

SECURITIES AND EXCHANGE COMMISSION

17 CFR Parts 232, 240, and 275

[Release Nos. 34–94196, IA–5957; File No. S7–05–22]

RIN 3235–AN02

Shortening the Securities Transaction Settlement Cycle

AGENCY: Securities and Exchange Commission.

ACTION: Proposed rule.

SUMMARY: The Securities and Exchange Commission (“Commission”) proposes rules to shorten the standard settlement cycle for most broker-dealer transactions from two business days after the trade date (“T+2”) to one business day after the trade date (“T+1”). To facilitate a T+1 standard settlement cycle, the Commission also proposes new requirements for the processing of institutional trades by broker-dealers, investment advisers, and certain clearing agencies. These requirements are designed to protect investors, reduce risk, and increase operational efficiency. The Commission proposes to require compliance with a T+1 standard settlement cycle, if adopted, by March 31, 2024. The Commission also solicits comment on how best to further advance beyond T+1.

DATES: Comments should be received on or before April 11, 2022.

ADDRESSES: Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission’s internet comment form (<https://www.sec.gov/rules/submitcomments.htm>); or
- Send an email to rule-comments@sec.gov. Please include File Number S7–05–22 on the subject line.

Paper Comments

- Send paper comments to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549–1090.

All submissions should refer to File Number S7–05–22. This file number should be included on the subject line if email is used. To help us process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s website (<http://www.sec.gov/rules/proposed.shtml>). Comments are also available for website viewing and printing in the Commission’s Public Reference Room, 100 F Street NE, Washington, DC 20549,

on official business days between the hours of 10:00 a.m. and 3:00 p.m. Operating conditions may limit access to the Commission’s public reference room. All comments received will be posted without change. Persons submitting comments are cautioned that the Commission does not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly.

Studies, memoranda, or other substantive items may be added by the Commission or staff to the comment file during this rulemaking. A notification of the inclusion in the comment file of any such materials will be made available on the Commission’s website. To ensure direct electronic receipt of such notifications, sign up through the “Stay Connected” option at www.sec.gov to receive notifications by email.

FOR FURTHER INFORMATION CONTACT:

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SUPPLEMENTARY INFORMATION: The Commission proposes rules to shorten the standard settlement cycle to T+1 and improve the processing of institutional trades by broker-dealers, investment advisers, and certain clearing agencies. First, the Commission proposes to amend 17 CFR 240.15c6–1 (“Rule 15c6–1”) to shorten the standard settlement cycle for most broker-dealer transactions from T+2 to T+1 and to repeal the T+4 standard settlement cycle for firm commitment offerings priced after 4:30 p.m.,¹ as discussed in Part III.A. Second, the Commission proposes 17 CFR 240.15c6–2 (“Rule 15c6–2”) to prohibit broker-dealers from entering into contracts with their institutional customers unless those contracts require that the parties complete allocations, confirmations, and affirmations by the end of the trade date, a practice the

¹ See *infra* Part III.A, notes 83–85, and accompanying text (discussing the types of securities to which Rule 15c6–1 applies, which includes equities, corporate bonds, unit investment trusts (“UITs”), mutual funds, exchange-traded funds (“ETFs”), American Depositary Receipts (“ADRs”), security-based swaps, and options).

securities industry has commonly referred to as “same-day affirmation,” as discussed in Part III.B. Third, the Commission proposes to amend 17 CFR 275.204–2 (“Rule 204–2”) to require investment advisers that are parties to contracts under Rule 15c6–2 to make and keep records of their allocations, confirmations, and affirmations described in Rule 15c6–2, as discussed in Part III.C. Fourth, the Commission proposes 17 CFR 240.17Ad–27 (“Rule 17Ad–27”) to require a clearing agency that is a central matching service provider (“CMSF”) to establish policies and procedures to facilitate straight-through processing, as discussed in Part III.D. To assess and manage the potential impact of a T+1 settlement cycle, the Commission is also soliciting comment on the following Commission rules and regulations: Regulation SHO; the financial responsibility rules for broker-dealers; requirements in 17 CFR 240.10b–10 (“Rule 10b–10”); and requirements related to prospectus delivery. The Commission proposes to require compliance with each of the proposed rules and rule amendments by March 31, 2024. The Commission solicits comment on this proposed compliance date in Part III.F.

In addition, accelerating beyond a T+1 settlement cycle to a same-day standard settlement cycle (*i.e.*, settlement no later than the end of trade date, or “T+0”) is an objective that the Commission is actively assessing; however, the Commission is not proposing rules to require a T+0 standard settlement cycle at this time. In Part IV, the Commission discusses and requests comment regarding potential pathways to T+0, as well as certain challenges to implementing T+0 that have been identified by market participants. The comments received will be used to inform any future action to further shorten the settlement cycle beyond T+1.

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Statutory Authority and Text of the Proposed Rules and Rule Amendments

I. Introduction

In the 1920s, capital markets maintained a one-day settlement cycle for transactions in securities.² Over the course of the twentieth century, the length of the settlement cycle grew to five days—a response to the ever-growing number of investors, the rising volume of transactions, and the increasing complexity of the processing infrastructure necessary to facilitate the settlement of those transactions.³ Since the late 1980s, the Commission, seeking to protect investors and reduce risk, has been working with the securities industry to minimize the time it takes for securities transactions to settle. The first initiative to shorten the standard settlement cycle emerged following studies by government and industry groups after the October 1987 market break, including the Report of the Bachmann Task Force on Clearance and Settlement Reform in U.S. Securities Markets.⁴ The Bachmann Report

presented multiple recommendations to improve the securities market by improving the safety and soundness of the National C&S System.⁵ The Bachmann Report, submitted to the Commission in May 1992, recommended that by 1994 the Commission shorten the standard settlement cycle from five days to three days.

To support its recommendation, the Bachmann Report used the concept “time equals risk” to illustrate that “less time between a transaction and its completion reduces risk.”⁶ In addition, the report stated that a “shorter settlement cycle will also uncover potential problems sooner, before they mushroom or begin to cascade throughout the industry.”⁷ In recommending that the Commission shorten the standard settlement cycle, the Bachmann Report also stated, “[t]he system and legal initiatives necessary to accomplish the T+3 settlement for corporate and municipal securities should serve as a stepping stone to further reductions in settlement periods over time as technology and systems permit.”⁸

In 1993, the Commission adopted Rule 15c6–1 to shorten this process by requiring the settlement of most securities transactions within three business days (“T+3”),⁹ and in 2017, the Commission amended the rule to require settlement within two business days (“T+2”).¹⁰ The Commission believes that further shortening of the settlement cycle would promote investor protection, reduce risk, and increase operational efficiency. This view has been informed by two recent episodes of increased market volatility—in March 2020 following the outbreak of the COVID–19 pandemic, and in January 2021 following heightened interest in certain “meme” stocks.

the national system for clearance and settlement (“National C&S System”).

⁵ See *id.*

⁶ See *id.* at 4. Specifically, the concept posits that the length of time between the execution and settlement of a securities transaction correlates to the financial risk exposure inherent in the transaction, and that shortening this length of time can reduce the overall risk exposure.

⁷ *Id.*

⁸ *Id.* at 6.

⁹ Exchange Act Release No. 33023 (Oct. 6, 1993), 58 FR 52891 (Oct. 13, 1993) (“T+3 Adopting Release”). In adopting Rule 15c6–1, the Commission set a compliance date of June 1, 1995.

¹⁰ Exchange Act Release No. 80295 (Mar. 22, 2017), 82 FR 15564, 15601 (Mar. 29, 2017) (“T+2 Adopting Release”).

² See Kenneth S. Levine, Was Trade Settlement Always on T+3? A History of Clearing and Settlement Changes, *Friends of Financial History* No. 56, at 20, 22 (Summer 1996), https://archive.org/details/friendsoffinanci00muse_12/page/20/mode/2up?view=theater.

³ See Levine, *supra* note 2, at 23–25.

⁴ See Report of the Bachmann Task Force on Clearance and Settlement Reform in U.S. Securities Markets, Submitted to The Chairman of the U.S. Securities and Exchange Commission (May 1992) (“Bachmann Report”), <https://www.govinfo.gov/content/pkg/FR-1992-06-22/pdf/FR-1992-06-22.pdf>. The task force was headed by John W. Bachmann, the Managing Principal of Edward D. Jones & Co. of St. Louis, Missouri. The recommendations in the Bachmann Report were intended to help inform the Commission’s approach to considering reforms of

These two episodes have highlighted potential vulnerabilities in the U.S. securities market that shortening the standard settlement cycle could help mitigate.¹¹ Accordingly, the Commission is proposing a transition to a T+1 standard settlement cycle. The Commission also believes that achieving settlement by the end of trade date (“T+0”) could benefit investors as well.¹² While the Commission is not proposing a T+0 standard settlement cycle at this time, the Commission would like to better understand the challenges that market participants may need to address and resolve to achieve T+0. Accordingly, the Commission solicits comments on potential paths to and challenges associated with achieving a T+0 standard settlement cycle in Part IV.¹³

On December 1, 2021, the Depository Trust and Clearing Corporation (“DTCC”),¹⁴ the Investment Company Institute (“ICI”),¹⁵ the Securities Industry and Financial Markets Association (“SIFMA”),¹⁶ and Deloitte & Touche LLP (“Deloitte”)¹⁷ published a report that presented industry

¹¹ See, e.g., Staff Report on Equity and Options Market Structure Conditions in Early 2021 (Oct. 14, 2021), <https://www.sec.gov/files/staff-report-equity-options-market-structure-conditions-early-2021.pdf>. This report represents the views of Commission staff. It is not a rule, regulation, or statement of the Commission. The Commission has neither approved nor disapproved its content. This report, like all staff reports, has no legal force or effect: It does not alter or amend applicable law, and it creates no new or additional obligations for any person.

¹² In this release, the Commission uses “T+0” to refer to a settlement cycle that is complete by the end of the day on which the trade was executed (“trade date”). This is sometimes referred to as “same-day” settlement and is distinct from real-time settlement, which contemplates settlement in real time or near real time (*i.e.*, immediately following trade execution) on a gross basis. See *infra* Part IV (further discussing the concept of “T+0” as used in this release, as well as the related concepts of real-time settlement and rolling settlement, where trades are netted and settled intraday on a recurring basis).

¹³ Part IV discusses potential paths to and challenges associated with implementing a T+0 settlement cycle. For example, activities that are linked to the length of the settlement cycle include securities lending activities. See *infra* Part IV.B.6.

¹⁴ DTCC is the holding company for three registered clearing agencies: The Depository Trust Company (“DTCC”), the National Securities Clearing Corporation (“NSCC”), and the Fixed Income Clearing Corporation (“FICC”). It is also the holding company for DTCC ITP Matching (US) LLC (“DTCC ITP Matching”), which operates a CMSP pursuant to an exemption from registration as a clearing agency.

¹⁵ ICI is an association representing regulated funds globally, including mutual funds, ETFs, closed-end funds, and unit investment trusts in the United States, and similar funds offered to investors in jurisdictions worldwide.

¹⁶ SIFMA is a trade association for broker-dealers, investment banks, and asset managers operating in the U.S. and global capital markets.

¹⁷ See *infra* note 18.

recommendations to implement a T+1 standard settlement cycle in the U.S.¹⁸ The Commission has considered the potential requirements, benefits, and costs associated with further shortening the standard settlement cycle in the U.S., and proposes to require that the standard settlement cycle transition to T+1, if adopted, by March 31, 2024.¹⁹ As the securities industry considers how it would implement T+1, the Commission believes that market participants also generally should consider investments in new technology or operations now that can be effective over the long term at maximizing the benefits of risk reduction and improved efficiency in post-trade processing that accompany shortening the settlement cycle, mindful of efforts to shorten the settlement cycle beyond T+1.

In Part II, the Commission provides (i) a history of the key Commission and industry efforts to shorten the standard settlement cycle, including past concerns related to T+1 and T+0 settlement cycles, (ii) an overview of the current state of post-trade processing in the market for U.S. equity securities, and (iii) a summary of other recent market events related to this rule proposal. In Part III, the Commission describes the rule proposals that are necessary to achieve T+1. In Part IV, the Commission discusses the potential pathways and challenges associated with implementing a standard T+0 settlement cycle and requests comment on any and all aspects of achieving T+0.

II. Background

In developing the rule proposals included in this release, the Commission considered the history related to shortening the standard settlement cycle, the current state of post-trade processing in the U.S. equities market, and recent initiatives and market events that have focused attention in the securities industry and the public on the appropriate length of the standard settlement cycle. Each of these is discussed further below.

A. Relevant History

The first industry-level engagement on T+1 began in the late 1990s and

¹⁸ Deloitte, DTCC, ICI, & SIFMA, Accelerating the U.S. Securities Settlement Cycle to T+1 (Dec. 1, 2021) (“T+1 Report”), <https://www.sifma.org/wp-content/uploads/2021/12/Accelerating-the-U.S.-Securities-Settlement-Cycle-to-T1-December-1-2021.pdf>. See *infra* Part II.C (summarizing the recommendations in the T+1 Report).

¹⁹ See *infra* Part III.F (discussing the proposed compliance date). The T+1 Report contemplates implementation of T+1 in the first half of 2024, and the Commission believes that sufficient time is available to achieve T+1 by March 31, 2024, as discussed further in Part III.F.

developed a business case for using straight-through processing to achieve T+1,²⁰ estimating that an industry investment of \$8 billion in improved settlement technologies and processes could reduce settlement exposures by 67% and return \$2.7 billion in annual savings. Implementation of the building blocks described in the Securities Industry Association (“SIA”) Business Case Report was postponed when improving operational resilience following the terrorist attacks of September 11, 2001 took priority,²¹ although many of them were subsequently achieved.

In 2012, DTCC commissioned a new study that found moving to a T+2 settlement cycle would be significantly less costly and take less time to implement than either an immediate or gradual transition to T+1, while still delivering significant benefits with respect to reducing risks and costs.²² The BCG Study ruled out as infeasible at the time a settlement cycle with settlement on trade date (*i.e.*, T+0) “given the exceptional changes required to achieve it and weak support across the industry.”²³ It concluded that a T+0 settlement cycle would face major challenges with processes such as trade reconciliation and exception management, securities lending, and transactions with foreign counterparties (especially where time zones are least aligned). It also concluded that payment systems used for final settlement would need to be significantly altered to enable transactions late in the day. The BCG Study noted that market participants were aware that a T+2 settlement cycle could be accomplished through mere compression of timeframes and corresponding rule changes but that implementing T+2 without certain building blocks would limit the amount of savings that would be realized across the industry.

²⁰ The term “straight-through processing” generally refers to processes that allow for the automation of the entire trade process from trade execution through settlement without manual intervention. See *infra* Part III.D.1 (further discussing the concept of straight-through processing).

²¹ See SIA, T+1 Business Case Final Report (July 2000) (“SIA Business Case Report”), <https://www.sifma.org/wp-content/uploads/2017/05/t1-business-case-final-report.pdf>.

²² See The Boston Consulting Group (“BCG”), Cost Benefit Analysis of Shortening the Settlement Cycle (Oct. 2012) (“BCG Study”), https://www.dtcc.com/-/media/Files/Downloads/WhitePapers/CBA_BCG_Shortening_the_Settlement_Cycle_October2012.pdf.

²³ *Id.* at 9.

The BCG Study further concluded that moving to a T+1 settlement cycle would require new infrastructure to enable near real-time trade processing and would also require transforming the securities lending and foreign buyer processes.²⁴

In 2014, DTCC, ICI, SIFMA, and other market participants formed an Industry Steering Group (“ISG”) to facilitate a transition to T+2.²⁵ The ISG and PricewaterhouseCoopers LLP published a white paper describing certain “industry-level requirements” and “sub-requirements” that the ISG believed would be required for a successful migration to a T+2 settlement cycle.²⁶ In conjunction with the ISG, Deloitte published in December 2015 a “T+2 Playbook” setting forth the requested implementation timeline with milestones and dependencies, as well as detailing “remedial activities” that impacted market participants should consider to prepare for migration to T+2.²⁷ The ISG White Paper also included an implementation timeline that targeted the transition for the end of the third quarter of 2017.

In 2015, the Commission’s Investor Advisory Committee recommended that the Commission pursue T+1 (rather than T+2), noting that retail investors would significantly benefit from a T+1 standard settlement cycle.²⁸ In the event that the Commission determined to pursue a T+2 standard settlement cycle, the IAC recommended that the Commission work with industry participants to create a clear plan for moving to T+1 shortly thereafter.²⁹

The Commission amended Rule 15c6–1 in 2017 to shorten the standard settlement cycle from T+3 to T+2 and set a compliance date for September

2017.³⁰ The Commission recognized that the clearance and settlement process for securities transactions encompassed by the rule involved a number of market participants and entities whose functions and capabilities would be impacted significantly by a change in the standard settlement cycle, and the Commission considered these in its analysis supporting the move to T+2. Among these entities were the NSCC and the DTC, which respectively operate the central counterparty (“CCP”) and central securities depository (“CSD”) for transactions in U.S. equity securities,³¹ three CMSPs,³² and the diverse population of market participants that depend on the clearance and settlement services provided by NSCC, DTC, and the CMSPs. These market participants include but are not limited to, retail and institutional investors, registered investment advisers, broker-dealers, exchanges, alternative trading systems, service providers, and custodian banks.

In the T+2 Adopting Release, the Commission explained that a T+1 standard settlement cycle could produce greater reductions in market, credit, and liquidity risk for market participants than a move to T+2, but that shortening beyond T+2 would require significantly larger investments in new systems and processes.³³ In an effort to analyze, among other things, the impacts of further shortening beyond T+2, the Commission directed Commission staff to study the issue.³⁴ As a result of the staff’s study and analysis of the settlement cycle, the Commission believes that, among other things, improvements to institutional trade processing are critical to promoting the operational efficiency necessary to facilitate a standard settlement cycle shorter than T+2, as discussed further in Part III.B below.

³⁰ T+2 Adopting Release, *supra* note 10; *see also* Exchange Act Release No. 78962 (Sept. 28, 2016), 81 FR 69240 (Oct. 5, 2016) (“T+2 Proposing Release”).

³¹ NSCC and DTC are subsidiaries of DTCC and each a clearing agency registered with the Commission. *See supra* note 14.

³² *See* Order Granting Exemption from Registration as a Clearing Agency for Global Joint Venture Matching Services—U.S., LLC, Exchange Act Release No. 44188 (Apr. 17, 2001), 66 FR 20494, 20501 (Apr. 23, 2001); Order Approving Applications for an Exemption from Registration as a Clearing Agency for Bloomberg STP LLC and SS&C Techs., Inc., Exchange Act Release No. 76514 (Nov. 24, 2015), 80 FR 75388, 75413 (Dec. 1, 2015) (“BSTP and SS&C Order”). In the T+2 Adopting Release, the Commission also referred to these entities as “matching and electronic trade confirmation service providers.” T+2 Adopting Release, *supra* note 10, at 15566.

³³ T+2 Adopting Release, *supra* note 10, at 15582.

³⁴ *Id.* at 15582–83.

B. Current State of Post-Trade Processing

In the T+2 Proposing Release, the Commission provided a detailed overview of post-trade processing for transactions in equity securities, including the roles of the CCP, the CSD, and CMSPs.³⁵ The Commission also provided a summary of the affected market participants—investors, broker-dealers, prime broker-dealers (“prime brokers”), and custodian banks—and described at a high level the different paths to settlement available depending on whether a transaction involves a retail or institutional investor.³⁶ While this overview remains an accurate summary of the post-trade process, the Commission recognizes that shortening the standard settlement cycle beyond T+2 will require particular focus on improving institutional trade processing.

To provide context for understanding the Commission’s rule proposals and the related economic analysis that follows in this release, the Commission provides below an overview of the current state of post-trade processing, including a brief summary of trade flows relevant to the processing of institutional trades. As a general matter, investors often rely on securities intermediaries to facilitate the clearance and settlement of their securities transactions. These intermediaries include broker-dealers, which maintain a securities account on the investor’s behalf to facilitate purchases and sales of securities, and clearing agencies, which provide a range of services designed to facilitate the clearance and settlement of a securities transaction. As relevant to this release, a clearing agency may act as a CCP, a CSD, or a CMSP. The role of each of these entities is explained further below.

1. Clearing Agencies—CCPs, CSDs, and CMSPs

As explained more fully in the T+2 Proposing Release,³⁷ a CCP interposes itself between the counterparties to a trade following trade execution, becoming the buyer to each seller and seller to each buyer to ensure the performance of open contracts. One critical function of a CCP is to eliminate bilateral credit risk between individual buyers and sellers. NSCC is a registered

³⁵ T+2 Proposing Release, *supra* note 30, at 69243–46.

³⁶ As in the T+2 Proposing Release, the distinction between “retail investor” and “institutional investor” is made only for the purpose of illustrating the manner in which these types of entities generally clear and settle their securities transactions.

³⁷ T+2 Proposing Release, *supra* note 30, at 69243.

²⁴ *Id.*

²⁵ *See* Press Release, DTCC, Industry Steering Committee and Working Group Formed to Drive Implementation of T+2 in the U.S. (Oct. 16, 2014), <http://www.dtcc.com/news/2014/october/16/ust2.aspx>.

²⁶ PricewaterhouseCoopers LLP & ISG, Shortening the Settlement Cycle: The Move to T+2 (June 2015) (“ISG White Paper”), <http://www.ust2.com/pdfs/ssc.pdf>. This release uses “ISG” rather than “ISC” (“Industry Steering Committee,” the term used in the ISG White Paper) when referring to the T+2 effort so that this release clearly distinguishes between the ISC’s current work on T+1, as reflected in the T+1 Report, *supra* note 18, from past work on T+2.

²⁷ Deloitte & ISG, T+2 Industry Implementation Playbook (Dec. 18, 2015) (“T+2 Playbook”), <http://www.ust2.com/pdfs/T2-Playbook-12-21-15.pdf>.

