

# Evaluating Swing Pricing: Operational Considerations

## ADDENDUM

JUNE 2017

All documents and resources listed are proprietary and confidential property of the Investment Company Institute (ICI). Their contents may be shared with your firm's employees, agents, and fund directors as long as the firm, its employees, and directors do not disclose, publish, or otherwise share them with other persons without prior written authorization from ICI. Each firm should make independent decisions, if any, based on the information in this document. For further advice concerning use of the data, please consult your firm's counsel.

Copyright © 2017 by the Investment Company Institute. All rights reserved.

# Evaluating Swing Pricing: Operational Considerations

## ADDENDUM

### Contents

- Receipt of Daily Trade Activity ..... 3
- Estimating Flow from Intermediaries..... 5
  - Traditional FundSERV® ..... 5
  - Defined Contribution Clearance & Settlement ..... 6
- Estimating Flow by Historical Modeling..... 7
- Large Trade Notification ..... 7
- Conclusion ..... 7



## Background and Purpose

Following the Securities and Exchange Commission (SEC) amendment of Rule 22c-1 to permit use of swing pricing,<sup>1</sup> ICI established a Swing Pricing Task Force, comprising representatives from funds, intermediaries, and service providers. The task force evaluated the various operational impediments to the adoption of swing pricing, including receipt of timely and reasonably accurate daily fund flow information from intermediaries. To facilitate this discussion, ICI hosted a roundtable session of the task force.

The discussion focused on the operational challenges funds face in implementing swing pricing, not on the benefits or appropriateness of swing pricing.<sup>2</sup> This paper is intended to summarize the task force's discussions and to supplement ICI's *Evaluating Swing Pricing: Operational Considerations* white paper.<sup>3</sup>

## Receipt of Daily Trade Activity

In advance of the in-person roundtable session, ICI conducted a survey<sup>4</sup> of task force members to establish a baseline understanding of current trading and pricing activities. As anticipated, the survey results underscored a fundamental data gap impeding any implementation of swing pricing.

---

<sup>1</sup> *Investment Company Swing Pricing*, SEC Release No. IC-32316 [Oct. 13, 2016] (referred to in this paper as *the release*), available at [www.sec.gov/rules/final/2016/33-10234.pdf](http://www.sec.gov/rules/final/2016/33-10234.pdf). For a detailed summary of the final amendments, see ICI Memorandum no. 30333, available at [www.ici.org/my\\_ici/memorandum/memo30333](http://www.ici.org/my_ici/memorandum/memo30333).

<sup>2</sup> Each fund must make an independent decision regarding its use of swing pricing.

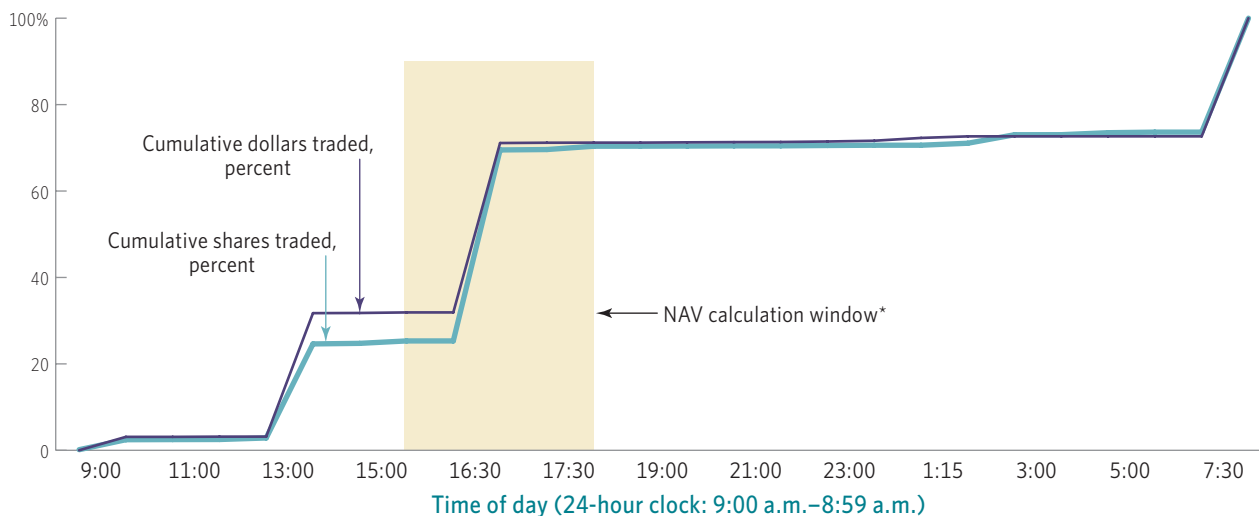
<sup>3</sup> Available at [www.ici.org/pdf/30436a.pdf](http://www.ici.org/pdf/30436a.pdf).

