 948 hours ÷ 3 = 316 average annual burden hours; $307,152 burden costs ÷ 3 = $102,384 average annual burden cost.

550 This estimate is based on the following calculations: 1 hour x $324 (blended hourly rate for a compliance attorney ($340) and a senior programmer ($308)) = $324.

551 This estimate is based on the following calculation: 1 hour x 474 funds = 474 hours.

552 This estimate is based on the following calculation: 474 hours x $324 (blended hourly rate for a compliance attorney ($340) and a senior programmer ($308)) = $153,576.

553 This estimate is based on the following calculation: 2 burden hours (year 1) + 1 burden hour (year 2) + 1 burden hour (year 3) ÷ 3 = 1.33 hours.

554 This estimate is based on the following calculation: $648 (year 1 monetized burden hours) + $324 (year 2 monetized burden hours) + $324 (year 3 monetized burden hours) ÷ 3 = $432.

555 This estimate is based on the following calculation: 316 hours + 474 hours = 790 hours.

556 This estimate is based on the following calculation: $102,384 + $153,576= $255,960.

any change to the external costs associated with these amendments to Form N-1A.

V. FINAL REGULATORY FLEXIBILITY ACT ANALYSIS

This Final Regulatory Flexibility Analysis has been prepared in accordance with section 3 of the Regulatory Flexibility Act ("RFA").[557] It relates to amendments to rule 22c-1, rule 31a-2, Form N-1A, and Form N-CEN. We prepared an Initial Regulatory Flexibility Analysis ("IRFA") in conjunction with the Proposing Release in September 2015.[558] The Proposing Release included, and solicited comment, on the IRFA.

A. Need for the Rule

Under current pricing methods, shareholder purchase and redemption activity could dilute the value of non-transacting shareholders' interests in some funds. The Commission is adopting amendments to rule 22c-1 to permit a fund to use "swing pricing," the process of adjusting a fund's NAV to effectively pass on to purchasing and redeeming shareholders more of the costs stemming from their trading activity. We believe that rule 22c-1 will promote investor protection by providing funds with an additional tool to mitigate the potentially dilutive effects of shareholder purchase or redemption activity and provide a set of operational standards that will allow funds to gain comfort using swing pricing as a new means of mitigating potential dilution. Swing pricing may also provide funds with an additional tool to manage liquidity risks. In addition, the Commission is adopting related recordkeeping and disclosure requirements to enhance disclosure and Commission oversight of funds' use of swing pricing. Each of these objectives is discussed in detail in section III above.

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557 5 U.S.C. 604.

558 *See* Proposing Release, *supra* footnote 6, at section VI.

B. Significant Issues Raised by Public Comment

In the Proposing Release, we requested comment on the IRFA, requesting in particular comment on the number of small entities that would be subject to the proposed swing pricing rules and whether the proposed swing pricing rules would have any effects that have not been discussed. We requested that commenters describe the nature of any effects on small entities subject to the proposed swing pricing rules and provide empirical data to support the nature and extent of such effects. We also requested comment on the estimated compliance burdens of the proposed swing pricing rules and how they would affect small entities. We received a number of comments related to the impact of our proposal on small entities, with some commenters expressing concern that certain large fund complexes with more influence over their distribution partners (or with more resources/internal processes in place to support swing pricing) would be more successful than small fund complexes in obtaining intraday flow information and implementing swing pricing.[559] We believe this effect on small fund complexes may be mitigated if fund service providers implement the operational changes necessary to support swing pricing for all funds that they service. Based on staff outreach, we understand that fund service providers are more likely to implement operational changes in this manner than they are to implement operational changes selectively for certain funds. We also note that funds will be permitted, but will not be required, to implement swing pricing.

C. Small Entities Subject to the Rule

An investment company is a small entity if, together with other investment companies in the same group of related investment companies, it has net assets of $50 million or less as of the

559 *See* CRMC Comment Letter; Dechert Comment Letter; ICI Comment Letter I; IDC Comment Letter.

end of its most recent fiscal year.[560] Commission staff estimates that, as of December 31, 2015, there were 78 small open-end investment companies (within 76 fund complexes) that would be considered small entities; this number includes open-end ETFs.