²⁸ Investor Advisory Committee (“IAC”), U.S. Securities and Exchange Commission, Recommendation of the Investor Advisory Committee: Shortening the Settlement Cycle in U.S. Financial Markets (Feb. 12, 2015), <https://www.sec.gov/spotlight/investor-advisory-committee-2012/settlement-cycle-recommendation-final.pdf>.

²⁹ *Id.*

clearing agency that provides CCP services for transactions in U.S. equity securities to its members.³⁸ NSCC facilitates the management of risk among its members using a number of tools, which include: (1) Novating and guaranteeing trades to assume the credit risk of the original counterparties; (2) collecting clearing fund contributions from members to help ensure that NSCC has sufficient financial resources in the event that one of the counterparties defaults on its obligations;³⁹ and (3) netting to reduce NSCC's overall exposure to its counterparties.⁴⁰

As discussed further in Part V.B.1, CCP netting reduces risk in the settlement process by reducing the overall number of obligations that must be settled. NSCC's netting and accounting system is called the Continuous Net Settlement System ("CNS"). NSCC accepts trades into CNS for clearing from the nation's exchanges and other trading venues, and it uses CNS to net each NSCC member's trades in each security traded that day to a single position for each security, either long (*i.e.*, the right to receive securities) or short (*i.e.*, an obligation to deliver securities). Throughout the day, NSCC records cash debit and credit data generated by its members' activities, and at the end of the processing day, NSCC nets the debits and credits to produce one aggregate cash debit or credit for each member.⁴¹

While NSCC provides final settlement instructions to its members each day, the payment for and transfer of securities ownership occurs at DTC, which serves as the CSD and settlement system for U.S. equity securities. At the conclusion of each trading day, an NSCC member's short and long positions are compared against its corresponding DTC account to determine whether securities are available for settlement. If securities are

available, they will be transferred to cover the NSCC member's short positions. Specifically, on settlement date NSCC submits instructions to DTC to deliver (*i.e.*, transfer) securities positions for each security netted through CNS to each NSCC member holding a long position in such securities. Cash obligations are settled through DTC by one net payment for each NSCC member at the end of the settlement day.⁴²

As noted above, DTC is a CSD, which is an entity that holds securities for its participants either in certificated or uncertificated (*i.e.*, immobilized or dematerialized) form so that ownership can be easily transferred through a book entry (rather than the transfer of physical certificates) and provides central safekeeping and other asset services. Additionally, a CSD may operate a securities settlement system, which is a set of arrangements that enables transfers of securities, either for payment or free of payment, and facilitates the payment process associated with such transfers. DTC serves as the CSD and settlement system for most U.S. equity securities, providing custody and book-entry services.⁴³ In accordance with its rules, DTC accepts deposits of securities from its participants, credits those securities to the depositing participants' accounts, and effects book-entry transfer of those securities. DTC substantially reduces the number of physical securities certificates transferred in the U.S. markets, which significantly improves operational efficiencies and reduces risk and costs associated with the processing of physical securities certificates.

In addition to a securities account at DTC, each DTC participant has a settlement account at a clearing bank to record any net funds obligation for end-of-day settlement. Debits and credits in the participant's settlement account are netted intraday to calculate, at any time, a net debit balance or net credit balance, resulting in an end-of-day settlement obligation or right to receive payment. DTC nets debit and credit balances for

participants who are also members of NSCC to reduce fund transfers for settlement, and acts as settlement agent for NSCC in this process. Settlement payments between DTC and DTC's participants' settlement banks are made through the National Settlement Service ("NSS") of the Federal Reserve System.⁴⁴

CMSPs electronically facilitate communication among a broker-dealer, an institutional investor or its investment adviser, and the institutional investor's custodian to reach agreement on the details of a securities trade.⁴⁵ These entities emerged as a result of efforts by market participants to develop a more efficient and automated matching process that continues to be viewed as a necessary step in achieving straight-through processing for the settlement of institutional trades.

CMSPs provide the communication facilities to enable a broker-dealer and an institutional investor to send messages back and forth that results in the agreement of the trade details, generally referred to as an "affirmation" or "affirmed confirmation," which is then sent to DTC to effect settlement of the trade.⁴⁶ In general, the formatting and content of messages used to communicate confirmations and affirmations varies and may include use of, for example, SWIFT, FIX, ISITC, or other formats. The delivery method of such messages also may vary across market participants. The CMSP, by acting as a centralized hub, helps promote standardization and facilitate communication.

In addition, a CMSP may offer a "matching" process by which it compares and reconciles the broker-dealer's trade details with the institutional investor's trade details to determine whether the two descriptions of the trade agree, at which point it can generate an affirmation to effect settlement of the trade. As part of such process, the CMSP may offer services that can assist with the automated identification of trades that do not match, allowing market participants to identify errors and remediate any trade information that does not match.

⁴⁴ The relevance of NSS to achieving money settlement in a T+0 environment is discussed in Part IV.B.3.

⁴⁵ The role of the CMSP in facilitating settlement is discussed more fully in the T+2 Proposing Release. See T+2 Proposing Release, *supra* note 30, at 69246.

⁴⁶ Specifically, the CMSP will send the affirmed confirmations to DTC where the DTC participants, who will deliver the securities, will authorize the trades for automated settlement.

³⁸ As discussed further in the T+2 Proposing Release, NSCC also provides CCP services for other types of securities, including corporate bonds, municipal securities, and UITs. *Id.*

³⁹ Commission rules require a covered clearing agency that provides CCP services to have policies and procedures reasonably designed to maintain financial resources that cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the participant family that would potentially cause the largest aggregate credit exposure for the covered clearing agency in extreme but plausible market conditions. See 17 CFR 240.17Ad-22(e)(4)(iii).

⁴⁰ These functions are discussed in more detail in the T+2 Proposing Release. See T+2 Proposing Release, *supra* note 30, at 69243. Since publication of the T+2 Proposing Release, NSCC has amended its rules to provide a trade guarantee as soon as NSCC has validated the trade upon submission for clearing.

⁴¹ The operation of CNS is explained more fully in the T+2 Proposing Release. See *id.* at 69244.

⁴² The interaction between NSCC and DTC to achieve settlement is explained more fully in the T+2 Proposing Release. See *id.* at 69245.

⁴³ DTC's role as CSD is discussed more fully in the T+2 Proposing Release. See *id.* at 69245-46. As of 2017, DTC retained custody of more than 1.3 million active securities issues valued at \$54.2 trillion, including securities issued in the U.S. and 131 other countries and territories. See DTCC, *Businesses and Subsidiaries: The Depository Trust Company (DTC)*, <https://www.dtcc.com/about/businesses-and-subsidiaries/dtc>. The corporate bond market accounted for another \$30 billion and the municipal bond market saw over \$10 billion on average traded every day in 2016. See SIFMA, T+2 Fact Sheet, <https://www.sifma.org/wp-content/uploads/2017/09/Sep-8-T2-Update-Fact-Sheet.pdf>.

2. Broker-Dealers

Broker-dealers are securities intermediaries that, among other things, may hold accounts on behalf of investors to facilitate the purchase and sale of securities transactions. Broker-dealers that are direct members of clearing agencies are typically referred to as “clearing brokers.” Clearing brokers must comply with the rules of the clearing agency, including but not limited to rules for operational and financial requirements.⁴⁷ Broker-dealers that submit transactions to a clearing agency through a clearing broker are typically referred to as “introducing brokers.” In general, broker-dealers executing trades on a registered securities exchange are required to clear those transactions through a registered clearing agency. Broker-dealers executing trades outside the auspices of a trading venue (e.g., on an internalized basis) may clear through a clearing agency or may choose to settle those trades through mechanisms internal to that broker-dealer.

3. Retail and Institutional Investors

As discussed in the T+2 Proposing Release, institutional investors are entities such as, but not limited to, pension funds, mutual funds, hedge funds, bank trust departments, and insurance companies.⁴⁸ Transactions

involving institutional investors are often more complex than those for and with retail investors due to the volume and size of the transactions, the entities involved in facilitating the execution and settlement of the trade, including CMSPs, bank custodians, or prime brokers, and the need to manage certain regulatory or business obligations.⁴⁹ By contrast, the settlement of retail investor trades generally occurs directly with the investor’s broker-dealer,⁵⁰ without relying on a separate custodian bank or prime broker.

Institutional investors may choose to trade through an executing broker-dealer that clears and settles its securities transactions using NSCC and DTC. However, depending on the size and complexity of the trade and the number of trading partners involved in the transaction, institutional investors may also choose to avail themselves of processes specifically designed to address the unique aspects of their trades. Specifically, as described below, many institutional trades settle on an allocated trade-for-trade basis through a custodian bank. Many hedge funds settle their trades using prime brokers.

Below are diagrams that illustrate at a high level the typical path to settlement for retail trades and institutional trades.

(a) Retail Trades

In general, individual retail investors rely on their broker-dealers to execute trades on their behalf as customers of their broker-dealers. As previously

discussed, a broker-dealer may choose to internalize a customer’s order using its own inventory of securities. However, the broker-dealer may also take other steps, away from its customer, to deliver securities to its customer’s account. Depending on how the broker-dealer executes such trades away from its customer, these other trades may clear through a clearing agency or may settle bilaterally.

Retail investors may engage in “self-directed” trading. Figure 1 illustrates, at a high level, the activities that take place for a self-directed retail trade. In this scenario, when a retail investor places an order to trade with its counterparty, the counterparty—typically, the broker-dealer through which the retail investor holds its securities account—will execute the trade. The counterparty will issue a trade confirmation identifying certain trade details, such as the transaction type, the account information, the security and quantity of shares traded, the trade and settlement dates, and the net amount of money to be received or paid at settlement.⁵¹ The confirmation may also include other financial details, such as commissions, taxes, and fees. A retail investor generally would review the information provided in the confirmation and contact its broker-dealer to correct any errors. In the absence of errors, the broker-dealer can proceed with settlement processing.

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⁴⁷ The requirements for membership or participation established by the clearing agencies are discussed more fully in the T+2 Proposing Release. See T+2 Proposing Release, *supra* note 30, at 69247.

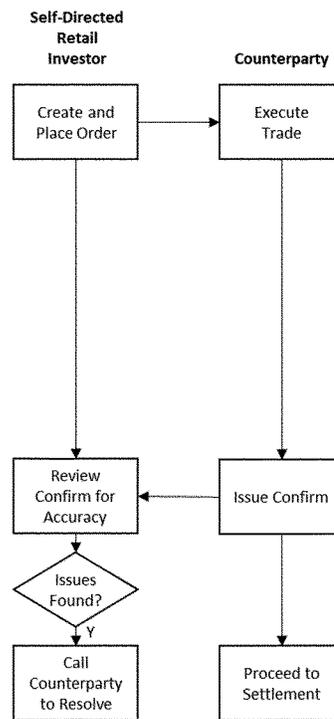
⁴⁸ Institutional investors also include employee-benefit plans, foundations, endowments, insurance companies and registered investment companies (“RICs”) (of which mutual funds are one type), among other investor types.

⁴⁹ See T+2 Proposing Release, *supra* note 30, at 69247 (discussing the same).

⁵⁰ As previously discussed, if the broker-dealer is an introducing broker-dealer, the broker-dealer may use a clearing broker-dealer to facilitate clearance and settlement. See *id.* (discussing the same).

⁵¹ See *infra* Part III.B.1 (further discussing trade confirmations and distinguishing the requirements with respect to a confirmation under existing Rule 10b-10 and a confirmation under proposed Rule 15c6-2).

Figure 1. Trade processing from the perspective of a self-directed retail investor.



In some instances, self-directed retail trades and trades directed by an investment adviser are executed together as part of a block trade initiated by an investment adviser, which could also engage the use of a CMSP to communicate the allocations of the block trade to participating accounts.⁵² Further discussion of institutional trades and the use of block trades by institutional investors follows below.

(b) Institutional Trades

Institutional investors often engage a broker-dealer or another counterparty for trade execution, and separately, a bank custodian to provide custodial safekeeping and asset servicing for their investments.⁵³ Because the counterparty and the custodian are different entities in this scenario, additional steps are necessary to complete the post-trade process, as identified by the black

shapes in Figure 2. Specifically, the institutional investor or its investment adviser will need to instruct the bank custodian on the details of each transaction and authorize the bank custodian to settle the trade. The black shapes in Figure 2 also illustrate how the investor's counterparty generally will provide the institutional investor or investment adviser with execution details prior to issuing a trade confirmation.⁵⁴

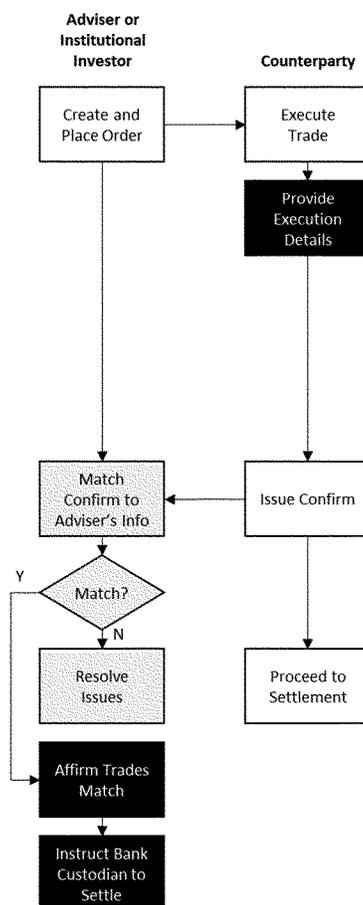
⁵² See *supra* Part II.B.1 (discussing the services provided by a CMSP); *infra* Part II.B.3.c) (discussing block trades).

⁵³ Some institutional investors use broker-dealers to custody their securities, and in such cases their transactions will trade and settle as described in Figure 1. In this release, we have grouped such

circumstances under the retail investor scenario because of the similar transaction flow.

⁵⁴ An electronic copy of the execution details is sometimes referred to as a "notice of execution."

Figure 2. Trade processing from the perspective of an institutional investor or its investment adviser without the use of a CMSP.



Institutional investors, along with their broker-dealers and bank custodians, may rely on the services of a CMSP to transmit confirmations and affirmations or match the trade details to prepare a trade for settlement. Alternatively, they may use other standardized messaging protocols, such as FIX and SWIFT,⁵⁵ to communicate trade information. Some market participants, however, still rely on manual processes to communicate trade information, such as through the use of fax machines or email, and may use Excel data files rather than standardized data protocols.⁵⁶ Whichever the

mechanism, achieving an affirmed confirmation by the end of trade date is considered a securities industry best practice.⁵⁷ According to data from DTCC, however, only 68% of trades are affirmed on trade date.⁵⁸ Figure 2 illustrates a scenario where the institutional investor does not rely on a CMSP to complete the confirmation/affirmation process.

For some institutional investors, such as hedge funds, a prime broker may act as both the counterparty to the trade and the custodian of the securities. In this scenario, the institutional investor or its

investment adviser provides trade details to the prime broker, and the prime broker will affirm the transaction to facilitate settlement. As a broker-dealer, the prime broker may also use NSCC to clear the transaction. Generally, the Commission understands that the prime broker will “disaffirm” a transaction if the institutional investor does not make margin payments required of the investor by the prime broker.

(c) Use of Block Trades

Investment advisers commonly trade in “blocks” to manage the accounts of their institutional clients. In such a scenario, investment advisers aggregate the orders of multiple clients into a block for trade execution. After trade execution of the block order by the broker-dealer, the investment adviser

⁵⁵ See T+1 Report, *supra* note 18, at 5.

⁵⁶ Protocols are the rules that govern the exchange or transmission of data and may refer to the specific content and formatting of trade information (*i.e.*, ISO15022, FIX, SWIFT or an Excel template), the method for delivery trade information (*i.e.*, file transfer protocol (FTP), SSH file transfer protocol (SFTP), SWIFT, DTC ITP, email, etc.), or both. They may also refer to the frequency of transmission, deadlines for data delivery, and whether data is sent for individual trades or a group (or “batch”) of trades. Some delivery mechanisms may offer a

hub-and-spoke model for delivery, in which the sender delivers data to a central hub and the hub passes the data on to identified recipients. Other delivery mechanisms are bi-lateral, in which the sender and receiver have a direct communication with one another without transmission through a hub.

⁵⁷ See T+1 Report, *supra* note 18, at 8–9.

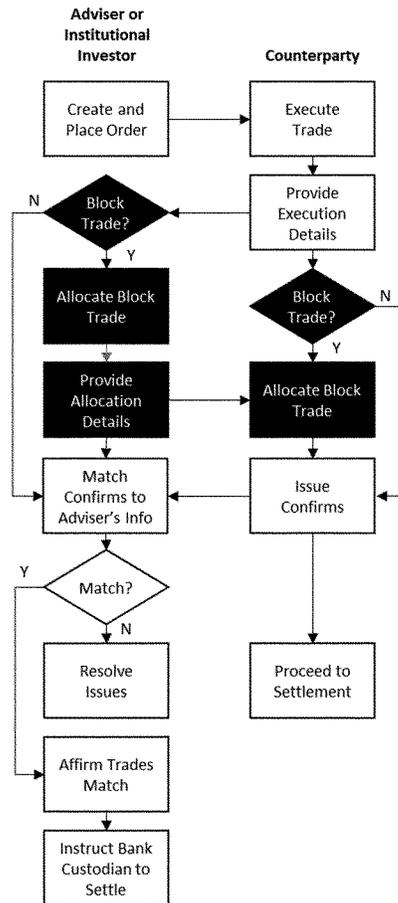
⁵⁸ Sean McEntee, Executive Director, ITP Product Management, DTCC, Remarks at the DTCC ITP Forum—Americas (June 17, 2021) (“DTCC ITP Forum Remarks”) (recording available at <https://www.dtcc.com/events/archives>).

will allocate securities within the block to the accounts of its clients participating in the block, as reflected in

Figure 3. These allocation instructions are communicated to the broker-dealer so that the broker-dealer can generate a

confirmation of the trade details for each account for the investment adviser to affirm.

Figure 3. Processing of a block trades from the perspective of an institutional investor or its investment adviser.



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C. Recent Initiatives and Market Events

Efforts to facilitate a settlement cycle shorter than T+2 began soon after the transition to a T+2 standard settlement cycle had been completed. For example, DTCC announced two initiatives in January 2018 to achieve additional operational and capital efficiencies, dubbed “Accelerating Time to Settlement” and “Settlement Optimization.”⁵⁹ Among other things, the DTCC-owned clearing agencies have

been exploring steps to modify their settlement process to be more efficient, such as by introducing new algorithms to position more transactions for settlement during the “night cycle” process (which currently begins in the evening of T+1) to reduce the need for activity on the day of settlement. Portions of these two initiatives have been submitted to the Commission and approved as proposed rule changes.⁶⁰

More recently, periods of increased market volatility—first in March 2020 following the outbreak of the COVID-19 pandemic, and again in January 2021 following heightened interest in certain “meme” stocks—highlighted the significance of the settlement cycle to the calculation of financial exposures and exposed potential risks to the stability of the U.S. securities market.⁶¹

⁵⁹ DTCC, Modernizing the U.S. Equity Markets Post-Trade Infrastructure (Jan. 2018) (“DTCC Modernizing Paper”), <https://www.dtcc.com/-/media/Files/downloads/Thought-leadership/modernizing-the-u-s-equity-markets-post-trade-infrastructure.pdf>. These initiatives are relevant to the discussion of T+0 building blocks related to netting and batch processing, as discussed in Part IV.B.1 and Part IV.B.2.

⁶⁰ See, e.g., Exchange Act Release No. 87022 (Sept. 19, 2019), 84 FR 50541 (Sept. 25, 2019) (order amending NSCC’s settlement guide to implement a new algorithm for night cycle transactions); Exchange Act Release No. 87756 (Dec. 16, 2019), 84 FR 70256 (Dec. 20, 2019) (order extending the implementation timeframe for the new algorithm for transactions processed in the night cycle); Exchange Act Release No. 87023 (Sept. 19, 2019), 84 FR 50532 (Sept. 25, 2019) (order amending the CNS Accounting Operation of NSCC’s Rules &

Procedures with respect to receipt of securities from NSCC’s CNS System).

⁶¹ According to DTCC, on March 12, 2020, NSCC processed over 363 million market-side transactions in equity securities, topping by 15% its prior peak set in October 2008 during the financial crisis. On an average day, NSCC processes approximately 106 million market-side transactions. DTCC, Advancing Together: Leading the Industry to Accelerated Settlement, at 4 (Feb. 2021) (“DTCC White Paper”), <https://www.dtcc.com/-/media/Files/PDFs/White%20Paper/DTCC-Accelerated-Settle-WP-2021.pdf>.

Specifically, these two events have expanded a public debate over the length of the settlement cycle, and whether a shorter settlement cycle could have reduced the impact of the market volatility on investors by, among other things, reducing the length of time over which a broker-dealer member of NSCC is required to provide margin deposits with respect to a given transaction, thereby also potentially reducing the size of the deposits required per portfolio to manage the increased volatility.

In February 2021, DTCC published the DTCC White Paper stating that accelerating settlement beyond T+2 may bring significant benefits to market participants but requires careful consideration and a balanced approach so that settlement can be achieved as close to the trade as possible without creating capital inefficiencies or introducing new, unintended consequences—such as inadvertently reducing or eliminating the benefits and cost savings provided by multilateral netting.⁶² DTCC suggested that shortening the settlement cycle to T+1 could occur in the second half of 2023, and it estimated that a T+1 settlement cycle could reduce the volatility component of NSCC margin requirements by up to 41%.⁶³ DTCC also contended that achieving T+1 could be largely supported by using existing systems and available tools and procedures.⁶⁴ With respect to a T+0 settlement cycle, DTCC distinguished between netted T+0 settlement and real-time gross settlement,⁶⁵ noting that in a netted settlement environment, trades would be netted either during the day or prior to settlement at the end of the day; with real-time gross settlement, trades would be settled instantaneously without netting. Currently, the DTCC clearing agencies can facilitate settlement on either T+1 or T+0 pursuant to their rules and procedures for accelerated settlement.⁶⁶ The DTCC White Paper explained that DTCC's participants believe “the hurdles to T+0 settlement,” especially real-time gross settlement, are “too great at this

⁶² *Id.* at 2. The DTCC White Paper notes that centralized multilateral netting reduces the value of payments that need to be exchanged each day by an average of 98%, and netting is particularly important during times of heightened volatility and volume.