<sup>4</sup> To preserve the confidentiality of the information provided voluntarily by survey participants, ICI collected, aggregated, and reported historical data only, without attribution to specific task force members. Intermediaries provided historical trade delivery data and timing expectations for receipt of fund net asset values (NAVs). Funds provided the latest times they can receive data to support NAV calculation and still meet contracted NAV delivery terms with intermediaries.

## Timing of Trade Delivery for Survey Respondents

Average for 2016:Q3, aggregated across respondents

### Cumulative percentage of actual and estimated trades



\*The shaded area represents the time window for receipt of actual/estimated trade activity by funds to calculate NAV. Most respondents target 90 percent receipt.

More than 90 percent of fund respondents indicated that 90 to 100 percent<sup>5</sup> of trade flow (actual or estimated) is required to apply swing pricing between 4:00 p.m. and 6:00 p.m. (ET),<sup>6</sup> shown in the above chart by the shaded area. The intermediary respondents indicated that only 70 percent of trade flow could be delivered in that time frame. Thus, this survey demonstrates that in the current state of processing, a mismatch occurs between the percentages of trade data the intermediaries can provide versus the percentage the funds need to apply swing pricing.

The SEC's final rule amendment, though, allows that a fund may use reasonable, high confidence<sup>7</sup> estimates to determine whether it has crossed the swing threshold. Because the survey results indicate receipt of actual activity is highly unlikely, much of the task force's discussion centered on a fund's ability to receive estimated daily net shareholder activity from intermediary partners.

<sup>5</sup> Fifty-five percent of the fund respondents that indicated a required percentage of net shareholder activity specified 100 percent. Another 36 percent specified that 90 to 95 percent of activity was required, with the remaining 9 percent requiring less than 90 percent.

<sup>6</sup> The task force confirmed this timing is necessary to meet contractual commitments for NAV publication to intermediaries beginning at 6:45 p.m. (ET).

<sup>7</sup> The release states, "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, but we do not believe that complete information is necessary to make a reasonable high confidence estimate. Instead, a fund may determine its shareholder flows have 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." See pages 55–58 of the release for SEC guidance related to making reasonable estimates.

## Estimating Flow from Intermediaries

In lieu of receiving actual trade activity from intermediaries, funds may consider receiving estimates of anticipated trade activity from intermediaries prior to calculation of the funds' NAVs. In discussing estimates, the task force concluded that providing estimated intermediary trade information in time to determine whether to swing the price would be problematic at best and, in many cases, impossible. This is particularly true for the retirement trading currently executed overnight through the Defined Contribution Clearance & Settlement (DCC&S)<sup>8</sup> service from the Depository Trust & Clearing Corporation (DTCC).

As noted in ICI's *Evaluating Swing Pricing* white paper, because of current operational conventions of retirement trading, a fund wanting to incorporate swing pricing faces a classic "chicken-and-egg" conundrum. That is, a fund needs timely and accurate fund flow information from intermediaries to calculate and publish its daily NAV, but in many cases intermediaries need a NAV from the fund before finalizing and transmitting daily flow information to the fund. This is also true in relation to estimates and is, in part, exacerbated by the intermediaries' trading channels.

### Traditional Fund/SERV<sup>®</sup>

Intermediaries trading via traditional Fund/SERV<sup>®</sup> receive purchase and redemption orders from shareholders up to market close, compliant with SEC Rule 22c-1. The intermediary has recordkeeping processes to complete before the orders can be transmitted to the fund. Today, all this activity generally is completed before 7:00 p.m. (ET). Those task force participants aligned with this practice indicated that with system and procedural enhancements, they may be able to move up processing and submit all orders as actual trades prior to 6:00 p.m. (ET).