D. Projected Reporting, Recordkeeping, and Other Compliance Requirements

1. *Swing Pricing*

Amendments to rule 22c-1 permit, but do not require, all registered open-end funds (except money market funds and ETFs), including small entities, to use swing pricing, provided that it adopts policies and procedures that include certain elements and are approved by the fund's board.[561] A fund's swing pricing policies and procedures must provide that the fund is required to adjust its NAV per share by an amount known as the "swing factor" once the level of net purchases or net redemptions has exceeded a set, specified percentage of the fund's NAV known as the "swing threshold."[562] A fund is required to consider certain factors in determining its swing threshold,[563] and to take into account certain considerations in determining the swing factor.[564] In addition, a fund is required to establish an upper limit on the swing factor(s) used, which may not exceed two percent of NAV per share. The fund's board is required to approve the fund's swing pricing policies and procedures, as well as the fund's swing factor upper limit and swing threshold(s) and any changes to the upper limit or threshold(s). The fund's board is also required to periodically review a written report prepared by the persons responsible for

560 *See* rule 0-10(a) under the Act.

561 *See supra* section II.A.

562 A fund may have multiple, escalating swing factors, with each factor associated with a different swing threshold, subject to the two percent upper limit. *See supra* section II.A.3.c.

563 *Id*.

564 *See supra* section II.A.3.e.

administering swing pricing that includes certain required information.[565] A fund that adopts swing pricing policies and procedures also would be subject to certain recordkeeping requirements under proposed amendments to each of rule 22c-1 and rule 31a-2. We estimate that the annual external cost burden of compliance with these recordkeeping requirements would increase by $600 per fund that engages in swing pricing.[566] Because the amendments permit, but do not require a fund to adopt swing pricing policies and procedures, there is no compliance date associated with this proposed rule. We are providing a two-year effective date for the new swing pricing amendments, however, to provide time for funds, their intermediaries and service providers to make any operational changes necessary to implement swing pricing.[567] By providing a uniform extended effective date, all eligible funds will have time to develop swing pricing capabilities (should they choose to do so) and competitive advantages among funds may be mitigated.

As discussed above, we estimate that, on average, a fund complex would incur one-time costs ranging from $2.4 million to $48.5 million, depending on the fund complex's particular circumstances, to adopt swing pricing policies and procedures and comply with related record retention requirements, as well as ongoing annual costs ranging from $120,000 to $15.8 million per year associated with the new swing pricing (and related recordkeeping) regulations.[568] We estimate that 12 small fund complexes, rather than 24 small fund complexes (half as many small fund complexes as estimated in the proposal), include funds that will adopt swing pricing

[565] *See supra* section II.A.3.f.

[566] *See supra* footnote 512 and accompanying text.

[567] *See supra* section II.A.1.

[568] *See supra* footnote 439 and accompanying paragraph.

policies and procedures pursuant to the rule.[569] We further estimate that these small fund complexes would incur one-time and ongoing costs on the low end of the estimated range as compared to the high end of the estimated range (one-time costs of approximately $2.4 million and ongoing costs of approximately $120,000 per year for each small fund complex).

2. *Disclosure and Reporting Requirements Regarding Swing Pricing*

The swing pricing rules include amendments to Form N-1A and additions to Form N-CEN that are intended to enhance fund disclosure and reporting regarding a fund's use of swing pricing. In particular, the amendments to Form N-1A require funds that use swing pricing to disclose that they use swing pricing, and, if applicable, an explanation of what swing pricing is, the circumstances under which swing pricing is used, the effects of using swing pricing, and the upper limit the fund has set on the swing factor.[570] The amendments to Form N-1A also require funds to disclose on their balance sheet the NAV as adjusted pursuant to swing pricing policies and procedures.[571] The amendments to Regulation S-X requires a fund to disclose both its GAAP NAV per share and the Swung NAV per share as adjusted pursuant to the fund's swing pricing policies and procedures (if applicable). The new item in Form N-CEN requires disclosure regarding whether a fund engaged in swing pricing during the reporting period and, if so, the fund's swing factor upper limit. We estimate that 78 funds are small entities that would be required to comply with the proposed disclosure and reporting requirements.[572]

As discussed above, we estimate that each fund, including funds that are small entities, will

[569] *See supra* footnote 489 and accompanying text.