⁶³ *Id.* at 5, 8.

⁶⁴ *Id.* at 5.

⁶⁵ See *supra* note 12 and accompanying text (making the same distinction); *infra* Part IV (discussing three potential models for T+0 settlement, and soliciting comment on these models).

⁶⁶ See, e.g., DTCC, Same-Day Settlement (SDS), <https://www.dtcc.com/sds>.

time.”⁶⁷ Furthermore, DTCC noted that real-time gross settlement could require trades to be funded on a trade-for-trade basis, eliminating the liquidity and risk-reduction benefits of existing CCP netting processes.⁶⁸ Additionally, DTCC indicated that over the past year it has been working collaboratively with a cross-section of market participants to build support for further shortening of the settlement cycle, and has outlined a plan to increase these efforts to forge a consensus on setting a firm date and approach to achieving a transition to T+1.⁶⁹

Following publication of the DTCC White Paper, the securities industry formed an Industry Steering Committee (“ISC”) and an Industry Working Group (“IWG”)⁷⁰ with the intent of developing industry consensus for an accelerated settlement cycle transition, including to understand the impacts, evaluate the potential risks, and develop an implementation approach. To support this effort, the ISC engaged Deloitte to facilitate the IWG's analysis of the benefits and barriers to moving to T+1, and coordinate with the industry on recommending solutions for the transition.⁷¹ In April 2021, DTCC, ICI, and SIFMA issued a joint press release to announce their collaboration “on efforts to accelerate the U.S. securities settlement cycle from T+2 to T+1.”⁷²

As stated above, on December 1, 2021, DTCC, SIFMA and ICI, together with Deloitte, published the T+1 Report, which outlined the ISC's recommendations for achieving a T+1 standard settlement cycle, and proposed transitioning to T+1 settlement by the second quarter of 2024.⁷³ These recommendations focused on the following topics: Allocation and confirmation of institutional trades, trade documentation, global settlement and FX markets, corporate actions, prime brokerage services, securities lending, settlement errors and fails, creation and redemption of exchange

⁶⁷ DTCC White Paper, *supra* note 61, at 7.

⁶⁸ *Id.*

⁶⁹ See Press Release, DTCC, DTCC Proposes Approach to Shortening U.S. Settlement Cycle to T+1 Within 2 Years (Feb. 24, 2021), <https://www.dtcc.com/news/2021/february/24/dtcc-proposes-approach-to-shortening-us-settlement-cycle-to-t1-within-two-years>.

⁷⁰ IWG participation consisted of over 800 subject matter advisors representing over 160 firms from buy- and sell-side firms, custodians, vendors, and clearinghouses. T+1 Report, *supra* note 18, at 4.

⁷¹ *Id.*

⁷² See Press Release, DTCC, SIFMA, ICI and DTCC Leading Effort to Shorten U.S. Securities Settlement Cycle to T+1, Collaborating with the Industry on Next Steps (Apr. 28, 2021), <https://www.dtcc.com/news/2021/april/28/sifma-ici-and-dtcc-leading-effort-to-shorten-us-securities-settlement-cycle-to-t1>.

⁷³ See T+1 Report, *supra* note 18.

traded funds (“ETFs”), equity and debt offerings, and regulatory requirements.⁷⁴

In addition to presenting the ISC's recommendations regarding the requirements for moving to T+1, the T+1 Report stated that the IWG also considered the impacts and benefits of moving to T+0 settlement.⁷⁵ The ISC and IWG concluded, by consensus, that T+0 is not achievable in the short term given the current state of the settlement ecosystem.⁷⁶ The T+1 Report stated that a move towards a shortening of the settlement cycle to T+0 would require an overall modernization of current-day clearance and settlement infrastructure, changes to business models, revisions to industry-wide regulatory frameworks, and the potential implementation of real-time currency movements to facilitate such a change.⁷⁷ Additionally, the IWG indicated that “adoption of such technologies would disproportionately fall on small and medium-sized firms that rely on manual processing or legacy systems and may lack the resources to modernize their infrastructure rapidly.”⁷⁸ The T+1 Report also described several “key areas” that the IWG concluded would be significantly impacted by a move to T+0 settlement. These areas included: Re-engineering of securities processing; securities netting; funding requirements for securities transactions; securities lending practices; prime brokerage practices; global settlement; and primary offerings, derivatives markets and corporate actions.⁷⁹ The Commission is assessing these challenges, and in Part IV, includes further discussion of them in requesting comment on considerations related to T+0 settlement.

III. Proposals for T+1

The Commission is proposing the following rules to implement a T+1 standard settlement cycle. First, the Commission proposes to amend Rule 15c6–1 to establish a standard settlement cycle of T+1 for most broker-dealer transactions.⁸⁰ In so doing, the Commission also proposes to repeal Rule 15c6–1(c), which currently establishes a T+4 standard settlement cycle for certain firm commitment offerings.⁸¹ Second, the Commission proposes three additional rules applicable, respectively, to broker-

⁷⁴ *Id.*

⁷⁵ *Id.* at 10.

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.* at 11.

⁸⁰ See *infra* Part III.A.1.

⁸¹ See *infra* Part III.A.3.

dealers, investment advisers, and CMSPs to improve the efficiency of managing the processing of institutional trades under the shortened timeframes that would be available in a T+1 environment. Specifically, the Commission proposes new Rule 15c6–2 to prohibit broker-dealers who have agreed with a customer to engage in an allocation, confirmation or affirmation process from effecting or entering into a contract for the purchase or sale of a security on behalf of that customer unless the broker-dealer has also entered into a written agreement that requires the allocation, confirmation, affirmation to be completed as soon as technologically practicable and no later than the end of the day on trade date in order to complete settlement in the timeframes required under Rule 15c6–1(a). The Commission also proposes to amend the recordkeeping obligations of investment advisers to ensure that they are properly documenting their related allocations and affirmations, as well as retaining the confirmations they receive from their broker-dealers. Finally, the Commission proposes a requirement for CMSPs to establish, implement, maintain, and enforce written policies and procedures designed to facilitate straight-through processing. Each proposal is discussed further below.

In addition, the Commission also discusses the anticipated impact of T+1 on other Commission rules and existing Commission guidance on Regulation SHO, the financial responsibility rules for broker-dealers under the Exchange Act, Rule 10b–10, prospectus delivery, and rules and operations of self-regulatory organizations (“SROs”). Finally, the Commission proposes to require compliance with each of the above rule proposals, if adopted, by March 31, 2024. The Commission is soliciting comment on all aspects of the proposals, and in each section below also solicits comment on specific aspects of the proposed rules and rule amendments, the anticipated impact on the other Commission rules noted above, and the proposed compliance date.

A. Shortening the Length of the Standard Settlement Cycle

Existing Rule 15c6–1(a) under the Exchange Act provides that, unless otherwise expressly agreed by the parties at the time of the transaction, a broker-dealer is prohibited from entering into a contract for the purchase or sale of a security (other than an exempted security, government security, municipal security, commercial paper, bankers’ acceptances, or commercial bills) that provides for payment of funds

and delivery of securities later than the second business day after the date of the contract.⁸² Rule 15c6–1(a) covers contracts for the purchase or sale of all types of securities except for the excluded securities enumerated in paragraph (a)(1) of the rule. The definition of the term “security” in Section 3(a)(10) of the Exchange Act covers, among others, equities, corporate bonds, UITs, mutual funds, ETFs, ADRs, security-based swaps, and options.⁸³ Application of Rule 15c6–1(a) extends to the purchase and sale of securities issued by investment companies (including mutual funds),⁸⁴ private-label mortgage-backed securities, and limited partnership interests that are listed on an exchange.⁸⁵

⁸² 17 CFR 240.15c6–1(a).

⁸³ 15 U.S.C. 78c(a)(10). Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Public Law 111–203, 124 Stat. 1376 (2010), amended, among other things, the definition of “security” under the Exchange Act to encompass security-based swaps. The Commission in July 2011 granted temporary exemptive relief from compliance with certain provisions of the Exchange Act, including Rule 15c6–1, in connection with the revision of the Exchange Act definition of “security” to encompass security-based swaps. See Order Granting Temporary Exemptions Under the Securities Exchange Act of 1934 In Connection With the Pending Revision of the Definition of “Security” To Encompass Security-Based Swaps, Exchange Act Release No. 64795 (July 1, 2011), 76 FR 39927, 39938–39 (July 7, 2011). This temporary exemptive relief expired on February 5, 2020. See Order Granting a Limited Exemption from the Exchange Act Definition of “Penny Stock” for Security-Based Swap Transactions between Eligible Contract Participants; Granting a Limited Exemption from the Exchange Act Definition of “Municipal Securities” for Security-Based Swaps; and Extending Certain Temporary Exemptions under the Exchange Act in Connection with the Revision of the Definition of “Security” to Encompass Security-Based Swaps, Exchange Act Release No. 84991 (Jan. 25, 2019), 84 FR 863 (Jan. 31, 2019) (extending the expiration date for the relevant portion of the temporary exemptive relief to February 5, 2020); Order Extending Temporary Exemptions from Exchange Act Section 8 and Exchange Act Rules 8c–1, 10b–16, 15a–1, 15c2–1 and 15c2–5 in Connection with the Revision of the Definition of “Security” to Encompass Security-Based Swaps, Exchange Act Release No. 87943 (Jan. 10, 2020), 85 FR 2763 (Jan. 16, 2020) (allowing the relevant portion of the temporary exemptive relief to expire on February 5, 2020).

⁸⁴ The Commission applied Rule 15c6–1 to broker-dealer contracts for the purchase and sale of securities issued by investment companies, including mutual funds, because the Commission recognized that these securities represented a significant and growing percentage of broker-dealer transactions. See T+3 Adopting Release, *supra* note 9, at 52900.

⁸⁵ With regard to limited partnership interests, the Commission excluded non-listed limited partnerships due to complexities related to processing the trades in these securities and the lack of an active secondary market. In contrast, the Commission included listed limited partnerships primarily to ensure exclusion of these securities would not unnecessarily contribute to the bifurcation of the settlement cycle for listed securities generally. See *id.* at 52899.

Rule 15c6–1(a) allows the parties to the trade to agree that settlement will take place later than two business days after the trade date, provided that such an agreement is express and reached at the time of the transaction.⁸⁶ This provision is sometimes referred to as the “override provision.” When the Commission first adopted Rule 15c6–1(a), it stated that use of the override provision “was intended to apply only to unusual transactions, such as seller’s option trades that typically settle as many as sixty days after execution as specified by the parties to the trade at execution.”⁸⁷ The override provision in 15c6–1(a) continues to be intended to apply only to these unusual transactions.⁸⁸

Rule 15c6–1(b) provides an exclusion for contracts involving the purchase or sale of limited partnership interests that are not listed on an exchange or for which quotations are not disseminated through an automated quotation system of a registered securities association.⁸⁹ Pursuant to Rule 15c6–1(b), the Commission has granted an exemption from Rule 15c6–1 for securities that do not have facilities for transfer or delivery in the U.S.⁹⁰ However, if the parties execute a transaction on a registered securities exchange, the transaction will be subject to both the rules of the exchange and Rule 15c6–1.⁹¹ Under the exemption, an ADR is considered a separate security from the underlying security.⁹² Thus, if there are no transfer facilities in the U.S. for a foreign security but there are transfer facilities for an ADR based on such

⁸⁶ 17 CFR 240.15c6–1(a).

⁸⁷ T+3 Adopting Release, *supra* note 9, at 52902. In the T+2 Proposing Release, the Commission stated its preliminary belief that the use of this provision should continue to be applied in limited cases to ensure that the settlement cycle set by Rule 15c6–1(a) remains a standard settlement cycle. T+2 Proposing Release, *supra* note 30, at 69257 n.153.

⁸⁸ To date, the Commission has not identified instances indicating a risk of overuse of this provision.

⁸⁹ 17 CFR 240.15c6–1(b). In recognition of the fact that the Commission may not have identified all situations or types of trades where T+2 settlement would be problematic, Rule 15c6–1(b) provides that the Commission may exempt by order additional types of trades from T+2 settlement, either unconditionally or on specified terms and conditions, if the Commission determines that such an exemption is consistent with the public interest and the protection of investors. *Id.*

⁹⁰ See Exchange Act Release No. 35750 (May 22, 1995), 60 FR 27994, 27995 (May 26, 1995) (granting an exemption from Rule 15c6–1 for certain transactions in foreign securities). The exemption also provides that if less than 10% of the annual trading volume in a security that has U.S. transfer or deliver facilities occurs in the U.S., the transaction in such security will be exempt from the requirements in the rule.

⁹¹ *Id.*

⁹² *Id.* at n.7.

foreign security, only the foreign security will be exempt from Rule 15c6–1.⁹³ The Commission has also granted a separate exemption for contracts for the purchase or sale of any security issued by an insurance company (as defined in Section 2(a)(17) of the Investment Company Act⁹⁴) that is funded by or participates in a “separate account” (as defined in Section 2(a)(37) of the Investment Company Act⁹⁵), including a variable annuity contract or a variable life insurance contract, or any other insurance contract registered as a security under the Securities Act of 1933 (“Securities Act”).⁹⁶

Rule 15c6–1(c) establishes a T+4 settlement cycle for firm commitment underwritings for securities that are priced after 4:30 p.m. Eastern Time (“ET”).⁹⁷ Specifically, the rule states that the standard settlement cycle set forth in Rule 15c6–1(a) does not apply to contracts for the sale of securities that are priced after 4:30 p.m. ET on the date that such securities are priced and that are sold by an issuer to an underwriter pursuant to a firm commitment offering registered under the Securities Act or sold to an initial purchaser by a broker-dealer participating in such offering. Under the rule, the broker or dealer must effect or enter into a contract for the purchase or sale of those securities that provides for payment of funds and delivery of securities no later than the fourth business day after the date of the contract unless otherwise expressly agreed to by the parties at the time of the transaction.

Rule 15c6–1(d) provides that, for purposes of paragraphs (a) and (c) of the rule, parties to a contract shall be deemed to have expressly agreed to an alternate date for payment of funds and delivery of securities at the time of the transaction for a contract for the sale for cash of securities pursuant to a firm commitment offering if the managing underwriter and the issuer have agreed to such date for all securities sold pursuant to such offering and the parties to the contract have not expressly agreed to another date for payment of funds and delivery of securities at the time of the transaction.⁹⁸

⁹³ *Id.*

⁹⁴ 15 U.S.C. 80a–2(a)(17).

⁹⁵ 15 U.S.C. 80a–2(a)(37).

⁹⁶ See Exchange Act Release No. 35815 (June 6, 1995), 60 FR 30906, 30907 (June 12, 1995) (granting an exemption from Rule 15c6–1 for transactions involving certain insurance contracts). The Commission determined not to rescind or modify the exemptive order when it shortened the settlement cycle from T+3 to T+2. See T+2 Adopting Release, *supra* note 10, at 15581.

⁹⁷ 17 CFR 240.15c6–1(c).

⁹⁸ 17 CFR 240.15c6–1(d).

1. Proposed Amendment to Rule 15c6–1(a)

The Commission proposes to amend Rule 15c6–1(a) to prohibit a broker-dealer from effecting or entering into a contract for the purchase or sale of a security (other than an exempted security, a government security, a municipal security, commercial paper, bankers’ acceptances, or commercial bills) that provides for payment of funds and delivery of securities later than the first business day after the date of the contract unless otherwise expressly agreed to by the parties at the time of the transaction.⁹⁹ The Commission’s proposal to amend Rule 15c6–1(a) would change only the standard settlement date for securities transactions covered by the existing rule, and would not impact the existing exclusions enumerated in the rule. In addition, the Commission’s proposal would retain the so-called “override provision,” and the Commission continues to intend for the “override provision” to apply only to unusual cases to ensure that the settlement cycle set by Rule 15c6–1(a) is in fact the standard settlement cycle.¹⁰⁰

2. Basis for Shortening the Standard Settlement Cycle to T+1

First, the Commission preliminarily believes that market participants have made substantial progress toward identifying the technological and operational changes that would be necessary to establish a T+1 standard settlement cycle, and significant industry support for such a move has emerged. By contrast, at the time the Commission proposed to shorten the standard settlement cycle to T+2, market participants generally supported moving to T+2 and many believed that moving to T+1 would be substantially more costly and take longer to achieve than moving to T+2.¹⁰¹ At that time, neither the Commission nor the industry supported moving to a T+1 standard settlement cycle.¹⁰² Since then, Commission staff has continued to study the potential impact of further shortening the settlement cycle, and the ISC has recommended that the securities industry implement a T+1 standard settlement cycle.¹⁰³

The Commission acknowledges that a transition from a T+2 to T+1 standard

⁹⁹ 17 CFR 240.15c6–1(a).

¹⁰⁰ See *supra* note 88.

¹⁰¹ See T+2 Adopting Release, *supra* note 10, at 15598–99.

¹⁰² See *id.* at 15572.

¹⁰³ See *supra* notes 73–74 and accompanying text (discussing the recommendations in the T+1 Report).

settlement cycle, and implementation of the necessary operational, technical, and business changes, will likely result in varying burdens, costs and benefits for a wide range of market participants.¹⁰⁴ The Commission has remained mindful and observant of industry initiatives and progress targeted at facilitating an environment where a shortened standard settlement cycle could be achieved in a manner that reduces risk for market participants while also minimizing the likelihood of disruptive burdens and costs. Having taken current industry initiatives and their relative progress into consideration, the Commission preliminarily believes there has been collective progress by market participants sufficient to facilitate a transition to a T+1.

Furthermore, when the Commission adopted a T+2 standard settlement cycle, it identified a number of incremental improvements to the functioning of the U.S. securities market likely to result relative to a T+3 standard settlement cycle.¹⁰⁵ The Commission preliminarily believes that a T+1 settlement cycle would produce similar incremental improvements to the functioning of the U.S. securities market relative to a T+2 settlement cycle. These benefits, discussed further in Part V.C.1, are summarized briefly here.

First, as a general matter, time to settlement determines a significant portion of a market participant’s risk exposure on a given securities transaction. As a result, all else being equal, shortening the time to settlement reduces exposure to credit,¹⁰⁶ market,¹⁰⁷ and liquidity risk.¹⁰⁸ In addition, assuming that trading volume remains constant, shortening the time to settlement also decreases the total number of unsettled trades that exists at any point in time, as well as the total

¹⁰⁴ See *infra* Part V (analyzing the economic effects of shortening the standard settlement cycle to T+1).

¹⁰⁵ See T+2 Adopting Release, *supra* note 10, at 15569–75.

¹⁰⁶ Credit risk refers to the potential for the market participant’s counterparty to a given transaction to default on the transaction and therefore the market participant will not receive either the cash or securities necessary to settle the transaction.

¹⁰⁷ Market risk refers to the potential for the value of the security that underlies the transaction to change between trade execution and settlement.

¹⁰⁸ Liquidity risk refers to the risk that the market participant will be unable to timely settle a transaction because it does not have access to sufficient cash or securities. The market participant may not have access to sufficient cash or securities for a given transaction if, for example, it has recently been exposed to the default of a counterparty on a separate transaction and did not receive the anticipated proceeds of that transaction.

market value of all unsettled trades.¹⁰⁹ This reduction in the number and total value of unsettled trades should correspond to a reduction in a market participant's overall exposure to risk arising from unsettled transactions.

Second, the above dynamics produce noticeable effects for transactions that are centrally cleared because they reduce the CCP's exposure to credit, market, and liquidity risk arising from its obligations to its participants, promoting the stability of the CCP and thereby reducing the potential for systemic risk to transmit through the financial system. For example, when the CCP faces a participant default, the CCP will liquidate open positions of the defaulting participant and use the defaulting participant's financial resources held by the CCP to cover the CCP's losses and expenses. The CCP may face losses if the market value of the defaulting participant's open positions has moved significantly in the time between trade execution and default.¹¹⁰ While the CCP works to close out the defaulting participant's open positions, it also needs to continue to meet its end-of-day settlement obligations to non-defaulting participants, and so the CCP is exposed to liquidity risk when a member defaults because it may need to use its own resources to complete end-of-day settlement.¹¹¹ In each instance, the amount of risk to which the CCP is exposed is determined in part by the length of the settlement cycle, and shortening the settlement cycle would reduce the CCP's overall exposure to these risks.

Third, reducing these risks to the CCP would reduce the overall size of the financial resources that the CCP requires of its participants,¹¹² thereby reducing

¹⁰⁹ In other words, a T+2 settlement cycle results in two days of unsettled transactions at any given time, whereas a T+1 settlement cycle would result in one day of unsettled transactions at any given time.

¹¹⁰ For example, if the open position is net long, to close the position the CCP would obtain replacement securities in the market, possibly at a higher price than the original transaction. Conversely, if the open position is net short, to close the position the CCP would sell the defaulting participant's securities in the market, possibly at a lower price than the original transaction.

¹¹¹ The costs associated with deploying such resources are ultimately borne by the CCP members, both in the ordinary course of the CCP's daily risk management process and in the event of an extraordinary event where members may be subject to additional liquidity assessments. These costs may be passed on through the CCP members to broker-dealers and investors.

¹¹² See T+2 Proposing Release, *supra* note 30, at 69251 n.77 (discussing mutual fund settlement timeframes and related liquidity risk, which may be exacerbated during times of stress). The Commission preliminarily believes that shortening

the risks and costs faced by the CCP participants (*i.e.*, broker-dealers) and, by extension, their customers (*i.e.*, investors).¹¹³ CCP participants may choose to pass these reductions down to their customers.