Delivery of trade data by 6:00 p.m. (ET) would accommodate the time frame funds need to apply swing pricing, thus avoiding estimates altogether. Generally this group includes traditional brokerage and managed account activity but not "clearing relationships" that support multiple tiers of intermediaries. These tiered relationships largely process on a NAV-dependent basis because the clearing broker needs the NAV to further process the activity it receives from its correspondents in the tiers below.

---

<sup>8</sup> Defined Contribution Clearance & Settlement (DCC&S), offered by the Depository Trust & Clearing Corporation (DTCC), allows for transaction instructions received by intermediaries prior to market close, in compliance with SEC Rule 22c-1 on trade date, to be turned into trade orders overnight and sent to the fund the morning of trade date plus one. This occurs after the intermediary has completed its recordkeeping activities after market close that are necessary to create the trade order(s). For more information, see the DTCC website, [www.dtcc.com/wealth-management-services/mutual-fund-services/defined-contribution-clearance-and-settlement](http://www.dtcc.com/wealth-management-services/mutual-fund-services/defined-contribution-clearance-and-settlement).

## Defined Contribution Clearance & Settlement

Retirement recordkeeping systems in general are dependent on the NAV. As a result, no full set of orders can be created or estimated until a NAV is received. In response to this challenge, the SEC release suggests applying the previous day's NAV to current transaction activity as one possible means of arriving at reasonable estimates of fund flows. But this too would require extensive intermediary system enhancements because intermediaries' current systems have controls in place to prevent the use of prior day NAVs. During the task force discussions, the group identified three barriers to using the previous business day's price to create estimates.

First, the programming required to create an estimate using the previous day's NAV would introduce operational risk and be very costly to implement. As such, there appears to be little appetite for the affected community to take on this expense.

Second, even if the system could use a previous day's NAV to create estimates, the processing time required to run the same processes twice in the evening is greater than the time available. Generally, current retirement recordkeeping processing time, once the NAV is available, is four to six hours. Since participant input can occur until close of market at 4:00 p.m. (ET), it would not be possible to complete the processing routine before the fund would require the estimate to determine if swing pricing applied and publish a price by 6:00 p.m. (ET).

Third, as depicted below, the number of intermediary levels can be two or more deep in many large-scale business models.



With multiple layers, even if the programming and timing issues could be overcome, each layer would need to be able to seamlessly and quickly support the calculation and transmission of estimates.

Individually, these three issues are major challenges; collectively, they are nearly impossible to overcome.



## Estimating Flow by Historical Modeling

Given the difficulties in receiving sufficient trade estimates before 6:00 p.m. (ET), a fund could choose to model predictive flows under various market conditions. Task force discussion suggested a model would need to address accounts' historical transaction flows, volatility, and other events that affect the markets, as well as large outlier trades estimated by intermediaries (e.g., a scheduled retirement plan rebalance). Other factors affecting modeling flows include portfolio composition, shareholder demographics, and distribution channels used.

The group consensus is that a high level of sophistication is required to achieve the necessary level of model precision. However, a successful modeling effort with a high degree of predictive accuracy may be the most reliable alternative for a fund to implement swing pricing without concern for the operational impediments identified in taking an estimation approach.

## Large Trade Notification

Any path forward for a fund, including a predictive modeling–based approach to swing pricing, requires prospective awareness of large trades that a predictive model could not anticipate, such as a fund replacement in a retirement plan. A large trade notification process needs to capture significant events known in advance by intermediaries. This is a key component to incorporate into any trade estimation process because it is unlikely that a fund can predict these events with any accuracy.

Currently, there is no centralized data source or messaging system available to maximize the effectiveness of large trade notification processes among market participants. Funds employ a variety of notification practices, including telephone calls, email, intermediary portals, and fund portals; many funds require a single event to be reported by at least two or more methods (e.g., phone and portal). There is general agreement in the industry that this is an area where improvements can be made. Centralized resource and messaging are topics that ICI and DTCC are addressing with stakeholders to assess the development of potential solutions and standardization.

## Conclusion

Throughout the task force discussions, it was evident that the operational hurdles to the use of swing pricing as identified in *Evaluating Swing Pricing* remain and that, currently, there are no clear industry solutions. As events warrant, ICI will engage with members and other stakeholders to assess if circumstances have improved to enhance the potential to use swing pricing. In the meantime, the task force will continue to explore potential improvements and standards related to large trade notifications.







1401 H Street, NW  
Washington, DC 20005  
202-326-5800  
[www.ici.org](http://www.ici.org)