[570] *See supra* section II.B.

[571] *Id*.

[572] Commission staff estimate as of December 31, 2015.

incur a one-time burden of an additional 2 hours,[573] at a time cost of an additional $648 (plus printing costs), to comply with the amendments to Form N-1A.[574] We also estimate that each fund, including small entities, will incur an ongoing burden of an additional 1 hour, at a time cost of approximately an additional $324 each year associated with compliance with the amendments to Form N-1A.[575] We do not estimate any change to the external costs associated with the amendments to Form N-1A.

As discussed above, we also estimate that the average annual hour burden per additional response to Form N-CEN as a result of the adopted swing pricing additions to Form N-CEN will be 0.5 hour per fund per year.[576] We do not estimate any change to the external costs associated with Form N-CEN.[577]

E. Agency Action to Minimize Effect on Small Entities

The Regulatory Flexibility Act directs the Commission to consider significant alternatives that would accomplish the stated objective, while minimizing any significant impact on small entities. Alternatives in this category would include: (i) Establishing different compliance or reporting standards that take into account the resources available to small entities; (ii) clarifying, consolidating, or simplifying the compliance requirements under the rules and amendments for small entities; (iii) using performance rather than design standards; and (iv) exempting small entities from coverage of the rules and amendments, or any part of the rules and amendments.

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[573] *See supra* footnote 526 and accompanying text.

[574] *See supra* footnote 527 and accompanying text.

[575] *See supra* footnote 531 and accompanying text.

[576] *See supra* footnote 520 and accompanying paragraph.

[577] *Id*.

The Commission does not presently believe that the swing pricing rules would require the establishment of special compliance requirements or timetables for small entities. The swing pricing rules are specifically designed to reduce any unnecessary burdens on all funds (including small funds). To establish special compliance requirements or timetables for small entities may in fact disadvantage small entities by encouraging larger market participants to focus primarily on the needs of larger entities when making the operational changes envisioned by the swing pricing rules, and possibly ignoring the needs of smaller funds.

With respect to further clarifying, consolidating, or simplifying the compliance requirements of the swing pricing rules, using performance rather than design standards, and exempting small entities from coverage of the swing pricing rules or any part of the swing pricing rules, we believe additional such changes would be impracticable. Small entities are as vulnerable to the risk of dilution of the interests of fund shareholders as larger funds. We believe that the swing pricing rules are necessary to help mitigate these risks. Exempting small funds from coverage under the swing pricing rules or any part of the swing pricing rules could compromise the effectiveness of the swing pricing rules or any part of the swing pricing rules.

VI. STATUTORY AUTHORITY AND TEXT OF PROPOSED AMENDMENTS

The Commission is adopting amendments to rule 22c-1 under the authority set forth in sections 22(c) and 38(a) of the Investment Company Act [15 U.S.C. 80a-22(c) and 80a-37(a)]. The Commission is adopting amendments to rule 31a-2 under the authority set forth in section 31(a) of the Investment Company Act [15 U.S.C. 80a-31(a)]. The Commission is adopting amendments to Form N-1A, Regulation S-X, and proposed Form N-CEN under the authority set forth in the Securities Act, particularly section 19 thereof [15 U.S.C. 77a et seq.], the Trust Indenture Act, particularly, section 19 thereof [15 U.S.C. 77aaa et seq.], the Exchange Act, particularly sections 10, 13, 15, and 23, and 35A thereof [15 U.S.C. 78a et seq.], and the Investment Company Act, particularly, sections 8, 30, and 38 thereof [15 U.S.C. 80a et seq.].

TEXT OF RULES AND FORMS

List of Subjects

17 CFR Part 210

Accounting, Investment companies, Reporting and recordkeeping requirements, Securities.

17 CFR Parts 270 and 274

Investment companies, Reporting and recordkeeping requirements, Securities.