Fourth, the Commission anticipates that the above effects would reduce the potential for systemic risk.¹¹⁴ When the Commission proposed to shorten the standard settlement cycle from T+3 to T+2 it explained that its "views are even more apt today given the increasing interconnectivity and interdependencies among markets and market participants."¹¹⁵ In particular, in periods of market stress, liquidity demands imposed by the CCP on its participants, such as in the form of intraday margin calls, can have procyclical effects that reduce overall market liquidity.¹¹⁶ Reducing the CCP's liquidity exposure by shortening the settlement cycle can help limit this potential for procyclicality,¹¹⁷ enhancing the ability of the CCP to serve as a source of stability and efficiency in the national clearance and settlement system.¹¹⁸

Finally, shortening the standard settlement cycle to T+1 would enable investors to access the proceeds of their securities transactions sooner than they are able to in the current T+2 environment. In particular, in a T+1 environment, sellers would have access to cash proceeds one day sooner and

settlement timeframes for portfolio securities to T+1 will generally assist in reducing liquidity and other risks for funds that must satisfy investor redemption requests that settle pursuant to shorter settlement timeframes (*e.g.*, T+1).

¹¹³ See *id.* at 69251.

¹¹⁴ As the Commission noted when it adopted Rule 15c6-1, reducing the total volume and value of outstanding obligations in the settlement pipeline at any point in time will better insulate the financial sector from the potential systemic consequences of serious market disruptions. See T+3 Adopting Release, *supra* note 9, at 52894.

¹¹⁵ T+2 Proposing Release, *supra* note 30, at 69258 n.160 (citing Exchange Act Release No. 68080 (Oct. 22, 2012), 77 FR 66220, 66254 (Nov. 2, 2012) ("Clearing Agency Standards Adopting Release") and DTCC, Understanding Interconnectedness Risks—To Build a More Resilient Financial System (Oct. 2015), <http://www.dtcc.com/news/2015/october/12/understanding-interconnectedness-risks-article>).

¹¹⁶ For a discussion regarding procyclicality, see T+2 Proposing Release, *supra* note 30, at 69250-52.

¹¹⁷ See T+3 Adopting Release, *supra* note 9, at 52894.

¹¹⁸ See Standards for Covered Clearing Agencies, Exchange Act Release No. 71699 (Mar. 12, 2014), 79 FR 16865 (Mar. 26, 2014), *corrected at* 79 FR 29507, 29598 (May 22, 2014) ("CCA Standards Proposing Release"). Clearing members are often members of larger financial networks, and the ability of a covered clearing agency to meet payment obligations to its members can directly affect its members' ability to meet payment obligations outside of the cleared market. Thus, management of liquidity risk may mitigate the risk of contagion between asset markets.

buyers would see purchased securities in their accounts one day earlier relative to a T+2 standard settlement cycle.

In addition, as noted above, the Commission has evaluated the potential for shortening the settlement cycle to impose costs on market participants, which are likely to vary across market participants depending on a number of facts. These costs and considerations are discussed in Part V.C.2. The costs include those costs associated with investments in improved operations and new technologies to manage the compression of time resulting from a shorter settlement cycle. Shortening the settlement cycle may have other effects as well. For example, shortening the standard settlement cycle to T+1 for equity securities would disconnect settlement with foreign exchange ("FX") transactions, which settle on a T+2 basis. Mismatched settlement timeframes between equities and FX transactions may increase the cost needed to fund and hedge related securities transactions.¹¹⁹ In addition, the Commission recognizes that a disorderly transition to a shorter settlement cycle could lead to an increase in settlement fails. However, as discussed in Part V.B.4, in analyzing the shortening of the settlement cycle from T+3 to T+2, the Commission found no marked change in the volume of such failures. The Commission preliminarily believes that an orderly transition to a T+1 standard settlement cycle can limit the negative effects of settlement fails. The Commission also believes that facilitating an increase in same-day affirmations helps mitigate the effects of settlement fails, as affirmations on trade date can limit the potential for processing errors on settlement day that cause fails.¹²⁰ More generally, the Commission preliminarily believes that the anticipated benefits of a shortened settlement cycle justify the anticipated costs.

3. Proposed Deletion of Rule 15c6-1(c) and Conforming Technical Amendments to Rule 15c6-1

As explained above, Rule 15c6-1(c) establishes a T+4 settlement cycle for firm commitment offerings for securities that are priced after 4:30 p.m. ET, unless otherwise expressly agreed to by the parties at the time of the transaction.

¹¹⁹ See *infra* Part V.C.2 (noting that market participants will have a choice between bearing an additional day of currency risk or incurring the cost related to hedging away this risk in the forward or futures market).

¹²⁰ See *infra* Part III.B (proposing new Rule 15c6-2 to increase same-day affirmations); Part V.C.1 (noting that the proposed rule can facilitate an orderly transition to T+1).

The Commission proposes to delete this provision. Deleting Rule 15c6-1(c) would, in conjunction with the proposed amendment to Rule 15c6-1(a), set a T+1 standard settlement cycle for firm commitment offerings priced after 4:30 p.m. ET. However, the so-called “override” provisions in paragraphs (a) and (d) of Rule 15c6-1 would continue to allow contracts currently covered by paragraph (c) to provide for settlement on a timeframe other than T+1 if the parties expressly agree to a different settlement timeframe at the time of the transaction.

In proposing to delete paragraph (c) of Rule 15c6-1, the Commission also proposes conforming amendments to paragraphs (a), (b), and (d) of the rule. Specifically, the Commission is proposing to delete all references to paragraph (c) of Rule 15c6-1 that currently appear in paragraphs (a), (b) and (d) of the rule.

4. Basis for Eliminating T+4 Standard for Certain Firm Commitment Offerings

The Commission believes that expanded application of the “access equals delivery” standard for prospectus delivery supports removing paragraph (c) from Rule 15c6-1 because delays in the process that made delivery of the prospectus difficult to achieve under the standard settlement cycle have been mitigated by the “access equals delivery” standard. In addition, if paragraph (c) is removed as proposed, paragraph (d) would continue to provide underwriters and the parties to a transaction the ability to agree, in advance of a particular transaction, to a settlement cycle other than the standard set forth in Rule 15c6-1(a) when needed to manage obligations associated with the firm commitment offering.

The Commission adopted paragraphs (c) and (d) of Rule 15c6-1 in 1995, two years after Rule 15c6-1 was originally adopted.¹²¹ At the time, the rule included a limited exemption from the requirements under paragraph (a) of the rule for the sale for cash pursuant to a firm commitment offering registered under the Securities Act.¹²² The exemption for firm commitment offerings was added in response to public comments stating that new issue securities could not settle on T+3

because prospectuses could not be printed prior to the trade date (the date on which the securities are priced).¹²³

When the Commission proposed to amend Rule 15c6-1 in 1995, it stated that, since the adoption of the rule, members of the brokerage community had suggested the Commission eliminate the exemption and ease the problems associated with prospectus delivery by other means. The primary reasons expressed for requiring T+3 settlement of such offerings were: (i) The secondary market for a new issue may be subject to greater price fluctuations or instability, which in turn may expose underwriters, dealers and investors to disproportionate credit and market risk; and (ii) the bifurcated settlement cycle created for initial sales and resales of new issues would be disruptive to broker-dealer operations and to the clearance and settlement system.¹²⁴ In particular, it was explained that if a purchaser of a new issue sells on the first or second day after pricing, the purchaser’s broker will not be able to settle with the buyer’s broker on a T+3 schedule because the securities would not yet be available for settlement purposes.¹²⁵ As a result, all such trades by the purchasers would “fail” and result in expense, inefficiencies, and greater settlement risk for all participants. A bifurcated settlement cycle also may require the maintenance of separate computer systems and additional internal procedures.

The vast majority of commenters submitting feedback in response to the 1995 Amendments Proposing Release supported T+4 as the standard settlement cycle for firm commitment offerings price after 4:30 p.m.¹²⁶ Several of these commenters reasoned that it is difficult to print prospectuses within a T+3 timeframe when securities are priced late in the day. These commenters also stated that the potential systemic and market risks associated with the proposed T+4 provision should be limited because most secondary market trading in the subject securities would not begin trading until the opening of the market on the next business day, and therefore the primary issuance of securities would be available to settle secondary trading in the security.¹²⁷

The T+1 Report stated that paragraph (c) is rarely used in the current T+2 settlement environment, but the IWG expects a T+1 standard settlement cycle would increase reliance on paragraph (c).¹²⁸ The T+1 Report further stated that the IWG recommends retaining paragraph (c) but amending it to establish a standard settlement cycle of T+2 for firm commitment offerings.¹²⁹ The T+1 Report cited issues with respect to complex documentation and other operational elements of equity offerings that may delay settlement to T+2 in a T+1 environment.

With respect to debt offerings, the T+1 Report stated that many such offerings frequently rely on the exception provided in Rule 15c6-1(d).¹³⁰ In describing the reasons debt offerings “have historically needed, and will continue to need, this exemption if the standard settlement cycle is moved to T+1,” the T+1 Report stated that such offerings are “document-intensive and typically have more documentation than equity offerings.”¹³¹ According to the T+1 Report, this documentation includes indentures, guarantees, and collateral documentation, all of which are individually negotiated and unique to the transaction.¹³² Thus, the T+1 Report states, a substantial portion of debt offerings settle later than T+3.¹³³

While the Commission appreciates that documentation relating to firm commitment offerings for equities must be completed prior to settlement of such transactions, the T+1 Report did not explain why or how timely completion of such documentation would not be possible if the exception in paragraph (c) of Rule 15c6-1 were eliminated. In contrast, the T+1 Report states, as discussed above, that firm commitment offerings generally settle in alignment with the standard settlement cycle. As the Commission is not currently aware of any data or facts indicating that the documentation associated with firm commitment offerings cannot be completed by T+1, the Commission preliminarily believes that the need to complete transaction documentation prior to settlement does not justify proposing a separate standard settlement cycle of T+2 for equity offerings. Rather, to the extent that documentation may in some cases require more time to complete than is available under a T+1 standard settlement cycle, the parties to the

¹²¹ See Prospectus Delivery; Securities Transaction Settlement Cycle, Exchange Act Release No. 34-35705 (May 11, 1995), 60 FR 26604 (May 17, 1995) (“1995 Amendments Adopting Release”).

¹²² The exemption was limited to sales to an underwriter by an issuer and initial sales by the underwriting syndicate and selling group. Any secondary resales of such securities were to settle on a T+3 settlement cycle. T+3 Adopting Release, *supra* note 9, at 52898.

¹²³ *Id.*

¹²⁴ See Exchange Act Release No. 34-35396 (Feb. 21, 1995), 60 FR 10724 (Feb. 27, 1995) (“1995 Amendments Proposing Release”).

¹²⁵ *Id.*

¹²⁶ 1995 Amendments Adopting Release, *supra* note 121, at 26608.

¹²⁷ *Id.*

¹²⁸ T+1 Report, *supra* note 18, at 33–35.

¹²⁹ *Id.* at 33.

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² *Id.*

¹³³ *Id.*

transaction can agree to a longer settlement period pursuant to paragraph (d) when they enter the transaction. In this way, deleting paragraph (c) does not prevent the parties from using paragraph (d) to agree to a longer settlement period; it only removes the presumption that such firm commitment offerings should be subject to a different settlement cycle than the standard settlement cycle set forth in paragraph (a).

In addition, as discussed further in Part III.E.4, 17 CFR 230.172 (“Rule 172”) has implemented an “access equals delivery” model that permits, with certain exceptions, final prospectus delivery obligations to be satisfied by the filing of a final prospectus with the Commission, rather than delivery of the prospectus to purchasers. As a result of these changes, broker-dealers generally would not require time to print and deliver prospectuses—a point originally cited by many commenters in support of adopting paragraph (c)—and the Commission preliminarily believes that broker-dealers are able to satisfy their obligations with respect to these firm commitment offerings on a timeline much shorter than the current T+4 standard settlement cycle for these firm commitment offerings.

In addition, establishing T+1 as the standard settlement cycle for these firm commitment offerings, and thereby aligning the settlement cycle with the standard settlement cycle for securities generally, would reduce exposures of underwriters, dealers, and investors to credit and market risk, and better ensure that the primary issuance of securities is available to settle secondary market trading in such securities.¹³⁴ The

¹³⁴ As noted above, prior to the Commission’s 1995 amendments to Rule 15c6–1 members of the broker-dealer community expressed the view that (i) the secondary market for a new issue may be subject to greater price fluctuations or instability, which in turn may expose underwriters, dealers and investors to disproportionate credit and market risk; and (ii) a bifurcated settlement cycle created for initial sales and resales of new issues would be disruptive to broker-dealer operations and to the clearance and settlement system. See *supra* notes 124, 125, and accompanying text. While these arguments were made by market participants when the standard settlement cycle in the U.S. was still T+3, the Commission preliminarily believes that they remain relevant to the Commission’s proposed amendment to Rule 15c6–1(a) and proposed deletion of Rule 15c6–1(c). In particular, if the Commission were to adopt the proposed amendment to Rule 15c6–1(a) without deleting Rule 15c6–1(c), a broker-dealer settling on behalf of a customer who sells shares of a new issue on the first day after pricing might, in some cases, not be able to settle with the purchaser’s broker-dealer because the securities may not yet be available for settlement. Specifically, if the new issue settled on T+2 and the secondary market transactions executed on the first day of trading settled on T+1,

Commission believes that harmonizing the settlement cycle for such firm commitment offerings with secondary market trading, to the greatest extent possible, limits the potential for operational risk.

Therefore, in the Commission’s view, deleting paragraph (c) while retaining paragraph (d) provides sufficient flexibility for market participants to manage the potential need for longer than T+1 settlement on certain firm commitment offerings priced after 4:30 p.m. that may include “complex” documentation because paragraph (d) would continue to permit the underwriters and the parties to a transaction to agree, in advance of entering the transaction, whether T+1 settlement or some other settlement timeframe is appropriate for the transaction. In addition, the Commission believes that having the underwriters and the parties to the transaction agree in advance of entering the transaction whether to deviate from the standard settlement cycle established in paragraph (a) would promote transparency among the parties, in advance of entering the transaction, as to the length of the time that it takes to complete documentation with respect to the transaction. The Commission requests comment on these views. To the extent that commenters agree with the T+1 Report, the Commission requests that such commenters provide data or other detailed information explaining why a T+1 settlement cycle is an inappropriate standard for all firm commitment offerings priced after 4:30 p.m., such as an explanation or description for what specific documentation cannot be completed consistent with a T+1 settlement cycle.

5. Request for Comment

The Commission is requesting comment on all aspects of the proposed amendments to Rule 15c6–1 to shorten the current T+2 and T+4 standard settlement cycles to T+1. The Commission also solicits comment on the particular questions set forth below, and encourages commenters to submit any relevant data or analysis in connection with their answers.

1. Should the Commission amend Rule 15c6–1 to shorten the standard

the primary issuance would presumably not be available for timely settlement of the secondary market transactions. Conversely, if the Commission adopts both the proposed amendment to Rule 15c6–1(a) and the proposed deletion of Rule 15c6–1(c), the settlement cycle would not be bi-furcated and the basis for the above-described concerns raised previously by the broker-dealer community related to bi-furcation of the settlement cycle would not be applicable.

settlement cycle to T+1 as proposed? Why or why not?

2. Are efforts to shorten the standard settlement cycle to T+1 a logical step on the path to T+0 settlement, or would shortening to T+1 require investments or processes that would be outdated or unnecessary in a T+0 environment?¹³⁵ Please explain why or why not.

3. Is the current scope of securities covered by Rule 15c6–1, including the exclusions provided in the text of Rule 15c6–1(a), still appropriate in light of the Commission’s proposal to shorten the standard settlement cycle to T+1? Are there any asset classes, securities as defined in Section 3(a)(10) of the Exchange Act, or types of securities transactions for which the proposed amendment to Rule 15c6–1(a) would present compliance problems for broker-dealers? What would be the quantitative and qualitative impacts of maintaining those exclusions?

4. The Commission requests that commenters provide information regarding securities transactions that, in today’s T+2 settlement environment, generally settle later than T+2. To what extent does this occur, and what are the circumstances that motivate market participants to settle later than T+2? If Rule 15c6–1(a) is amended to shorten the standard settlement cycle from T+2 to T+1, would market participants continue to settle such securities transactions on a longer settlement cycle? Would market participants who frequently settle certain securities transactions later than T+2 settle such transactions later than T+1 if the Commission adopts the proposed amendment to Rule 15c6–1(a)? Conversely, under what circumstances are securities transactions settled on an expedited basis (*i.e.*, on timeframes less than T+2), and how often how common is such settlement? What are the circumstances that motivate earlier settlements? If Rule 15c6–1(a) is amended to shorten the standard settlement cycle from T+2 to T+1, how will the proposed amendment affect these expedited settlement decisions?

5. To what extent do market participants currently rely on the override provision in Rule 15c6–1(a)? Would market participants expect use of the provision to increase or decrease in a T+1 environment? Why or why not?

6. As noted above, the Commission previously issued an order that exempted security-based swaps from the requirements under Rule 15c6–1, and

¹³⁵ See *supra* note 12 and accompanying text (explaining that T+0 in this release is intended to refer to netted settlement by the end of trade date); see also *infra* Part IV (discussing the same).

subsequently extended that exemptive relief on several occasions, but the exemptive relief that previously covered compliance with Rule 15c6-1 expired in 2020.¹³⁶ Should the Commission issue a new order providing exemptive relief from compliance with Rule 15c6-1 for transactions in security-based swaps? If so, why or why not?

7. Should the Commission amend any other provisions of Rule 15c6-1 (other than the proposed amendments to the rule) for the purposes of shortening the standard settlement cycle to T+1? If so, which provisions and why?

8. Are the conditions set forth in the Commission's exemptive order for securities traded outside the U.S. still appropriate?¹³⁷ If not, why not? If the exemption should be modified, how should it be modified and why?

9. Are the conditions set forth in the Commission's exemptive order for insurance contracts still appropriate?¹³⁸ If not, why not? If the exemption should be modified, how should it be modified and why?

10. Should the Commission provide exemptive relief under Rule 15c6-1(b) for any other securities or types of transactions?

11. Would shortening the standard settlement cycle to T+1 as proposed make it difficult for broker-dealers to comply with the requirements of Rule 15c6-1? Please provide examples.

12. How would retail investors be impacted by new processes that broker-dealers may implement in support of a T+1 standard settlement cycle? For example, do commenters believe that broker-dealers would require changes to the way that retail investors fund their accounts in a T+1 environment? If so, how? Would shortening the standard settlement cycle to T+1 result in retail investors encountering ongoing costs due to a delay in their ability to make investments? Would shortening the standard settlement cycle to T+1 result in any benefits to retail investors?

13. How would institutional investors be impacted by new processes that broker-dealers may implement in support of a T+1 standard settlement cycle? For example, do market participants anticipate an increase in prefunding requirements for institutional investors in a T+1 environment?

14. What impact, if any, would the proposed amendment to Rule 15c6-1(a) have on market participants who engage in cross-border transactions? To what extent would shortening the standard

settlement cycle in the U.S. to T+1 result in increased or decreased operational costs to market participants? To what extent would shortening the standard settlement cycle for securities transactions in the U.S. increase or decrease risks associated with cross-border transactions or related transactions, such as financing transactions?

15. What impact, if any, would the proposed amendment to Rule 15c6-1(a) have on market participants who engage in trading activity across various financial product classes, each potentially involving a different settlement cycle? For example, what would be the impact on market participants conducting transactions in U.S. equities and U.S. commercial paper on the same day? Alternatively, are there benefits to alignment of the settlement timeframes across most U.S. security types to one day? For example, options and government securities currently settle on T+1 while equities, corporate bonds, and municipal debt settle on T+2.

16. What impact, if any, would the proposal have on trading involving derivatives and exchange-traded products ("ETPs")?¹³⁹ Would shortening the settlement cycle for ETPs affect the costs of creating or redeeming shares in ETPs that hold portfolio securities that are on a different settlement cycle, such as net capital charges related to collateral requirements?¹⁴⁰ If so, would such a change in costs affect the efficiency or

¹³⁹ ETPs constitute a diverse class of financial products that seek to provide investors with exposure to financial instruments, financial benchmarks, or investment strategies across a wide range of asset classes. ETP trading occurs on national securities exchanges and other secondary markets that are regulated by the Commission under the Exchange Act, making ETPs widely available to market participants, from individual investors to institutional investors, including hedge funds and pension funds. The largest category of ETPs are ETFs, which are open-end fund vehicles or UITs that are registered investment companies under the Investment Company Act. See Request for Comment on Exchange-Traded Products, Exchange Act Release No. 75165 (June 12, 2015), 80 FR 34729 (June 17, 2015).

¹⁴⁰ For example, the way a market participant executes a creation or redemption of an ETF share resembles a stock trade in the secondary market. A market participant typically referred to as an "Authorized Participant" or "AP" submits an order to create or redeem ("CR") ETF shares much like an investor submits an order to his broker to buy or sell a stock. Also, similar to a stock trade, the CR order settles on a T+2 settlement cycle through NSCC. See ICI, 20 ICI Research Perspective, no. 5, Sept. 2014, at 14, <https://www.ici.org/pdf/per20-05.pdf>; see also DTCC, Exchange Traded Fund (ETF) Processing, <http://www.dtcc.com/clearing-services/equities-trade-capture/etf>; DTCC, ETF and CNS Processing Facts, <https://dtcclearing.com/content/220-equities-clearing/exchange-traded-fund-etf/about-ef/3613-etf-cns-processing-facts.html>.

effectiveness of the arbitrage between an ETP's secondary market price and the value of its underlying assets? Would such a change lead to other downstream effects, such as an increase in the use of cash or custom baskets?¹⁴¹ Similarly, would the proposed amendments affect transactions in derivatives instruments if a derivative were to settle on a different timeframe than its underlying reference assets?

17. What impact, if any, would shortening the standard settlement cycle to T+1 have on the levels of liquidity risk that may currently exist as a result of mismatches between the settlement cycles for different markets? For example, would shortening the standard settlement cycle to T+1 eliminate or reduce any liquidity risk that mutual funds may face as a result of the mismatch between the current T+1 settlement cycle for transactions in open-end mutual fund shares that are settled through NSCC and the T+2 settlement cycle that is applicable to many portfolio securities held by mutual funds?

18. The Commission solicits comment on the status and readiness of the technology and processes currently used by market participants to support a T+1 settlement cycle.

19. What impact would the Commission's proposed deletion of paragraph (c) of Rule 15c6-1 have on underwriters, broker-dealers, and other market participants?

20. Have the technological and operational capabilities of broker-dealers and their service providers improved sufficiently to allow prospectuses to be printed and delivered on time if the standard settlement cycle for firm commitment offerings priced after 4:30 p.m. is shortened to T+1? Please describe such improvements and why they would or would not be sufficient to support shortening the standard settlement cycle for such transactions.

21. Should the Commission shorten the standard settlement cycle for firm commitment offerings priced after 4:30 p.m. to a time frame other than T+1 (e.g., T+2, or T+3)? If so, why?

¹⁴¹ Rule 6c-11 under the Investment Company Act permits ETFs to use "custom baskets" if their basket policies and procedures: (i) Set forth detailed parameters for the construction and acceptance of custom baskets that are in the best interest of the ETF and its shareholders, including the process for any revisions to, or deviations from, those parameters; and (ii) specify the titles or roles of the employees of the ETF's investment adviser who are required to review each custom basket for compliance with those parameters. See *infra* note 257 and accompanying text (further discussing the creation unit purchase and redemption process for ETFs).

¹³⁶ See *supra* note 83.

¹³⁷ See *supra* note 90 and accompanying text.

¹³⁸ See *supra* note 96 and accompanying text.

22. Would any additional technological and operational changes, if any, be necessary for broker-dealers to print and deliver prospectuses on time for firm commitment offerings priced after 4:30 p.m. if a T+1 standard settlement cycle is adopted for such transactions? What costs would be associated with such improvements?

23. Would the Commission's proposed deletion of paragraph (c) of Rule 15c6-1 decrease exposures of underwriters, dealers and investors to market and credit risks related to the bifurcated settlement periods for new issues and secondary market transactions? Please explain why or why not.

24. With respect to corporate actions, in most cases the ex-date will be the record date ("RD"), meaning that RD-1 will be the last day that a purchaser will gain the dividend or entitlement.¹⁴² Given the shorter timeframes, the Commission requests comments on this dynamic and statements in the T+1 Report urging a concerted effort among exchanges, other authorities, and issuers to standardize some currently fragmented procedures to set up and announce corporate actions.¹⁴³

25. Regarding corporate actions that concern voluntary reorganizations, the Commission solicits comments on the impact of a T+1 settlement cycle on DTC's "cover/protect" process for certain tenders, exchanges, or rights offerings.¹⁴⁴ This procedure enables DTC participants to allow their investors to make or change their final elections until the end of an offer's expiration date; where an offer allows, participants provide DTC with a notice of guaranteed delivery, allowing later delivery of the shares or rights. How would this process affect operations under a T+1 settlement cycle? Would any changes to this process be needed?

26. The Commission generally requests comment on the deadlines and timeframes set forth in the T+1 Report. For example, the Commission requests comment on their impact on DTC's IVORS function, used for retiring a UIT by withdrawing assets and transferring them to a new UIT.¹⁴⁵

27. If the Commission adopts the proposed deletion of paragraph (c) of Rule 15c6-1 and the proposed

conforming technical amendments to paragraphs (a), (b) and (d) of the rule, should the Commission adopt any additional amendments to Rule 15c6-1 in connection with such changes?

B. New Requirement for "Same-Day Affirmation"

As discussed in Part II.B.1, integral to completing the institutional trade process is achieving an affirmed confirmation, which can require a series of communications between a broker-dealer and its institutional customer. Since 2000, market participants have identified accelerating this process, which requires agreement among the parties regarding the trade details that facilitate trade allocation when needed, as well as trade confirmation and affirmation, as one of the core building blocks to improve the speed, safety, and efficiency of the trade settlement process, and ultimately to achieve shorter settlement cycles.¹⁴⁶ In particular, in the SIA Business Case Report, the securities industry noted the need to prioritize ensuring that a higher number and proportion of trades were confirmed and affirmed on trade date.¹⁴⁷ These improvements were considered essential to compressing the settlement cycle and facilitating an environment less prone to operational risk.¹⁴⁸ This objective, where broker-dealers and their institutional customers allocate, confirm, and affirm the trade details necessary to achieve settlement by the end of trade date has sometimes been referred to as "same-day affirmation."

In its 2004 concept release seeking comment on methods to improve the safety and operational efficiency of the National C&S System to achieve straight-through processing,¹⁴⁹ the Commission explored whether to adopt its own rule or whether the SROs should amend their existing rules to

require the completion of the confirmation and affirmation process on trade date.¹⁵⁰ Many market participants supported a Commission rule to mandate it, but believed that such requirements should be implemented in phases to allow for the development of certain processing improvements.¹⁵¹ Recommendations for such improvements included: (i) Achieving 100% of trades as matched or affirmed as soon as possible after execution on trade date; (ii) achieving asynchronous (non-sequential) and electronic communication between all trade parties, including notices of execution, allocations, match status, confirmation status, and settlement instructions; (iii) adoption of an industry standard electronic format for message communication; and (iv) adoption of standards that allow manual processing on an exception-only basis.¹⁵²

Since 2004, the industry has made significant progress in developing new centralized systems and processes designed to automate and streamline the institutional trade processing environment, both from an operational and technological perspective.¹⁵³ Market participants also rely on a variety of "local" matching tools that allow them to compare trade information received from another party against their own trade information. Further, industry coordination has facilitated improved communication between the parties to a trade using standardized messaging protocols, such as FIX, and the SWIFT network. When the Commission proposed to shorten the settlement cycle to T+2, the Commission observed that the market has improved these confirmation, affirmation, and matching processes through the use of CMSPs.¹⁵⁴

¹⁵⁰ *Id.*

¹⁵¹ See SIA Letter, *supra* note 147 (commenting on the Concept Release); letter from Margaret R. Blake, Counsel to the Association, Dan W. Schneider, Counsel to the Association, The Association of Global Custodians (June 28, 2004) (commenting on the Concept Release). Copies of the comment letters are available at <https://www.sec.gov/rules/concept/s71304.shtml>.

¹⁵² See *supra* note 151.

¹⁵³ For example, DTCC ITP Matching has introduced centralized matching with its CTM platform that continues to automate the trade confirmation process and includes connectivity via FIX and the SWIFT network to custodian banks for the purposes of settlement notification. See DTCC, Why Is DTCC Migrating US Trade Flows to CTM and Terminating OASYS?, <https://dtcclearing.com/content/1439-cat-institutional-trade-processing/cat-ctm/us-trade-flows/us-trades-on-ctm-faqs/us-trades-on-ctm-general-faqs/7353-why-is-dtcc-migrating-us-trade-flows-to-ctm-and-terminating-oasys.html>.

¹⁵⁴ T+2 Proposing Release, *supra* note 30, at 69258.

¹⁴² See, e.g., ISITC Virtual Winter Forum, DTCC presentation to Corporate Actions Working Group (Dec. 13, 2021).

¹⁴³ T+1 Report, *supra* note 18, at 20.

¹⁴⁴ *Id.* at 19-20; see also ISITC Virtual Winter Forum, DTCC presentation to Corporate Actions Working Group (Dec. 13, 2021).

¹⁴⁵ See DTC, IVORS Service Guide, <https://www.dtcc.com/~media/Files/Downloads/Settlement-Asset-Services/EDL/IVORS.pdf>.

¹⁴⁶ See SIA Business Case Report, *supra* note 21; BCG Study, *supra* note 22; see also T+2 Proposing Release, *supra* note 30, at 69252, 69254 (describing in detail the SIA Business Case Report and the BCG Study). The building blocks are described generally as the core initiatives that need to be implemented prior to shortening the settlement cycle. See SIA Business Case Report, *supra* note 21, at 18.

¹⁴⁷ See, e.g., Press Release, SIA, SIA Board Endorses Program to Modernize Clearing, Settlement Process for Securities (July 18, 2002) (statement from the SIA Board of Directors endorsing straight-through processing); letter from Jeffrey C. Bernstein, Chairman, SIA STP Steering Committee, Securities Industry Association (June 16, 2004) ("SIA Letter"). The comment letter is available at <https://www.sec.gov/rules/concept/s71304.shtml>.

¹⁴⁸ T+2 Proposing Release, *supra* note 30, at 69252.

¹⁴⁹ Exchange Act Release No. 49405 (Mar. 11, 2004), 69 FR 12922 (Mar. 18, 2004) ("Concept Release").

A 2010 white paper issued by Omgeo (now DTCC ITP) also described same-day affirmation as “a prerequisite” of shortening the settlement cycle because of its impact on the rate of settlement fails and on operational risk.¹⁵⁵ According to data published in 2011 regarding affirmation rates achieved through the use of one CMSP, on average, 45% of trades were affirmed on trade date, 90% were affirmed by the end of T+1, and 92% were affirmed by noon on T+2.¹⁵⁶ Existing processes for matching institutional trades rely on a number of manual elements, and currently only about 68% of trades achieve affirmation by 12:00 midnight at the end of trade date.¹⁵⁷ While these rates have improved over time, the improvements have been incremental and, in the Commission’s view, insufficient. Failing to affirm by the end of trade date increases the likelihood that errors or exceptions will not be resolved in time for settlement. The sooner the parties have affirmed the trade information for their transaction, the lower the likelihood of a settlement fail because the parties will have more time to identify and resolve any potential errors. The T+1 Report highlights the need for achieving affirmation on trade date and encourages that on trade date allocations be completed by 7:00 p.m. ET and affirmations by 9:00 p.m. ET to facilitate shortening of the standard settlement cycle to T+1.¹⁵⁸ As discussed below, the Commission proposes Rule 15c6–2 to require completion of institutional trade allocations, confirmations, and affirmations by the end of trade date.

1. Proposed Rule 15c6–2 Under the Exchange Act

The Commission proposes Rule 15c6–2 to require that, where parties have agreed to engage in an allocation, confirmation, or affirmation process, a broker or dealer would be prohibited from effecting or entering into a contract for the purchase or sale of a security (other than an exempted security, a government security, a municipal security, commercial paper, bankers’ acceptances, or commercial bills) on behalf of a customer unless such broker

or dealer has entered into a written agreement with the customer that requires the allocation, confirmation, affirmation, or any combination thereof, be completed as soon as technologically practicable and no later than the end of the day on trade date in such form as may be necessary to achieve settlement in compliance with Rule 15c6–1(a). As explained in further detail below, the Commission believes that implementing a T+1 standard settlement cycle, as well as any potential further shortening beyond T+1, would require a significant improvement in the current rates of same-day affirmations to ensure timely settlement in a T+1 environment. In this way, the Commission also believes that proposed Rule 15c6–2 should facilitate timely settlement as a general matter, regardless of shortening the settlement cycle, because it will accelerate the completion of affirmations on trade date. Because broker-dealers and their institutional customers will review and reconcile trade data earlier in the settlement process, the Commission believes that same-day affirmation can improve the accuracy and efficiency of institutional trade processing. In particular, conducting these activities earlier in the process, and as soon as technologically practicable, will allow more time to resolve errors, an important consideration as shorter settlement cycles compress the available time to resolve errors.

Proposed Rule 15c6–2 applies requirements to a broker-dealer’s contractual arrangements with its institutional customers because the Commission preliminarily believes that broker-dealers are best positioned to ensure (through their contractual arrangements) that their customers, including those acting on behalf of their customers, will perform the required allocation, confirmation, and affirmation functions on the appropriate timeframe and as soon as technologically practicable. Because broker-dealers are the party to a transaction most likely to have access to a clearing agency, the broker-dealer is also the party best positioned to ensure the timely settlement of institutional trades, and as such, should be able to ensure via its customer agreements that institutional customers or their agents also comport their operations to facilitate same-day affirmation.¹⁵⁹ In addition, requiring broker-dealers to

enter into written agreements that require the allocation, confirmation, and affirmation processes be completed as soon as technologically practicable and no later than the end of trade date may help increase the use of standardized terms and trade details across market participants, which may enable the parties to reduce their reliance on manual processes in favor of more automated methods.

As proposed, Rule 15c6–2 does not define the terms “allocation,” “confirmation,” or “affirmation.” As discussed in Part II.B.3.c), trade allocation refers to the process by which an institutional investor (often an investment adviser) allocates a large trade among various client accounts or determines how to apportion securities trades ordered contemporaneously on behalf of multiple funds or non-fund clients.¹⁶⁰ The terms “confirmation” and “affirmation” refer to the transmission of messages among broker-dealers, institutional investors, and custodian banks to confirm the terms of a trade executed for an institutional investor, a process necessary to ensure the accuracy of the trade being settled. Broker-dealers transmit trade confirmations to their customers to verify trade information, and customers provide an affirmation in response to affirm the confirmation so that the transaction can be prepared for settlement. The Commission believes that these terms are widely used and generally understood by market participants who engage in institutional trade processing.

Proposed Rule 15c6–2 uses the term “confirmation” to refer to the operational message that includes trade details provided by the broker-dealer to the customer to verify trade information so that a trade can be prepared for settlement on the timeline established in Rule 15c6–1(a).¹⁶¹ In contrast,

¹⁶⁰ For example, DTCC ITP’s OASYS platform is a trade allocation and acceptance service that communicates trade and allocation details between investment managers and broker-dealers. DTCC ITP is in the process of decommissioning OASYS and replacing it with CTM, an enriched automated system that offers central matching workflow (including allocation) settlement notification and ALERT services. ALERT provides a database for the maintenance and communication of account and SSI information so that investment managers, broker-dealers, custodian banks and prime brokers can share account information electronically. See DTCC, ALERT, <https://www.dtcc.com/institutional-trade-processing/itp/alert>.

¹⁶¹ Confirmations will include the following trade information: transaction type, security (including an identifier and description), account ID and title, trade date, settlement date, quantity, price, commission (if any), taxes and fees (if any), accrued interest (if appropriate) and the net amount of money to be paid or received at settlement. A

¹⁵⁵ Omgeo, *Mitigating Operational Risk and Increasing Settlement Efficiency through Same Day Affirmation (SDA)*, at 2, 7 (Oct. 2010) (“Omgeo Study”).

¹⁵⁶ DTCC, *Proposal to Launch a New Cost-Benefit Analysis on Shortening the Settlement Cycle*, at 7 (Dec. 2011), <https://www.dtcc.com/en/news/2011/december/01/proposal-to-launch-a-new-cost-benefit-analysis-on-shortening-the-settlement-cycle.aspx>.

¹⁵⁷ DTCC ITP Forum Remarks, *supra* note 58.

¹⁵⁸ See T+1 Report, *supra* note 18, at 13.

¹⁵⁹ In an effort to also encourage investment advisers to ensure that their own operations and procedures for institutional trade processing can accommodate T+1 or shorter settlement timeframes, in Part III.C the Commission proposes an amendment to an existing recordkeeping rule for registered investment advisers.

confirmations required by Exchange Act Rule 10b-10 concern a series of disclosures that broker-dealers are required to provide in writing to customers at or before completion of a transaction.¹⁶² While some matching or electronic trade confirmation services may use the operational confirmation process described in proposed Rule 15c6-2 to produce a confirmation for purposes of compliance with Rule 10b-10, others may not. Accordingly, the term “confirmation” as used in proposed Rule 15c6-2 should be understood to refer to the institutional trade processing message or verification and not the disclosure required under Rule 10b-10. Below the Commission solicits comment as to whether these terms are sufficiently understood to facilitate compliance with the proposed rule.

Proposed Rule 15c6-2 would also require broker-dealers to enter into a written agreement with a “customer” that has agreed to engage in the allocation, confirmation, or affirmation process. For purposes of the rule, the term “customer” includes any person or agent of such person who opens a brokerage account at a broker-dealer to effect an institutional trade or purchases or sells a security for which the broker-dealer receives or will receive compensation. In the institutional trade processing environment, the Commission understands that at times, a broker-dealer may accept instructions or trades from entities acting on behalf of the institutional investor. The term, as used in proposed Rule 15c6-2, is intended to cover both the institutional investor and any and all agents acting on its behalf. As stated below, the Commission is seeking further comment on whether the obligations imposed by proposed Rule 15c6-2 should explicitly state that contracts of such agents acting on behalf of the broker-dealer’s customer are subject to the proposed rule or whether the proposed rule text as written is sufficiently clear.

Finally, the written agreement executed pursuant to proposed Rule 15c6-1 requires that the allocation, confirmation, and affirmation processes, or any combination thereof, related to these trades be completed as soon as technologically practicable and no later than the end of the day on trade date in such form as may be necessary to achieve settlement in compliance with

confirmation will also include the broker name and whether the broker-dealer was acting as principal or agent on the trade.

¹⁶² 17 CFR 240.10b-10. For more information on confirmations required under Rule 10b-10, see Part III.E.3.

Rule 15c6-1(a).¹⁶³ The Commission is proposing “end of the day on trade date” rather than requiring a specific time earlier than end of day to allow firms to maximize their internal processes to meet the appropriate cutoff times and other deadlines, as soon as technologically practicable. The Commission expects that different sectors of the market, different types of asset classes or market participants, and different operational processes (e.g., cross-border transactions) may have varying processing deadlines, some of which may need to be earlier than end of the day to facilitate trade processing. For example, as noted above, the T+1 Report contemplates moving the “ITP Affirmation Cutoff” from 11:30 a.m. on the day after trade date to 9:00 p.m. on trade date to facilitate a T+1 settlement cycle.¹⁶⁴ Accordingly, the parties would be able under the rule to require earlier timeframes when appropriate. Moreover, the SROs could consider whether and how to use earlier than end of day deadlines, such as those recommended by the T+1 Report.

2. Basis for Requiring Affirmation No Later Than the End of Trade Date

As discussed in Part II.B, aspects of post-trade processing for institutional transactions remain inefficient and costly for several reasons. Although same-day affirmation is considered a best practice for institutional trade processing, adoption is not universal across market participants or even across all trades entered by a given participant.¹⁶⁵ Market participants continue to use hundreds of “local” matching platforms,¹⁶⁶ and rely on inconsistent SSI data independently maintained by broker-dealers, investment managers, custodians, sub-custodians, and agents on separate

¹⁶³ For purposes of this rule, “end of the day” has the same meaning as it is generally understood: no later than 11:59:59 p.m., Eastern Standard Time or Eastern Daylight Saving Time, whichever is currently in effect on trade date.

¹⁶⁴ See T+1 Report, *supra* note 18, at 39.

¹⁶⁵ While the concept of completing these functions on trade date has often been referred to a “same-day” affirmation, the Commission is proposing instead to use the term “trade date” in the rule to be clear that the allocation, confirmation, and affirmation process should be completed on the trade date.

¹⁶⁶ Local matching platforms include, for example, the trade reconciliation and inventory management tools that market participants use to reconcile trade information. See DTCC, Embracing Post-Trade Automation: Seven Ways the Sell-Side Will Benefit from No-Touch Future (Nov. 2020) (“DTCC Embracing Post-Trade Automation”), https://www.dtcc.com/itp-hub/dist/downloads/broker_supplement_11.11.20z.pdf. Examples of such service providers include Bloomberg, Corfinancial, Lightspeed, and SS&C Technologies.

databases.¹⁶⁷ As discussed in Part II.B, processing institutional trades requires managing the back and forth involved with transmitting and reconciling trade information among the parties, functionally matching and re-matching with the counterparties to the trade, as well as custodians and agents, to facilitate settlement. It also requires market participants to engage in allocation processes, such as allocation-level cancellations and corrections, some of which are still processed manually.¹⁶⁸ This collection of redundant, often manual steps and the use of uncoordinated (*i.e.*, not standardized) databases can lead to delays, exceptions processing, settlement fails, wasted resources, and economic losses. While the proposed rule does not require any changes to manual processes or existing uses of databases and exceptions processing, the Commission preliminarily believes that market participants may pursue improvements to these existing processes to manage their obligations under Rule 15c6-2, if adopted.

Although proposed Rule 15c6-2 does not require settlement of the transaction on trade date, the Commission preliminarily believes the proposed rule helps ensure that institutional trades will timely settle on T+1 because, by promoting the completion of these processes as soon as technologically practicable and no later than the end of trade date, it reduces the likelihood of exceptions or other errors with respect to trade information that can prevent a transaction from settling. In the Commission’s view, because the rule requires that allocation, confirmation, and affirmation be completed as soon as technologically practicable and no later than the end of trade date, it can also facilitate shortening the settlement cycle, both with respect to T+1 and potentially for shortening beyond T+1 in the future. By elevating an industry best practice to a Commission

¹⁶⁷ For more information about the use and impact of “local” matching platforms, see *supra* note 166. A 2020 DTCC survey of global broker-dealers found that certain institutional post-trade processing costs could be reduced by 20–25% through leveraging post-trade automation, which would in turn eliminate redundancies and manual processing and mitigate operational risks. See DTCC, DTCC Identifies Seven Areas of Broker Cost Savings as a Result of Greater Post-Trade Automation (Nov. 18, 2020), <https://www.dtcc.com/news/2020/november/18/dtcc-identifies-seven-areas-of-broker-cost-savings-as-a-result-of-greater-post-trade-automation>; see also DTCC Embracing Post-Trade Automation, *supra* note 166.

¹⁶⁸ See DTCC, Re-Imagining Post-Trade: No-Touch Processing Within Reach, at 4 (Sept. 2019), <https://www.dtcc.com/-/media/Files/Downloads/Institutional-Trade-Processing/ITP-Story/DTCC-Re-Imagining-Post-Trade.pdf>.

requirement, the Commission believes that proposed Rule 15c6–2 can significantly improve the current 68% rate of affirmations on trade date by standardizing the obligations of broker-dealers and their institutional customers with respect to the timing of achieving affirmations. This, in turn, could facilitate increases in operational efficiency necessary to support an orderly transition to shorter settlement cycles. The Commission also anticipates that SROs will consider whether to propose rule changes to incorporate the requirements in new Rule 15c6–2 if adopted,¹⁶⁹ and proposed Rule 15c6–2 would likely encourage further development of automated and standardized practices among market participants to facilitate settlement of institutional trades.