For the reasons set out in the preamble, title 17, chapter II of the Code of Federal Regulations is amended as follows:

PART 210 - FORM AND CONTENT OF AND REQUIREMENTS FOR FINANCIAL STATEMENTS, SECURITIES ACT OF 1933, SECURITIES EXCHANGE ACT OF 1934, INVESTMENT COMPANY ACT OF 1940, INVESTMENT ADVISERS ACT OF 1940, AND ENERGY POLICY AND CONSERVATION ACT OF 1975

1. The authority citation for part 210 continues to read as follows:

Authority: 15 U.S.C. 77f, 77g, 77h, 77j, 77s, 77z-2, 77z-3, 77aa(25), 77aa(26), 77nn(25), 77nn(26), 78c, 78j-1, 78*l*, 78m, 78n, 78o(d), 78q, 78u-5, 78w, 78*ll*, 78mm, 80a-8, 80a-20, 80a-29, 80a-30, 80a-31, 80a-37(a), 80b-3, 80b-11, 7202 and 7262, unless otherwise noted.

2. Amend §210.6-02 by adding paragraph (e) to read as follows:

§210.6-02 Definition of certain terms.

***   *   *   *   ***

(e) *Swing pricing*. The term *swing pricing* shall have the meaning given in §270.22c-1(a)(3)(v)(C) of this chapter.

3. Section 210.6-03 is further amended, as published elsewhere in this issue of the *Federal Register*, by adding paragraph (m) to read as follows:

§210.6-03 Special rules of general application to registered investment companies and business development companies.

* * * * *

(m) *Swing Pricing*. For a registered investment company that has adopted swing pricing policies and procedures, state in a note to the company's financial statements:

(1) The general methods used in determining whether the company's net asset value per share will swing;

(2) Whether the company's net asset value per share has swung during the year; and

(3) A general description of the effects of swing pricing.

PART 270 - RULES AND REGULATIONS, INVESTMENT COMPANY ACT OF 1940

4. The authority citation for part 270 continues to read, in part, as follows:

Authority: 15 U.S.C. 80a-1 *et seq.*, 80a-34(d), 80a-37, 80a-39, and Pub. L. 111-203, sec. 939A, 124 Stat. 1376 (2010), unless otherwise noted.

* * * * *

5. Amend §270.22c-1 by adding paragraph (a)(3) to read as follows:

§ 270.22c-1 Pricing of redeemable securities for distribution, redemption and repurchase.

(a) * * *

(3) Notwithstanding this paragraph (a), a registered open-end management investment company (but not a registered open-end management investment company that is regulated as a money market fund under § 270.2a-7 or an exchange-traded fund as defined in paragraph (a)(3)(v)(A) of this section) (a "fund") may use swing pricing to adjust its current net asset value

per share to mitigate dilution of the value of its outstanding redeemable securities as a result of shareholder purchase or redemption activity, provided that it has established and implemented swing pricing policies and procedures in compliance with the paragraphs (a)(3)(i) through (v) of this section.

(i) The fund's swing pricing policies and procedures must:

(A) Provide that the fund must adjust its net asset value per share by a single swing factor or multiple factors that may vary based on the swing threshold(s) crossed once the level of net purchases into or net redemptions from such fund has exceeded the applicable swing threshold for the fund. In determining whether the fund's level of net purchases or net redemptions has exceeded the applicable swing threshold(s), the person(s) responsible for administering swing pricing shall be permitted to make such determination based on receipt of sufficient information about the fund investors' daily purchase and redemption activity ("investor flow") to allow the fund to reasonably estimate whether it has crossed the swing threshold(s) with high confidence, and shall exclude any purchases or redemptions that are made in kind and not in cash. This investor flow information may consist of individual, aggregated, or netted orders, and may include reasonable estimates where necessary.

(B) Specify the process for how the fund's swing threshold(s) shall be determined, considering:

(1) The size, frequency, and volatility of historical net purchases or net redemptions of fund shares during normal and stressed periods;

(2) The fund's investment strategy and the liquidity of the fund's portfolio investments;

(3) The fund's holdings of cash and cash equivalents, and borrowing arrangements and other funding sources; and

(4) The costs associated with transactions in the markets in which the fund invests.