3. Request for Comment

The Commission solicits comment on the particular questions set forth below, and encourages commenters to submit any relevant data or analysis in connection with their answers.

28. Would proposed Rule 15c6–2 accomplish the stated objectives? Would the proposed rule encourage further standardization and automation in the processing of institutional trades? What effect will the proposed rule have on improving efficiencies and reducing errors and fails? Please provide a basis or explanation for your position.

29. Proposed Rule 15c6–2 uses such terms as “allocation,” “confirmation,” and “affirmation.” As discussed above, the Commission believes that these are well understood concepts. Should these terms be defined for purposes of the proposed rule? If so, please explain which terms need further definition and why? Please include the recommended elements of such definitions.

30. Similarly, does the term “end of the day on trade date” need to be defined? If so, please provide information as to why and include recommended elements of such a definition.

31. Proposed Rule 15c6–2 uses the term “customer.” Given that often agents of the customer are providing allocation, confirmation or affirmation instructions or communications to the broker-dealer on behalf of the broker-

dealer’s customer, does the rule as written address this scenario? Does the use of the term “customer” sufficiently incorporate any and all agents of the customer? Is the Commission’s understanding of these terms consistent with the industry’s use of these terms? Why or why not? Should the term “customer” be defined for purposes of Rule 15c6–2? If so, please include the recommended elements of such a definition.

32. What effect would proposed Rule 15c6–2 have on the relationship between a broker-dealer and its customer?

33. Do the perceived benefits of proposed Rule 15c6–2 or the benefits of trade date confirmation and affirmation accrue to all participants—brokers-dealers (including prime brokers), institutional customers, custodians, or matching utilities? If not, why? Do they accrue differently based on size of the entity? Please explain.

34. Does proposed Rule 15c6–2 introduce any new risks? If so, please describe such risks and whether they can be quantified. Can these risks be mitigated? If so, how?

35. If proposed Rule 15c6–2 is adopted by the Commission, what should be the necessary time frame for implementing such a rule? What factors should the Commission consider in determining the implementation date?

36. Would proposed Rule 15c6–2 affect cross-border trading or cross-border trade processing? If so, how would it do so?

37. As proposed, Rule 15c6–2 excludes exempted securities, government securities, municipal securities, commercial paper, bankers’ acceptances, and commercial bills. For those asset classes that do not already settle on T+1, should the proposed rule apply to any or all of these excluded securities? Please discuss the reasons why any or all of these securities should or should not be excluded from Rule 15c6–2.

38. What if anything should the Commission do to further facilitate the use of standardized industry protocols and standardization of reference data by broker-dealers and institutional customers, including investment advisers and custodians? What if anything should the Commission do to further facilitate efficiency in processing institutional trades and reducing errors and fails?

39. Would the adoption of further Commission rules be necessary to require or further facilitate the objective of ensuring that institutional trades are operationally capable of settling on a T+1 or shorter timeframe?

40. The T+1 Report indicates that market participants may cancel and rebill an affirmed trade because of a monetary change to the trade and states that these instances occur frequently in a T+2 settlement cycle.¹⁷⁰ Why are trades affirmed when monetary amounts may not agree? Should it be permissible to cancel an affirmed trade? Why or why not?

41. Are investment advisers matching their records about a trade against the received confirmation prior to affirming? If not, why not? If so, what criteria are used to determine that a ‘match’ has occurred? Which fields must match? Should financial values, such as unit price, total commission, accrued interest for fixed-income trades and net amount to be paid or received be matched? What steps does or should the adviser take to ensure the affirming party, if not the adviser, is matching adviser-provided trade information against the broker or dealer confirmation before affirming trades?

42. When matching trade information on a given transaction between the investment adviser and the broker-dealer, the parties to the transaction may view differences, such as differences in amounts, as minor and therefore within a satisfactory “tolerance” range to match, whereas in other cases a party may be unwilling to match if any discrepancy in trade information exists. These differences in trade information may be perceived to be small in absolute terms or relative to the size of the trade. Parties also may set “tolerance” thresholds in their systems to ignore some differences, such as trade information where an element differs by “one penny” or less than 0.01% of the value being compared. To what extent do advisers apply such tolerances when matching trades? What fields are subject to such tolerance thresholds and what size tolerances are generally used? For example, if the net money for settlement as calculated by the adviser differs from the net money for settlement as calculated by the broker or dealer as part of the confirmation by a dollar, is that trade a “match”? And if so, which value is used for settlement, the amount on the confirmation or the adviser’s records? Does the other party then adjust its records to the amount used for settlement? Are investors ever harmed by this approach? Is there general consensus on tolerances? Are there industry groups that define guidelines or best practices on the use of tolerances and, if so, do they all agree?

43. Should advisers be expected to affirm trades or should this always be a

¹⁶⁹ For example, Financial Industry Regulatory Authority (“FINRA”) Rule 11860 does not require that a broker-dealer send a confirmation of trade details until the day after trade date, which can delay the affirmation process until T+1 (in a T+2 environment) and reduce the time available to manage trade exceptions. FINRA, as well as DTC and DTCC ITP Matching may propose new rules, procedures or services to further enhance the ability of market participants to settle in shorter timeframes.

¹⁷⁰ See T+1 Report, *supra* note 18, at 26.

function of the broker-dealer or bank custodian holding the account where securities will be delivered? How should the adviser proceed if the deadline to notify a broker-dealer or bank custodian is approaching yet a confirmation has not been received? If advisers delay notification of the custodian until after affirming the trade in such a scenario, will this create delays in recalling loaned securities or securities that may have been pledged as collateral?

44. In some cases, bank custodians may receive a copy of a confirmation (a “duplicate confirmation”) as an early alert of potential trade activity. Are these duplicate confirmations relied upon to affirm the trade information? Do custodians ever settle trades based solely on information received in a duplicate confirmation? Should this practice be permitted? Please explain why or why not. Do custodians use these duplicate confirmations as an early alert to call a security back from being on loan or to identify a security that may be pledged as collateral?

45. Elements of FINRA Rule 11860 could be used to help facilitate compliance with proposed Rule 15c6–2, if adopted. Is proposed Rule 15c6–2 consistent with the approach to RVP/DVP settlement set forth in FINRA Rule 11860 and, more generally, the Uniform Practice Code (“UPC”) set forth in the FINRA Rule 11000 series?¹⁷¹ If not, please explain.

46. Should proposed Rule 15c6–2 have separate requirements and deadlines for each step in the allocation, affirmation, and confirmation processes? And if so, should deadlines be relative to a prior dependent activity? For example, should allocations be communicated within an hour of, or no later than three hours after, receipt of the notice of execution and affirmations be communicated within an hour of, or

¹⁷¹ The UPC is a series of FINRA rules, interpretations and explanations designed to make uniform, where practicable, custom, practice, usage, and trading technique in the investment banking and securities business, particularly with regard to operational and settlement issues. These can include such matters as trade terms, deliveries, payments, dividends, rights, interest, reclamations, exchange of confirmations, stamp taxes, claims, assignments, powers of substitution, computation of interest and basis prices, due-bills, transfer fees, “when, as and if issued” trading, “when, as and if distributed” trading, marking to the market, and close-out procedures. The UPC was created so that the transaction of day-to-day business by members may be simplified and facilitated; that business disputes and misunderstandings, which arise from uncertainty and lack of uniformity in such matters, may be eliminated; and that the mechanisms of a free and open market may be improved and impediments thereto removed. *See, e.g.*, Exchange Act Release No. 91789 (May 7, 2021), 86 FR 26084, 26088 (May 12, 2021).

no later than three hours after, receipt of the confirmation? Or is it acceptable to require end of day for all activity? What changes would be recommended for a T+0 environment?

C. Proposed Amendment to Recordkeeping Rule for Investment Advisers

Under proposed Rule 15c6–2, a broker-dealer would be prohibited from entering into a contract on behalf of a customer for the purchase or sale of certain securities¹⁷² unless it has entered into a written agreement with the customer that requires the allocation, confirmation, affirmation, or any combination thereof to be completed no later than the end of the day on trade date in such form as may be necessary to achieve settlement in compliance with proposed Rule 15c6–1(a).¹⁷³ Investment advisers, as customers of a broker or dealer, may become a party to such an agreement. Proposed Rule 15c6–2 does not specify which party would be obligated to provide the necessary allocation, confirmation, and affirmation, although the Commission understands that, generally, the customer (here, the investment adviser) customarily provides the broker or dealer with instructions directing how to allocate the securities to be purchased or sold, and the broker or dealer confirms the trade details, which the adviser, in turn, affirms.

Based on staff experience, the Commission believes that advisers generally have recordkeeping processes that include keeping originals and/or electronic copies of such allocations, confirmations, and affirmations. However, in some instances this may not be the case. Some activities, such as affirmation, may be performed on the adviser’s behalf by a third party, such as middle-office outsourcing provider, a custodian or a prime broker, and advisers may not maintain these records.¹⁷⁴ In addition, based on staff experience, the Commission also believes that some advisers do not maintain these records or maintain them only in paper. Accordingly, the Commission is proposing an amendment to the investment adviser recordkeeping rule designed to ensure

¹⁷² As discussed in Part III.B.1, proposed Rule 15c6–2 would not apply to an exempted security, government security, municipal security, commercial paper, bankers’ acceptances, or commercial bills.

¹⁷³ *See supra* Part III.B (discussing the proposed new requirement for “same-day affirmation”).

¹⁷⁴ *See* DTCC ITP Forum Remarks, *supra* note 58 (stating that up to 70% of institutional trades are affirmed by custodians).

that registered investment advisers that are parties to contracts under proposed Rule 15c6–2 retain records of confirmations received, and keep records of the allocations and affirmations sent to a broker or dealer.¹⁷⁵ Specifically, the Commission proposes to amend Rule 204–2 under the Investment Advisers Act of 1940 (the “Advisers Act”) by adding a requirement in paragraph (a)(7)(iii) that advisers maintain records of each confirmation received, and any allocation and each affirmation sent, with a date and time stamp for each allocation (if applicable) and affirmation that indicates when the allocation or affirmation was sent to the broker or dealer if the adviser is a party to a contract under proposed Rule 15c6–2. As with other records required under Rule 204–2(a)(7), advisers would be required to keep originals of confirmations, and copies of allocations and affirmations, described in the proposed rule, but may maintain records electronically if they satisfy certain conditions.¹⁷⁶

While the Commission believes that retaining records of all of these documents is important, we understand that the timing of communicating allocations to the broker or dealer is a critical pre-requisite to ensure that confirmations can be issued in a timely manner, and affirmation is the final step necessary for an adviser to acknowledge agreement on the terms of the trade or alert the broker or dealer of a discrepancy. The proposed amendment to Rule 204–2 therefore would require advisers to time and date stamp records of any allocation and each affirmation. The proposed time and date stamp for these communications would occur when they were “sent to the broker or dealer.” To meet this proposed requirement, an adviser generally should time and date stamp records of each allocation (if applicable) and affirmation to the nearest minute.

Based on staff experience, the Commission believes many advisers send allocations and affirmations electronically to brokers or dealers, and many records are already consistently date and time stamped to the nearest minute using either a local time zone or a centralized time zone, such as

¹⁷⁵ *See* proposed Rule 204–2(a)(7)(iii), *infra* Part 0.

¹⁷⁶ *See* Rule 204–2(a)(7) (requiring making and keeping originals of all written communications received and copies of all written communications sent by an investment adviser relating to the records listed thereunder). *But see* Rule 204–2(g) (permitting advisers to maintain records electronically if they establish and maintain required procedures).

coordinated universal time, or “UTC.”¹⁷⁷ The Commission believes that date and time stamping these records to the nearest minute would evidence that the advisers have met their obligations to timely achieve a matched trade.

The Commission recognizes that requiring these records and adding time and date stamps to records would, however, add additional costs and burdens for those advisers that do not currently maintain these records or do not use electronic systems to send allocations and affirmations to brokers or dealers or maintain confirmations. For example, some advisers may incur costs to update their processes to accommodate these records. For advisers that use third parties to perform or communicate allocations or affirmations, they also could incur costs associated with directing the third parties to electronically copy the adviser on any allocations or affirmations.¹⁷⁸

We believe that requiring these records and requiring a time and date stamp of all affirmations and any applicable allocations (but not confirmations) would help advisers establish that they have timely met contractual obligations under proposed Rule 15c6–2 and ultimately help ensure that trades involving such advisers would timely settle on T+1. In addition, we believe the proposed requirement would aid the Commission staff in preparing for examinations of investment advisers and assessing adviser compliance.

1. Request for Comment

We request comment on the proposed amendment to the investment adviser recordkeeping rule:

47. Should the Commission amend Rule 204–2 to specifically correspond to the proposed Rule 15c6–2 and require advisers that are parties to contracts under proposed Rule 15c6–2 to retain records of the documents described in that rule?

48. Should the Commission require that these records be retained under a different provision of the recordkeeping

rule? For example, should the Commission instead amend Rule 204–2(a)(3) (requiring advisers to retain “memorandums” of orders) to explicitly include these records? If so, the determination of whether to maintain the relevant allocations, confirmation, and affirmations would depend on if they were part of an “order.” Given that certain orders may never be executed, and that certain executed trades potentially might not have orders associated with them, would including the requirement in the recordkeeping requirement related to “orders” result in advisers not retaining some allocations, confirmations, and affirmations? Separately, would maintaining the proposed records under Rule 204–2(a)(3) create confusion about whether advisers need to maintain originals and/or duplicate copies of relevant allocations, confirmations, and affirmations, when the specified record is the memorandum? Or, do advisers currently maintain records of allocations, confirmations, and affirmations under this provision to document the orders they describe in the memoranda?

49. Should the Commission require time and date stamping of the allocations and affirmations to the nearest minute, as proposed? Would advisers need to make system changes to accomplish such time and date stamping of allocations and affirmations? Is there an approach other than time and date stamping that would allow Commission staff to verify that an adviser has completed the steps necessary to facilitate settlement in a timely manner? Should the Commission require time and date stamping of just the affirmation or just the allocation? Is the requirement to time and date stamp the allocation or affirmation when it is “sent to the broker or dealer” clear? Should we require the time and date stamp at a different point in time? If so, when?

50. Should we require time and date stamping of receipt of the confirmation as well? What additional costs or burdens would such time stamping incur?

51. Under what circumstances do third parties, such as prime brokers or custodians, affirm trades instead of advisers, and in those instances do the third parties send copies of the affirmations to the advisers? Does this happen for all accounts an adviser manages or only some accounts and why?

52. If advisers are matching adviser records to confirmations, some trades will not match. In other instances, an adviser may receive a confirmation for

a trade that the adviser does not “know,” such as when an adviser did not execute a trade or when the adviser’s trading desk has not notified the adviser’s middle or back office. In such cases, do advisers proactively notify the broker-dealer that the trade does not match (often referred to as “don’t know” or sending a “DK”)? Should the proposed rule be more specific about recordkeeping when an adviser does not agree with or does not “know” a trade for which a confirmation was received? How often do trades not match? How frequently do advisers receive confirmations they do not “know”?

D. New Requirement for CMSPs To Facilitate Straight-Through Processing

Because of the rising volume of transactions for which CMSPs provide matching and other services,¹⁷⁹ CMSPs have become increasingly critical to the functioning of the securities market.¹⁸⁰ As described in Part II.B.1, CMSPs facilitate communications among a broker-dealer, an institutional investor or its investment adviser, and the institutional investor’s custodian to reach agreement on the details of a securities transaction, enabling the trade allocation, confirmation, affirmation, and/or the matching of institutional trades. Once the trade details have been agreed among the parties or matched by the CMSP, the CMSP can then facilitate settlement of the transaction.

While the introduction of new technologies and streamlined operations such as those offered by CMSPs have improved the efficiency of post-trade processing over time, the Commission believes more should be done to facilitate further improvements, particularly with respect to the processing of institutional trades. Currently, some SRO rules require the use of CMSP services for institutional

¹⁷⁹ See, e.g., Press Release, DTCC, Over 1,800 Firms Agree to Leverage U.S. Institutional Trade Matching Capabilities in DTCC’s CTM (Oct. 12, 2021), <https://www.dtcc.com/news/2021/october/12/over-1800-firms-agree-to-leverage-dtccs-ctm>; DTCC’s Trade Processing Suite Traffics One Billion Trades, Traders Magazine (Feb. 13, 2017), <https://www.tradersmagazine.com/departments/clearing/dtccs-trade-processing-suite-traffics-one-billion-trades/>.

¹⁸⁰ CMSPs are clearing agencies as defined in Section 3(a)(23) of the Exchange Act, and as such, are required to register as a clearing agency or obtain an exemption from registration. The Commission has currently exempted three CMSPs from the registration requirement. The Commission also has adopted rules that apply to both registered and exempt clearing agencies, including CMSPs operating pursuant to an exemption from registration. See, e.g., Regulation Systems Compliance and Integrity, Exchange Act Release No. 73639 (Nov. 19, 2014), 79 FR 72252 (Dec. 5, 2014) (“Regulation SCI Adopting Release”).

¹⁷⁷ See U.S. Naval Observatory, Systems of Time, <https://www.cnmc.usff.navy.mil/Organization/United-States-Naval-Observatory/Precise-Time-Department/The-USNO-Master-Clock/Definitions-of-Systems-of-Time/>. The Commission understands that some firms have systems that date and time stamp records with greater precision. Certainly as volumes increase and the timeframes to complete operational activities, such as settlement, shorten, the Commission believes from a practical perspective that many firms will find value in having increased precision in the time stamps on trade-related activities.

¹⁷⁸ For additional discussion on this and other initial costs and burdens of the proposed amendment to Rule 204–2, see *infra* Part V.C.5.b).

trade processing.¹⁸¹ The Commission has previously explained that a shortened settlement cycle may lead to expanded use of CMSPs, as well as increased focus on enhancing the services and operations of the CMSPs themselves.¹⁸² In particular, the Commission believes that eliminating the use of tools that encourage or require manual processing, alongside the continued development and implementation of more efficient automated systems in the institutional trade processing environment, is essential to reducing risk and costs to ensure the prompt and accurate clearance and settlement of securities transactions.¹⁸³ Below is a discussion of the elements of the proposed rule.

1. Policies and Procedures To Facilitate Straight-Through Processing

Proposed Rule 17Ad–27 would require a CMSP to establish, implement, maintain and enforce policies and procedures to facilitate straight-through processing for transactions involving broker-dealers and their customers.

The term “straight-through processing” generally refers to processes that allow for the automation of the entire trade process from trade execution through settlement without manual intervention.¹⁸⁴ In the context of institutional trade processing under this rule, straight-through processing occurs when a market participant or its agent uses the facilities of a CMSP to enter trade details and completes the trade allocation, confirmation, affirmation, and/or matching processes without manual intervention. Under the rule, a CMSP facilitates straight-through processing when its policies and procedures enable its users to minimize or eliminate, to the greatest extent that is technologically practicable, the need for manual input of trade details or manual intervention to resolve errors and exceptions that can prevent settlement of the trade. A CMSP also facilitates straight-through processing when it enables, to the greatest extent that is technologically practicable, the transmission of messages regarding errors, exceptions, and settlement status information among the parties to a trade and their settlement agents. Under the rule, policies and procedures generally should establish a holistic framework

for facilitating straight-through processing, as just described, on a CMSP-wide basis. CMSPs should also generally consider and address how the services, systems, and any operational requirements a CMSP applies to its users ensure that the CMSP’s policies and procedures advance the goal of achieving straight-through processing for trades processed through it. For example, a CMSP’s policies and procedures generally should explain the criteria that the CMSP applies to determine when a “match” has been achieved, including any relevant tolerances that it or its users might apply to achieve a match, and the extent to which such criteria should be standardized or customized. With respect to the use of electronic trade confirmation services, which often rely on legacy technologies, a CMSP’s policies and procedures generally should establish a timeline for transitioning users away from manual processes to matching services that reduce a party’s reliance on the manual, often sequential, entry and reconciliation of trade information.

The Commission believes that increasing the efficiency of using a CMSP can reduce the risk that a trade will fail to settle, as well as the costs associated with correcting errors that result from the use of manual processes and data entry, thereby improving the overall efficiency of the National C&S System. CMSPs have become increasingly connected to a wide variety of market participants in the U.S.,¹⁸⁵ increasing the need to reduce risks and inefficiencies that may result from use of a CMSP’s services. Because the proposed rule would preclude reliance on service offerings at CMSPs that rely on manual processing, the Commission preliminarily believes the proposed rule will better position CMSPs to provide services that not only reduce risk generally but also help facilitate an orderly transition to a T+1 standard settlement cycle,¹⁸⁶ as well as potential further shortening of the settlement cycle in the future.

The Commission has taken a “policies and procedures” approach in developing the proposed rule because it preliminarily believes such an approach

will remain effective over time as CMSPs consider and offer new technologies and operations to improve the settlement of institutional trades. The Commission also believes that improving the CMSP’s systems to facilitate straight-through processing can help market participants consider additional ways to make their own systems more efficient. In addition, a “policies and procedures” approach can help ensure that a CMSP considers in a holistic fashion how the obligations it applies to its users will advance the implementation of methodologies, operational capabilities, systems, or services that support straight-through processing.

In considering how to develop policies and procedures that facilitate straight-through processing, a CMSP generally should consider the full range of operations and services related to the processing of institutional trades for settlement. For example, as noted above, the CMSP often acts as a communication platform for different market participants to transmit messages regarding errors, exceptions, and settlement status information among the parties to a trade and their settlement agents. Under proposed Rule 17Ad–27, a CMSP also generally should consider the extent to which its policies, procedures, and processes restrict, inhibit, or delay the ability of users to transmit such messages to any agent that assists said users in preparing or submitting the trade for settlement. In the Commission’s view, the CMSP generally should consider having policies and procedures that promote the onward transmission of messages among the relevant parties to a transaction to ensure timely settlement and reduce the potential for errors. Similarly, in structuring its process for submitting transactions for settlement, the CMSP generally should consider ensuring that its systems, operational requirements, and the other choices it makes in designing its services enable and incentivize prompt and accurate settlement without manual intervention.

As explained above, the Commission recognizes it may not be technologically or operationally practicable to eliminate all manual processes immediately. Indeed, the Commission believes that in certain circumstances, the parties to a trade may need to engage in manual interventions to ensure the accuracy of trade information and minimize operational or other risks that may prevent settlement, and proposed Rule 17Ad–27 does not require CMSPs to remove a manual processes if doing so would clearly undermine the prompt and accurate clearance and settlement of

¹⁸¹ See e.g., FINRA Rule 11860 (requiring a broker-dealer to use a registered clearing agency, a CMSP, or a qualified vendor to complete delivery-versus-payment transactions with their customers).

¹⁸² T+2 Proposing Release, *supra* note 30, at 69258.

¹⁸³ See T+1 Report, *supra* note 18, at 9.

¹⁸⁴ See SIA Business Case Report, *supra* note 21, at app. E (defining “straight-through processing”).

¹⁸⁵ See, e.g., DTCC, About DTCC Institutional Trade Processing, <https://www.dtcc.com/about/businesses-and-subsidiaries/dtccitp> (noting that DTCC ITP, parent to DTCC ITP Matching, serves 6,000 financial services firms in 52 countries).

¹⁸⁶ As discussed in Part III.B.2, the T+1 Report contemplates moving the “ITP Affirmation Cutoff” from 11:30 a.m. on the day after trade date to 9:00 p.m. on trade date. See *supra* note 164. Proposed Rule 17Ad–27 is consistent with, and should help promote, efforts to shorten the processing time for institutional trades in a T+1 environment.

securities transactions. However, pursuant to the policies and procedures approach described above, where a CMSP continues to permit manual reconciliation or other types of human intervention, it generally should explain in its policies and procedures why those manual processes remain necessary as part of its systems and processes. In addition, the CMSP should consider developing processes that ultimately would eliminate the underlying issues that drive the use of manual processes in order to facilitate a more automated approach.

2. Annual Report on Straight-Through Processing

Proposed Rule 17Ad-27 also would require a CMSP to submit every twelve months to the Commission a report that describes the following: (a) The CMSP's current policies and procedures for facilitating straight-through processing; (b) its progress in facilitating straight-through processing during the twelve month period covered by the report; and (c) the steps the CMSP intends to take to facilitate and promote straight-through processing during the twelve month period that follows the period covered by the report. The Commission preliminarily intends to make this annual report publicly available on its website to enable the public to review and analyze progress on achieving straight-through processing. A CMSP would submit this report to the Commission using the Commission's Electronic Data Gathering, Analysis, and Retrieval system ("EDGAR"), and would tag the information in the report using the structured (*i.e.*, machine-readable) Inline eXtensible Business Reporting Language ("XBRL").¹⁸⁷

The Commission believes that the proposed reporting requirement would enable the Commission to evaluate actions taken by the CMSP to ensure compliance with the rule and to help fulfill the Commission's responsibility for oversight of the National C&S System, both as it relates to the CMSP specifically and the National C&S System more generally. The proposed requirement would also inform the Commission and the public, particularly the direct and indirect users of the CMSP, as to the progress being made each year to advance implementation of

straight-through processing with respect to the allocation, confirmation, affirmation, and matching of institutional trades, the communication of messages among the parties to the transactions, and the availability of service offerings that reduce or eliminate the need for manual processing. In particular, the Commission preliminarily believes that a CMSP generally should include in its report a summary of key settlement data relevant to its straight-through processing objective. Such data could include the rates of allocation, confirmation, affirmation, and/or matching achieved via straight-through processing. In describing its progress in facilitating straight-through processing, the CMSP could also identify common or best practices that facilitate straight-through processing. In addition, after the CMSP has submitted its initial report, in subsequent years a CMSP generally should include in its report an assessment of how its progress in facilitating straight-through processing during the twelve month period covered by the report under paragraph (b) compares to the steps it intended to take to facilitate straight-through processing under paragraph (c) from the prior year's report.

Because this information would be useful to the industry and the general public in considering potential ways to increase the availability of straight-through processing, the Commission believes that the report should be made public. The Commission preliminarily believes that the proposed requirement generally would not require the disclosure of proprietary information, trade secrets, or personally identifiable information. To the extent that an annual report includes confidential commercial or financial information, a CMSP could request confidential treatment of those specific portions of the report.¹⁸⁸

As the National C&S System continues to evolve, the Commission believes that CMSPs will continue to play an increasingly critical role in efforts to facilitate the prompt and accurate clearance and settlement of securities transactions and to eliminate inefficient and costly procedures that effect the settlement of securities transactions, particularly institutional transactions. Furthermore, because of the CMSP's role in submitting matched or confirmed and affirmed trades for overnight positioning of settling transactions, the Commission believes that a CMSP generally should evaluate how it participates in that process and

consider how it can support improvements to the timing and manner of settlement obligations (*e.g.*, intraday) to increase efficiency in the National C&S System.

Requiring CMSPs to file the reports on EDGAR would provide the Commission and the public with a centralized, publicly accessible electronic database for the reports, facilitating the use of the reported data on straight-through processing. Moreover, requiring Inline XBRL tagging of the reported disclosures, which would specifically comprise an Inline XBRL block text tag for each of the three required narrative disclosures as well as detail tags for individual data points, would make the disclosures more easily available and accessible to and reusable by market participants and the Commission for retrieval, aggregation, and comparison across different CMSPs and time periods, as compared to an unstructured PDF, HTML, or ASCII format requirement for the reports.¹⁸⁹ Detail tags could be helpful to the extent the reports disclose individual data points, including the rates of allocation, confirmation, affirmation, and/or matching achieved via straight-through processing.

The Commission is proposing a 12-month requirement in the rule because the Commission preliminarily believes that a yearly review and report on progress with respect to straight-through processing is the appropriate timescale on which the CMSP should consider, develop, and implement iterative improvements over time, while also ensuring that progress towards straight-through processing is expeditious. Specifically, a 12-month period would provide the CMSP with a sufficient look-back period to complete a meaningful review on an organization-wide basis and time to test and implement material changes to technologies and procedures. An annual reporting requirement, as opposed to a monthly or semi-annual requirement, should help ensure that the information provided to the Commission reflects meaningful and substantive progress by the CMSP, as opposed to focusing the Commission's attention on smaller, technical changes in services and policies that would be less relevant to improving the Commission's understanding of the overall progress towards achieving straight-through processing by the CMSP. The

¹⁸⁷ This requirement would be implemented by including a cross-reference to Regulation S-T in proposed Rule 17Ad-27, and by revising Regulation S-T to include the proposed straight-through processing reports. Pursuant to Rule 301 of Regulation S-T, the EDGAR Filer Manual is incorporated by reference into the Commission's rules. In conjunction with the EDGAR Filer Manual, Regulation S-T governs the electronic submission of documents filed with the Commission.

¹⁸⁸ See 17 CFR 240.24b-2.

¹⁸⁹ See Release No. 33-10514 (June 28, 2018), 83 FR 40846, 40847 (Aug. 16, 2018). Inline XBRL allows filers to embed XBRL data directly into an HTML document, eliminating the need to tag a copy of the information in a separate XBRL exhibit. *Id.* at 40851.

Commission believes that the reporting requirement should continue indefinitely because changes in technology will require ongoing review and consideration of how such changes might impact policies and procedures to facilitate straight-through processing.

3. Request for Comment

The Commission requests comment on all aspects of proposed Rule 17Ad-27, as well as the following specific topics:

53. Is the proposed policies and procedures approach appropriate and sufficient to achieve the proposed rule's stated objectives? Why or why not? Would more specific or directive requirements, such as those discussed above be more effective at facilitating straight-through processing than the proposed policies and procedures approach? Please explain why or why not.

54. Is proposed Rule 17Ad-27 consistent with the approach to RVP/DVP settlement set forth in FINRA Rule 11860 and, more generally, the UPC set forth in the FINRA Rule 11000 series?¹⁹⁰ If not, please explain.

55. Is the proposed use of the term "straight-through processing" clear and understandable? Why or why not? Should the Commission define the term for purposes of the proposed rule? If so, please describe the elements that the Commission should consider including in the definition to make it clear and understandable.

56. Should the Commission require a CMSP to enable the users of its service to complete the matching, confirmation, or affirmation of securities transactions as soon as technologically practicable? Alternatively, should the Commission impose a specific deadline on such a requirement, such as requiring that these processes be completed within a certain number of minutes or hours? Should the Commission require specific deadlines, when using a CMSP, for completing each of the allocation, confirmation, affirmation, or matching processes? Why or why not? If the Commission were to impose a specific deadline, what would be the appropriate deadline for each process—allocation, confirmation, affirmation, and matching?

57. Should the Commission require a CMSP to forward or otherwise submit a transaction for settlement as soon as technologically and operationally practicable, as if using fully automated systems? Should the Commission specify to whom a CMSP should

forward such information to facilitate straight-through processing? To what extent do CMSPs not forward such trade information as soon as technologically practicable? Are certain parties excluded? What are the reasons preventing such forwarding of trade information?

58. Is it appropriate for proposed Rule 17Ad-27 to require a CMSP to retire any electronic trade confirmation services, where the users of a CMSP may transmit sequential messages back and forth to achieve allocation, confirmation, and affirmation of a transaction? If so, should the rule be modified to accommodate electronic trade confirmation services offered by CMSPs? Why or why not?

59. More generally, are electronic trade confirmation services consistent with the concept of "straight-through processing"? Why or why not? Please explain.

60. With regard to the proposed requirement for a CMSP to provide an annual report, does the proposed rule include the appropriate aspects or level of detail that should be included in such a report? Why or why not? Should the Commission require that the public report be issued in a machine-readable data language? Why or why not?

61. Are the time periods (*i.e.*, every 12 months) described in the rule concerning the submission and content of the annual report sufficiently clear? If not, please explain.

62. Should a CMSP be required to tag its annual report using Inline XBRL? Why or why not? Rather than requiring block text tags for the narrative disclosures as well as detail tags of individual data points (including those nested within the narrative disclosures), should we only require block text tags for the narrative disclosures? Should the annual report be tagged in an open structured data language other than Inline XBRL? If so, what open structured data language should be used and why?

63. Is EDGAR an appropriate submission mechanism for the annual report? Why or why not? Should the Commission use an alternative submission mechanism, such as the Electronic Form Filing System ("EFFS")? An EFFS submission requirement would not be compatible with a requirement to use Inline XBRL or other open structured data language for the annual report.

64. Should the Commission make public the annual report required to be submitted to the Commission under the proposed rule? Why or why not? Would making the report public alter the type or detail of information included by the

CMSP in the report or in its policies and procedures? If so, why? If the public availability of any information required under the proposed rule would raise issues related to confidentiality or the proprietary nature of the CMSP's operations, please explain.

65. CMSPs generally allow their users to define the criteria that will constitute a "match," and the users may set different tolerances under those criteria depending on their business strategy. Should a CMSPs be required to disclose in the annual report its matching criteria? Should a CMSP be required to disclose data regarding confirmations, affirmations, and/or matches in its annual report, such as the percentage of successful confirmations, affirmations, and/or matches achieved on trade date, or the average time users take to achieve confirmation, affirmation, and/or a match from trade submission? Should a CMSP be required to disclose any other data to help facilitate straight-through processing, such as average time to submit a trade to a registered clearing agency for settlement, or the average number of messages that a CMSP transmits among the parties to a trade before the trade is submitted to a registered clearing agency for settlement? Please explain.

66. More generally, should CMSPs be required to make their policies and procedures for straight-through processing public? Please explain why or why not?

67. The Commission has issued exemptive orders for three CMSPs, pursuant to which each CMSP is subject to a series of operational and interoperability conditions.¹⁹¹ Should the Commission amend the respective exemptive orders to add conditions similar to the proposed requirements in Rule 17Ad-27 instead of adopting this proposal? Why or why not?

68. In the Matching Release, the Commission stated that, even though matching services fall within the Exchange Act definition of "clearing agency," it was of the view that an entity that limits its clearing agency functions to providing matching services need not be subject to the full panoply of clearing agency regulation.¹⁹² The Commission offered two alternative approaches for regulation: Limited registration or conditional exemptions. Since the Matching Release, the Commission has approved three conditional exemptions

¹⁹⁰ See *supra* note 171 and accompanying text (describing the UPC).

¹⁹¹ See *supra* note 32 (providing citations to the exemptive orders for DTCC ITP Matching, BSTP, and SS&C).

¹⁹² Exchange Act Release No. 39829 (Apr. 6, 1998), 63 FR 17943, 17947 (Apr. 13, 1998) ("Matching Release").

for CMSPs, as noted in the above question, with the goal of facilitating competition in the provision of matching services.¹⁹³ Has the Commission's approach to the regulation of CMSPs facilitated competition in the provision of matching services? If so, why or why not? To what extent does competition among CMSPs help promote either a shortened settlement cycle or straight-through processing? Please explain.

69. Are there any other steps that the Commission should take to enhance the ability of the CMSPs to promote straight-through processing or increase efficiency in the settlement of securities transactions?

E. Impact on Certain Commission Rules and Guidance and SRO Rules

The proposed rules and rule amendments may affect compliance with other existing Commission rules and guidance that reference the settlement cycle or settlement processes in establishing requirements for market participants. Below is a preliminary list of rules identified by the Commission. The Commission preliminarily believes that no changes to these rules are necessary to adopt the proposed rules. The Commission solicits comment on the potential impacts of shortening the settlement cycle to T+1 on each of the below rules.

1. Regulation SHO Under the Exchange Act

As with the adoption of a T+2 standard settlement cycle, several provisions of Regulation SHO may be impacted by shortening the settlement cycle to T+1 because certain provisions use "trade date" and "settlement date" to determine the timeframes for compliance relating to sales of equity securities and fails to deliver on settlement date. Since these references are not to a particular settlement cycle (e.g., "T+2"), the timeframes for these provisions change in tandem with changes in the standard settlement cycle.

(a) Rule 204

Shortening the standard settlement cycle to T+1 would reduce the timeframes to effect the closeout of a fail-to-deliver position under 17 CFR 242.204 ("Rule 204").¹⁹⁴ Under Rule 204,¹⁹⁵ a participant of a registered

clearing agency must deliver securities to a registered clearing agency for clearance and settlement on a long or short sale in any equity security by settlement date, or if a participant has a fail-to-deliver position, the participant shall, by no later than the beginning of regular trading hours on the applicable closeout date, immediately close out the fail-to-deliver position by borrowing or purchasing securities of like kind and quantity.¹⁹⁶

The applicable closeout date for a fail-to-deliver position differs depending on whether the position results from a short sale, a long sale, or bona fide market making activity. If a fail-to-deliver position results from a short sale, the participant must close out the fail-to-deliver position by no later than the beginning of regular trading hours on the settlement day following the settlement date.¹⁹⁷ Under the current T+2 standard settlement cycle, the applicable closeout date for short sales is required by the beginning of regular trading hours on T+3. In a T+1 settlement cycle, the existing closeout requirement for fail-to-deliver positions resulting from short sales would be reduced from T+3 to T+2.¹⁹⁸

If a fail-to-deliver position results from a long sale or bona fide market making activity, the participant must close out the fail-to-deliver position by no later than the beginning of regular trading hours on the third consecutive settlement day following the settlement date.¹⁹⁹ Under the current T+2 standard settlement cycle, the closeout for long sales or bona fide market making activity is required by the beginning of regular trading hours on T+5. If the Commission adopts a T+1 standard settlement cycle, this closeout requirement would be shortened from T+5 to T+4.

(b) Rule 200(g)

Shortening the standard settlement cycle to T+1 may also impact the application of 17 CFR 242.200(g) ("Rule 200(g)"). Specifically, a T+1 settlement cycle may change when a broker-dealer

would need to initiate a bona fide recall of a loaned security to be able to mark the sale of such loaned but recalled security "long" for purposes of Rule 200(g)(1). Under Rule 200(g), a broker-dealer must mark all sell orders of any equity security as "long," "short," or "short exempt."²⁰⁰ Rule 200(g)(1) stipulates that a broker-dealer may only mark a sale as "long" if the seller is "deemed to own" the security being sold under 17 CFR 242.200 (a) through (f) and either (i) the security is in the broker-dealer's physical possession or control; or (ii) it is reasonably expected that the security will be in the broker-dealer's possession or control by settlement of the transaction.²⁰¹

The Commission has provided guidance on when a person that sells a loaned but recalled security would be "deemed to own" the security and be able to mark the sale "long."²⁰² The guidance was given when the standard settlement cycle was T+3. Under those circumstances, the Commission indicated that, if a person that has loaned a security to another person sells the security and a bona fide recall of the security is initiated within two business days after trade date, the person that has loaned the security will be "deemed to own" the security for purposes of Rule 200(g)(1), and such sale will not be treated as a short sale for purposes of Rule 204. The Commission also stated that a broker-dealer may mark such orders as "long" sales provided such marking is also in compliance with Rule 200(c) of Regulation SHO, and thus the closeout requirement of Rule 204.²⁰³

This guidance was predicated on the Commission's belief that, under then current industry standards, recalls for loaned securities would likely be delivered within three business days after the initiation of a recall. In that case, a broker-dealer that initiated a bona fide recall by T+2 would receive delivery of loaned securities by T+5 and then be able to close out any failure to deliver on a "long" sale of the loaned but recalled securities by the beginning of regular trading hours on T+6, as then required by Rule 204 in a T+3 environment.

Under a T+2 standard settlement cycle, the closeout period for sales marked "long" is T+5, and so recalls of loaned securities need to be delivered by T+4 to be available to close out any fails on sales marked "long" by the beginning of regular trading hours on

¹⁹³ See, e.g., BSTP and SS&C Order, *supra* note 32, at 75397–400 (noting the Commission's interest in facilitating competition among CMSPs).

¹⁹⁴ 17 CFR 242.204.

¹⁹⁵ For purposes of Regulation SHO, the term "participant" has the same meaning as in Section 3(a)(24) of the Exchange Act, 15 U.S.C. 78c(a)(24).

See Amendments to Regulation SHO, Exchange Act Release No. 60388 (July 27, 2009), 74 FR 38266, 38268 n.34 (July 31, 2009) ("Rule 204 Adopting Release"). Section 3(a)(24) of the Exchange Act defines "participant" to mean, when used with respect to a clearing agency, any person who uses a clearing agency to clear or settle securities transactions or to transfer, pledge, lend, or hypothecate securities. Such term does not include a person whose only use of a clearing agency is (A) through another person who is a participant or (B) as a pledgee of securities.

¹⁹⁶ 17 CFR 242.204(a).

¹⁹⁷ *Id.*

¹⁹⁸ See 17 CFR 242.204(g)(1).

¹⁹⁹ See 17 CFR 242.204(a)(1), (a)(3).

²⁰⁰ See 17 CFR 242.200(g).

²⁰¹ See 17 CFR 242.200(g)(1).

²⁰² See Rule 204 Adopting Release, *supra* note 195, at n.55.

²⁰³ See *id.*; see also 17 CFR 242.200(c).

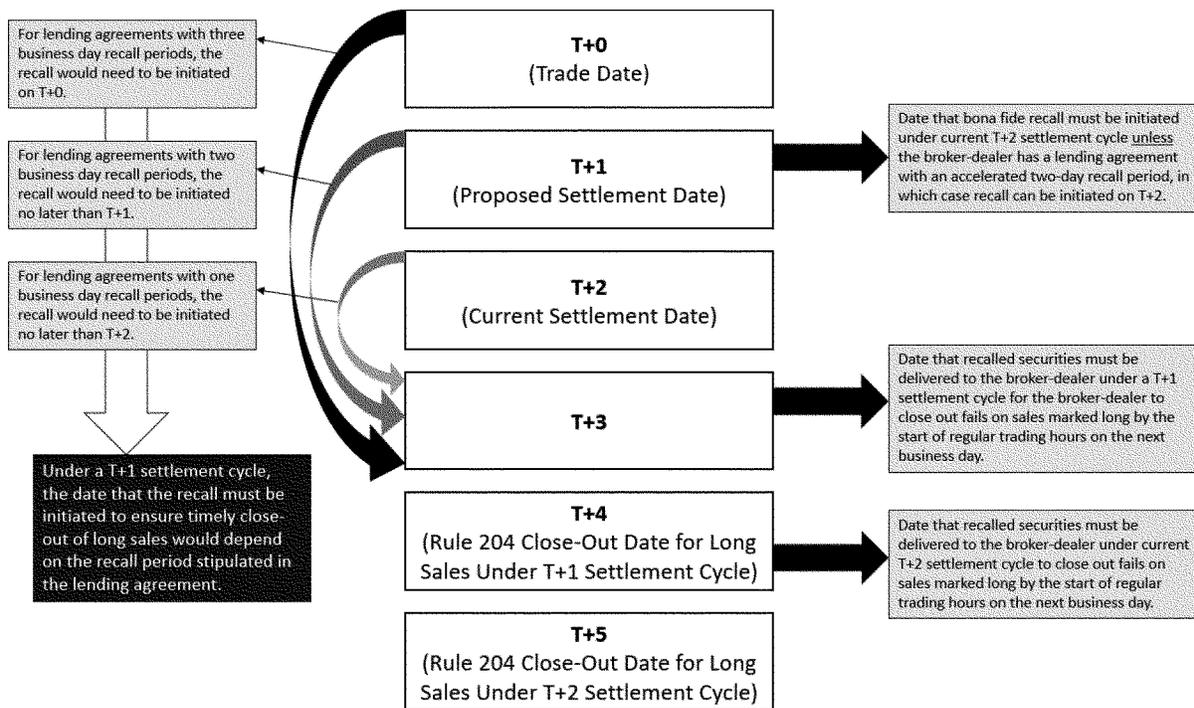
T+5. To meet this timeframe, a number of broker-dealers have securities lending agreements that set the period of delivery for delivering loaned but recalled securities to two settlement days after initiation of a recall. Under such an agreement, a bona fide recall by no later than T+2 would result in the delivery of such loaned securities by T+4 and in time to close out any fails on sales marked long by the beginning of regular trading hours on T+5. For those broker-dealers that lend securities pursuant to securities lending agreements that have a recall period of three business days after recall, a broker-dealer would need to initiate a bona fide recall by T+1 to receive delivery of the loaned security by T+4

and in time to close out any fails on sales marked long by the beginning of regular trading hours on T+5.