(C) Specify the process for how the swing factor(s) shall be determined, which must include: *(1)* the establishment of an upper limit on the swing factor(s) used, which may not exceed two percent of net asset value per share; and *(2)* the determination that the factor(s) used are reasonable in relationship to the costs discussed in this paragraph. In determining the swing factor(s) and the upper limit, the person(s) responsible for administering swing pricing may take into account only the near-term costs expected to be incurred by the fund as a result of net purchases or net redemptions that occur on the day the swing factor(s) is used, including spread costs, transaction fees and charges arising from asset purchases or asset sales resulting from those purchases or redemptions, and borrowing-related costs associated with satisfying redemptions.

(ii) The fund's board of directors, including a majority of directors who are not interested persons of the fund must:

(A) Approve the fund's swing pricing policies and procedures;

(B) Approve the fund's swing threshold(s) and the upper limit on the swing factor(s) used, and any changes to the swing threshold(s) or the upper limit on the swing factor(s) used;

(C) Designate the fund's investment adviser, officer, or officers responsible for administering the swing pricing policies and procedures ("person(s) responsible for administering swing pricing"). The administration of swing pricing must be reasonably segregated from portfolio management of the fund and may not include portfolio managers; and

(D) Review, no less frequently than annually, a written report prepared by the person(s) responsible for administering swing pricing that describes:

(*1*) its review of the adequacy of the fund's swing pricing policies and procedures and the effectiveness of their implementation, including the impact on mitigating dilution;

(2) any material changes to the fund's swing pricing policies and procedures since the date of the last report; and

(*3*) its review and assessment of the fund's swing threshold(s), swing factor(s), and swing factor upper limit considering the requirements of paragraphs (a)(3)(i)(B) and (C) of this section, including the information and data supporting the determination of the swing threshold(s), swing factor(s), and swing factor upper limit.

(iii) The fund shall maintain the policies and procedures adopted by the fund under this paragraph (a)(3) that are in effect, or at any time within the past six years were in effect, in an easily accessible place, and shall maintain a written copy of the report provided to the board under paragraph (a)(3)(ii)(C) for six years, the first two in an easily accessible place.

(iv) Any fund (a "feeder fund") that invests, pursuant to section 12(d)(1)(E) of the Act (15 U.S.C. 80a-12(d)(1)(E)), in another fund (a "master fund") may not use swing pricing to adjust the feeder fund's net asset value per share; however, a master fund may use swing pricing to adjust the master fund's net asset value per share, pursuant to the requirements set forth in this paragraph (a)(3).

(v) For purposes of this paragraph (a)(3):

(A) *Exchange-traded fund* means an open-end management investment company (or series or class thereof), the shares of which are listed and traded on a national securities exchange, and that has formed and operates under an exemptive order under the Act granted by the Commission or in reliance on an exemptive rule adopted by the Commission.

(B) *Swing factor* means the amount, expressed as a percentage of the fund's net asset value and determined pursuant to the fund's swing pricing policies and procedures, by which a fund adjusts its net asset value per share once a fund's applicable swing threshold has been exceeded.

(C) *Swing pricing* means the process of adjusting a fund's current net asset value per share to mitigate dilution of the value of its outstanding redeemable securities as a result of shareholder purchase and redemption activity, pursuant to the requirements set forth in this paragraph (a)(3).

(D) *Swing threshold* means an amount of net purchases or net redemptions, expressed as a percentage of the fund's net asset value, that triggers the application of swing pricing.

(E) *Transaction fees and charges* means brokerage commissions, custody fees, and any other charges, fees, and taxes associated with portfolio asset purchases and sales.

*   *   *   *   *

6. Section 270.31a-2 is amended by revising paragraph (a)(2) to read as follows:

§270.31a-2 Records to be preserved by registered investment companies, certain majority-owned subsidiaries thereof, and other persons having transactions with registered investment companies.

(a) *   *   *

(2) Preserve for a period not less than six years from the end of the fiscal year in which any transactions occurred, the first two years in an easily accessible place, all books and records required to be made pursuant to paragraphs (5) through (12) of §270.31a-1(b) and all vouchers, memoranda, correspondence, checkbooks, bank statements, cancelled checks, cash reconciliations, cancelled stock certificates, and all schedules evidencing and supporting each computation of net asset value of the investment company shares, including schedules evidencing and supporting each computation of an adjustment to net asset value of the investment company shares based on swing pricing policies and procedures established and

implemented pursuant to §270.22c-1(a)(3), and other documents required to be maintained by §270.31a-1(a) and not enumerated in §270.31a-1(b).

PART 274 - FORMS PRESCRIBED UNDER THE INVESTMENT COMPANY ACT OF 1940

7. The general authority citation for part 274 continues to read, in part, as follows, and the sectional authorities for §§274.101 and 274.130 are removed:

Authority: 15 U.S.C. 77f, 77g, 77h, 77j, 77s, 78c(b), 78*l*, 78m, 78n, 78o(d), 80a-8, 80a-24, 80a-26, 80a-29, and Pub. L. 111-203, sec. 939A, 124 Stat. 1376 (2010), unless otherwise noted.

* * * * *

8. Amend Form N-1A (referenced in 274.11A) by:

a. In Item 4(b)(2)(ii) adding a sentence regarding the effects of swing pricing and in Item 4(b)(2)(iv) adding paragraph (E)

b. In Item 6 adding paragraph (d);

c. In Item 13, adding “Capital Adjustments Due to Swing Pricing” after “Total Distributions” to the list in paragraph (a);

d. In Item 13, adding “Net Asset Value, adjusted pursuant to swing pricing, End of Period” after “Net Asset Value, End of Period”.

e. In Item 13, Instruction 2., adding paragraphs (d) and (e).

The additions read as follows:

Note: The text of Form N-1A does not, and this amendment will not, appear in the Code of Federal Regulations.

Form N-1A

*	*	*	*	*

Item 4. Risk/Return Summary: Investments, Risks, and Performance

*	*	*	*	*

(b)	*	*	*

(2)	*	*	*

(ii) If swing pricing policies and procedures were applied during any of the periods, include a general description of the effects of swing pricing on the Fund's annual total returns for the applicable period(s) presented in a footnote to the bar chart.

*	*	*	*	*

(b)	*	*	*

(2)	*	*	*

(iv)	*	*	*

(E) If swing pricing policies and procedures were applied during any of the periods, include a general description of the effects of swing pricing on the Fund's average annual total returns for the applicable period(s) presented.

Item 6. Purchase and Sale of Fund Shares

(a)	*	*	*

(d)	If the Fund uses swing pricing, explain the Fund's use of swing pricing; including what swing pricing is, the circumstances under which the Fund will use it, the effects of swing pricing on the Fund and investors, and provide the upper limit it has set on the swing factor. With respect to any portion of a Fund's assets that is invested in one or more open-end management investment companies that are registered under the Investment Company Act, the

Fund shall include a statement that the Fund's net asset value is calculated based upon the net asset values of the registered open-end management investment companies in which the Fund invests, and, if applicable, state that the prospectuses for those companies explain the circumstances under which they will use swing pricing and the effects of using swing pricing.

* * * * *

Item 13. Financial Highlights Information

*** * * * ***

Instructions * * *

2. *Per Share Operating Performance.* * * *

(a) * * *

(d) The amount shown at the Capital Adjustments Due to Swing Pricing caption should include the per share impact of any amounts retained by the Fund pursuant to its swing pricing policies and procedures, if applicable.

(e) The amounts shown at the Net Asset Value, as adjusted pursuant to swing pricing, End of Period caption should be the Fund's net asset value per share as adjusted pursuant to its swing pricing policies and procedures on the last day of the reporting period, if applicable.

*** * * * ***

9. Amend Form N-CEN (referenced in §274.101), as published elsewhere in this issue by:

a. In Part C, adding Item C.21.

The addition read as follows:

FORM N-CEN
ANNUAL REPORT FOR REGISTERED INVESTMENT COMPANIES

*   *   *   *   *

Part C. Additional Questions for Management Investment Companies

*   *   *

Item C.21. Swing pricing. For open-end management investment companies, respond to the following:

d. Did the Fund (if not a Money Market Fund, Exchange-Traded Fund, or Exchange-Traded Managed Fund) engage in swing pricing? [Yes/No]

i. If so, what was the swing factor upper limit?

*   *   *   *   *

By the Commission.

Dated: October 13, 2016

Brent J. Fields
Secretary