If a T+1 settlement cycle is implemented, closeout of a failure of a sale marked “long” would be required by the beginning of regular trading hours on T+4. With this further shortened timeframe, recalls of loaned securities would need to be delivered by T+3 to be available to close out any fails on sales marked “long” by the beginning of regular trading hours on T+4. Accordingly, under a T+1 settlement cycle, broker-dealers that lend securities pursuant to a recall period of three business days would need to initiate a bona fide recall on trade date (*i.e.*, T+0), and those brokers

that lend securities pursuant to a recall period of two business days would need to initiate a bona fide recall by T+1, in order to close out any failure to deliver on sales marked “long” by the beginning of regular trading hours in T+4. The Commission understands, however, that under a T+1 standard settlement cycle, at least some broker-dealers would be likely to modify their securities lending agreements to shorten the recall period to one settlement day after the initiation of the recall.²⁰⁴ Under such agreements, a bona fide recall would need to be initiated by T+2 in order to meet the applicable closeout period for long sales. Figure 4 provides a diagram of close-out scenarios in a T+1 environment.

Figure 4. Close-out scenarios under Regulation SHO in a T+1 environment.



2. Financial Responsibility Rules Under the Exchange Act

Certain provisions of the Commission’s broker-dealer financial responsibility rules²⁰⁵ reference explicitly or implicitly the settlement date of a securities transaction. For example, paragraph (m) of Exchange Act Rule 15c3-3 references the settlement

date to prescribe the timeframe in which a broker-dealer must complete certain sell orders on behalf of customers.²⁰⁶ Specifically, Rule 15c3-3(m) provides that if a broker-dealer executes a sell order of a customer (other than an order to execute a sale of securities which the seller does not own) and if for any reason whatever the broker-dealer has

not obtained possession of the securities from the customer within ten business days after the settlement date, the broker-dealer must immediately close the transaction with the customer by purchasing securities of like kind and quantity.²⁰⁷ In addition, settlement date is incorporated into paragraph (c)(9) of Exchange Act Rule 15c3-1,²⁰⁸ which

²⁰⁴ See T+1 Report, *supra* note 18, at 24–25.

²⁰⁵ For purposes of this release, the term “financial responsibility rules” includes any rule adopted by the Commission pursuant to Sections 8, 15(c)(3), 17(a) or 17(e)(1)(A) of the Exchange Act, any rule adopted by the Commission relating to hypothecation or lending of customer securities, or

any rule adopted by the Commission relating to the protection of funds or securities. The Commission’s broker-dealer financial responsibility rules include 17 CFR 240.15c3-1, 15c3-3, 17a-3, 17a-4, 17a-5, 17a-11, and 17a-13.

²⁰⁶ 17 CFR 240.15c3-3(m).

²⁰⁷ However, paragraph (m) of Rule 15c3-3 provides that the term “customer” for the purpose of paragraph (m) does not include a broker or dealer who maintains an omnibus credit account with another broker or dealer in compliance with Rule 7(f) of Regulation T (12 CFR 220.7(f)).

²⁰⁸ 17 CFR 240.15c3-1(c)(9).

defines what it means to “promptly transmit” funds and “promptly deliver” securities within the meaning of paragraphs (a)(2)(i) and (a)(2)(v) of Rule 15c3-1.²⁰⁹ The concepts of promptly transmitting funds and promptly delivering securities are incorporated in other provisions of the financial responsibility rules as well, including paragraphs (k)(1)(iii), (k)(2)(i), and (k)(2)(ii) of Rule 15c3-3,²¹⁰ paragraph (e)(1)(A) of Rule 17a-5,²¹¹ and paragraph (a)(3) of Rule 17a-13.²¹²

The Commission acknowledges that shortening the standard settlement cycle to T+1 will effectively reduce the number of days (from 12 business days to 11 business days) that a broker-dealer will have to obtain possession of customer securities before being required to close out a customer transaction under Rule 15c3-3(m). The operations supporting the processing of customer orders by broker-dealers and the technology supporting those operations have developed substantially since 1972, when the Commission adopted paragraph (m) of Rule 15c3-3.²¹³ Based on staff experience, the Commission believes that these developments have resulted in a lower frequency of broker-dealers failing to obtain possession of the securities from their customers within 10 business days after the settlement date. Therefore, the Commission believes that these developments in technology and broker-dealer operations diminish the potential for customers to be adversely affected by the change from 12 business days to 11 business days. Accordingly, the Commission believes that the change from 12 business days to 11 business days would not materially burden broker-dealers or their customers,²¹⁴ and the Commission believes that it is unnecessary to amend Rule 15c3-3(m), or any of the broker-dealer financial responsibility rules, at this time.

The Commission solicits comment regarding the effect that shortening the standard settlement cycle from T+2 to T+1 could have on the ability of broker-dealers to comply with the Commission’s financial responsibility rules.

3. Rule 10b-10 Under the Exchange Act

Providing customers with confirmations pursuant to Rule 10b-10 serves a significant investor protection function.²¹⁵ Confirmations provide customers with a means of verifying the terms of their transactions, alerting investors to potential conflicts of interest with their broker-dealers, acting as a safeguard against fraud, and providing investors a means to evaluate the costs of their transactions and the quality of their broker-dealers’ execution.²¹⁶

Although Rule 10b-10 does not directly refer to the settlement cycle, it requires that a broker-dealer send a customer a written confirmation disclosing specified information “at or before completion” of the transaction, which Rule 10b-10 defines to have the meaning provided in the definition of the term in Rule 15c1-1 under the Exchange Act.²¹⁷ Generally, Rule 15c1-1 defines “completion of the transaction” to mean the time when: (i) A customer purchasing a security pays for any part of the purchase price after payment is requested or notification is given that payment is due; (ii) a security is delivered or transferred to a customer who purchases and makes payment for it before payment is requested or notification is given that payment is due; (iii) a security is delivered or transferred to a broker-dealer from a customer who sells the security and delivers it to the broker-dealer after delivery is requested or notification is given that delivery is due; or (iv) a broker-dealer makes payment to a customer who sells a security and delivers it to the broker-dealer before delivery is requested or notification is given that delivery is due.²¹⁸

When first adopting Rule 15c6-1 in 1993 to establish a T+3 settlement cycle, the Commission noted that broker-dealers typically send customer confirmations on the day after the trade date.²¹⁹ When adopting a T+2 settlement cycle in 2017, the Commission stated that, while broker-dealers may continue to send physical customer confirmations on the day after the trade date, broker-dealers may also send electronic confirmations to customers on the trade date. Accordingly, the Commission noted its belief that implementation of a T+2

settlement cycle would not create problems with regard to a broker-dealer’s ability to comply with the requirement under Rule 10b-10 to send a confirmation “at or before completion” of the transaction, but acknowledged that broker-dealers would have a shorter timeframe to comply with the requirements of Rule 10b-10 in a T+2 settlement cycle.²²⁰ With respect to a T+1 standard settlement cycle, the Commission similarly believes that T+1 would not create a compliance issue for broker-dealers under Rule 10b-10, although broker-dealers would have a further shortened timeframe to do so in a T+1 settlement cycle. In addition, as explained in Part III.D, proposed Rule 15c6-2 also would not alter the requirements of Rule 10b-10.²²¹

The Commission solicits comment on the extent to which the T+1 rule proposals may impact compliance with Rule 10b-10. In the T+1 Report, the ISC recommends clarifying what constitutes “delivery” for electronic confirmations under Rule 10b-10. The Commission has previously provided such guidance.²²² The Commission therefore solicits comment on whether this guidance needs to be updated in a T+1 environment.

²²⁰ T+2 Adopting Release, *supra* note 10, at 15579.

²²¹ See *supra* Part III.B.1 (discussing the relationship between a “confirmation” under proposed Rule 15c6-2 and existing Rule 10b-10).

²²² See generally Use of Electronic Media for Delivery Purposes, Exchange Act Release No. 36345 (Oct. 6, 1995) (“1995 Release”) (providing Commission views on the use of electronic media to deliver information to investors, with a focus on electronic delivery of prospectuses, annual reports to security holders and proxy solicitation materials under the federal securities laws); Use of Electronic Media by Broker-Dealers, Transfer Agents, and Investment Advisers for Delivery of Information, Exchange Act Release No. 37182 (May 9, 1996) (“1996 Release”) (providing Commission views on electronic delivery of required information by broker-dealers, transfer agents and investment advisers); Use of Electronic Media, Exchange Act Release No. 42728 (Apr. 28, 2000) (“2000 Release”) (providing updated interpretive guidance on the use of electronic media to deliver documents on matters such as telephonic and global consent; issuer liability for website content; and legal principles that should be considered in conducting online offerings). Under the guidance, the Commission’s framework for electronic delivery consists of the following elements: (1) Notice to the investor that information is available electronically; (2) access to information comparable to that which would have been provided in paper form and that is not so burdensome that the intended recipients cannot effectively access it; and (3) evidence to show delivery (*i.e.*, reason to believe that electronically delivered information will result in the satisfaction of the delivery requirements under the federal securities laws). See 1996 Release at 24646–47.

²⁰⁹ 17 CFR 240.15c3-1(a)(2)(i), (a)(2)(v).

²¹⁰ 17 CFR 240.15c3-3(k)(1)(iii), (k)(2)(i)–(ii).

²¹¹ 17 CFR 240.17a-5(e)(1)(A).

²¹² 17 CFR 240.17a-13(a)(3).

²¹³ See Broker-Dealers; Maintenance of Certain Basic Reserves, Exchange Act Release No. 9856 (Nov. 10, 1972), 37 FR 25224 (Nov. 29, 1972) (“Rule 15c3-3 Adopting Release”).

²¹⁴ See *infra* Part V.C.3 (discussing the economic implications of shortening the settlement cycle on Rule 15c3-3).

²¹⁵ 17 CFR 240.10b-10.

²¹⁶ See Confirmation Requirements for Transactions of Security Futures Products Effected in Futures Accounts, Exchange Act Release No. 46471 (Sept. 6, 2002), 67 FR 58302, 58303 (Sept. 13, 2002).

²¹⁷ See 17 CFR 240.10b-10(d)(2).

²¹⁸ See 17 CFR 240.15c1-1(b).

²¹⁹ T+3 Adopting Release, *supra* note 9, at 52908.

4. Prospectus Delivery and “Access Versus Delivery”

Broker-dealers have to comply with prospectus delivery obligations under the Securities Act.²²³ As discussed in Part III.A.4, Securities Act Rule 172 implements an “access equals delivery” model that permits, with certain exceptions, final prospectus delivery obligations to be satisfied by the filing of a final prospectus with the Commission, rather than delivery of the prospectus to purchasers.²²⁴

The Commission preliminarily believes that, if a T+1 standard settlement cycle is implemented, such a standard settlement cycle would not raise any significant legal or operational concerns for issuers or broker-dealers to comply with the prospectus delivery obligations under the Securities Act.

The Commission requests comment on whether commenters believe any specific legal or operational concerns would arise for issuers or broker-dealers to comply with the prospectus delivery obligations under the Securities Act if the settlement cycle is shortened to T+1. The Commission asks that commenters identify specific examples of the circumstances in which such legal or operational difficulties could occur.

The Commission also requests comment on the extent to which the T+1 rule proposals may impact compliance with the prospectus delivery requirements under the Securities Act.

5. Changes to SRO Rules and Operations

As with the T+2 transition, the Commission anticipates that the proposed transition to T+1 would again require changes to SRO rules and operations to achieve consistency with a T+1 standard settlement cycle. Certain

²²³ 15 U.S.C. 77a *et seq.* Section 5(b)(2) of the Securities Act makes it unlawful to deliver (*i.e.*, as part of settlement) a security “unless accompanied or preceded” by a prospectus that meets the requirements of Section 10(a) of the Act (known as a “final prospectus”). 15 U.S.C. 77e(b)(2).

²²⁴ 15 U.S.C. 77e(b)(2); 17 CFR 230.172. Under Securities Act Rule 172(b), an obligation under Section 5(b)(2) of the Securities Act to have a prospectus that satisfies the requirements of Section 10(a) of the Act precede or accompany the delivery of a security in a registered offering is satisfied only if the conditions specified in paragraph (c) of Rule 172 are met. 17 CFR 230.172(b). Pursuant to Rule 172(d), “access equals delivery” generally is not available to the offerings of most registered investment companies (*e.g.*, mutual funds), business combination transactions, or offerings registered on Form S-8. 17 CFR 230.172(d). The Commission recently amended Rule 172 to allow registered closed-end funds and business development companies to rely on the rule. *See* Securities Offering Reform for Closed-End Investment Companies, Investment Company Act Release No. 33836 (Apr. 8, 2020), 85 FR 33353 (June 1, 2020).

SRO rules reference existing Rule 15c6-1 or currently define “regular way” settlement as occurring on T+2 and, as such, may need to be amended in connection with shortening the standard settlement cycle to T+1. Certain timeframes or deadlines in SRO rules also may refer to the settlement date, either expressly or indirectly. In such cases, the SROs may need to amend these rules in connection with shortening the settlement cycle to T+1.²²⁵

Because the Commission is also proposing two other rule changes to facilitate a T+1 standard settlement cycle, SRO rules and operations may be affected to a greater extent than occurred during the T+2 transition. For example, while elements of FINRA Rule 11860 could be used to facilitate compliance with proposed Rule 15c6-2, FINRA Rule 11860 currently requires that affirmations be completed no later than the day after trade date and may need to be amended to align with the requirements in proposed Rule 15c6-2.

The Commission solicits comment on the extent to which the T+1 rule proposals may impact existing SRO rules and operations.

F. Proposed Compliance Date

Industry planning and testing was critical to ensuring an orderly transition from a T+3 standard settlement cycle to T+2, and the Commission anticipates that planning and testing would again be critical to ensuring an orderly transition to a T+1 standard settlement cycle, if adopted. Accordingly, the Commission recognizes that the compliance date for the above rule proposals, if adopted, must allow sufficient time for broker-dealers, investment advisers, clearing agencies, and other market participants to plan for, implement, and test changes to their systems, operations, policies, and procedures in a manner that allows for an orderly transition. The Commission also recognizes that the compliance date must provide sufficient time for broker-dealers and other market participants to engage in outreach and education regarding the transition to ensure that, among other things, their customers, including individual retail investors, have time to prepare for operational or other changes related to a T+1 standard settlement cycle.

The Commission is mindful that failure to appropriately implement an orderly transition to T+1, if a T+1

²²⁵ The T+1 Report similarly indicates that SROs will likely need to update their rules to facilitate a transition to a T+1 standard settlement cycle. T+1 Report, *supra* note 18, at 35-36.

standard settlement cycle is adopted, may heighten certain operational risks for the U.S. securities markets. However, the Commission is also mindful that delaying the transition to a T+1 standard settlement cycle further than is necessary would delay the realization of the risk reducing and other benefits expected under a T+1 standard settlement cycle.²²⁶ The DTCC White Paper contemplated that a transition to T+1 is achievable in the second half of 2023,²²⁷ and the T+1 Report states that a T+1 transition is achievable in the first half of 2024. The T+1 Report estimates that planning for testing will begin in Q4 2022, that industry-wide testing will begin in Q2 2023, and that industry-wide testing will need to occur for one full year before implementation of a T+1 standard settlement cycle.²²⁸ The T+1 Report also states that, once “regulatory certainty and guidance is achieved, the industry anticipates a lengthy and necessary amount of time will be required for T+1 implementation.”²²⁹

With these dates and considerations in mind, the Commission believes that market participants should prepare expeditiously for a T+1 transition and proposes a compliance date of March 31, 2024.²³⁰ If the proposed rules and rule amendments presented in this release are adopted as proposed, the Commission believes that the systems and operational changes necessary at the industry level can be planned, tested, and implemented in advance of March 31, 2024. Although the T+1 Report estimates that planning for testing will not begin until Q4 2022, and that industry-wide testing will not begin until Q2 2023,²³¹ the Commission believes that market participants can implement a T+1 standard settlement cycle by the earlier end of the T+1 Report’s overall time table. Specifically, planning for testing could begin sooner than Q4 2022, so that industry-wide testing can begin in early 2023 and conclude in early 2024, in advance of the proposed compliance date.

70. The Commission solicits comment on whether the proposed March 31, 2024 compliance date is appropriate for each of the four proposed rules (Rule 15c6-1, Rule 15c6-2, Rule 17Ad-27,

²²⁶ *See infra* Part V.C (discussing the anticipated benefits of a T+1 standard settlement cycle).

²²⁷ DTCC White Paper, *supra* note 61, at 8.

²²⁸ T+1 Report, *supra* note 18, at Fig. 1.

²²⁹ T+1 Report, *supra* note 18, at 6-7.

²³⁰ Notwithstanding the proposed compliance date, market participants could still coordinate to establish an earlier T+1 transition date as needed to ensure effective planning, testing, and implementation.

²³¹ T+1 Report, *supra* note 18, at Fig. 1.

and the amendment to Rule 204–2(a). How many months would market participants need to plan, test, and implement a transition to T+1? What data points would market participants use to assess the timing for planning, testing, and implementation? Are any specific operational or technological issues raised by the proposed compliance date? To what extent does the proposed compliance date align or not align with typical practices related to the planning and testing of systems or other technology changes among affected parties, such as market participants, broker-dealers, investment advisers, or clearing agencies? For example, to achieve a compliance date of March 31, 2024, to what extent, if any, would these parties (and market participants more generally) have to consider an implementation date that is earlier than March 31, 2024? Why? Please explain.

71. What is the extent of planning and testing necessary to achieve an orderly transition to a T+1 standard settlement cycle, if adopted? In responding to this request for comment, commenters should provide specific data and any other relevant information necessary to explain the extent of industry-wide planning and testing that would be required to ensure an orderly transition to the proposed T+1 settlement cycle by March 31, 2024.

72. The Commission has proposed a single compliance date applicable to each of the four proposed rules. Would staggering the compliance dates for these rules help facilitate an orderly transition to a T+1 settlement cycle, if adopted? For example, should the compliance date for Rule 15c6–2, if adopted, fall before the compliance date for Rule 15c6–1, to ensure an orderly transition to a T+1 settlement cycle, if adopted? If staggering would be appropriate, what would be an appropriate schedule of compliance dates? Would staggering the compliance dates introduce impediments to an orderly T+1 settlement cycle transition? If so, please describe.

IV. Pathways to T+0

The Commission uses T+0 in this release to refer to settlement that is complete by the end of trade date.²³² This has sometimes been referred to as same-day settlement. In the Commission's preliminary view, same-day settlement could occur pursuant to at least three different models: (i) Netted settlement at the end of the day on T+0; (ii) real-time settlement, where transactions are settled in real time or

near real time and presumably on a gross basis (*i.e.*, without any netting applied to reduce the overall number of open positions); and (iii) “rolling” settlement, where trades are netted and settled intraday on a recurring basis. In this release, the Commission uses T+0 to refer specifically to netted settlement at the end of the day on T+0. The Commission believes that this model of same-day settlement is currently the most appropriate to consider applying to the standard settlement cycle after implementation of T+1, if adopted, because it retains a core element of the existing settlement infrastructure—namely, the application of multilateral netting at the end of trade date to reduce the overall number of open positions before completing settlement.²³³

The Commission preliminarily believes that implementing a T+0 standard settlement cycle would have similar benefits of market, credit, and liquidity risk reduction that were realized in the shortening of the settlement cycle from T+3 to T+2 and are expected in moving from a T+2 to a T+1 standard settlement cycle. In particular, shortening from a T+2 standard settlement cycle to a T+0 standard might result in a larger reduction in certain settlement risks than would result from shortening to a T+1 standard because the risks associated with counterparty default tend to increase with time.²³⁴ Similarly, because price volatility is a concave function of time,²³⁵ the shorter settlement cycle in a T+0 environment will reduce expected price volatility to a greater extent than in a T+1 environment.²³⁶ In addition, assuming constant trading volume, the volume of unsettled trades for a T+0 settlement cycle could be roughly half that from a T+1 settlement cycle, and, as a result, for any given adverse movement in prices, the financial losses resulting from counterparty default could be half that expected in a T+1 settlement cycle.²³⁷

The Commission believes that now is the time to begin identifying potential paths to achieving T+0. Thus, the Commission is actively assessing the

benefits and costs associated with accelerating the standard settlement cycle to T+0. As the securities industry plans how to implement a T+1 standard settlement cycle, this process should include consideration of the potential paths to achieving T+0 to help ensure that investments in new technology and operations undertaken to achieve T+1 can maximize the value of such investments over the long term. In this way, the transition to a T+1 settlement cycle can be a useful step in identifying potential paths to T+0.

The Commission is also mindful of some perceived challenges to implementing a T+0 standard settlement cycle in the immediate future identified by market participants. As discussed above,²³⁸ the T+1 Report states that T+0 is “not achievable in the short term given the current state of the settlement ecosystem” and would require an “overall modernization” of modern-day clearance and settlement infrastructure, changes to business models, revisions to industry-wide regulatory frameworks, and the potential implementation of real-time currency movements to facilitate such a change.²³⁹ The T+1 Report identified “key areas” that industry groups determined would be impacted by a move to T+0 settlement, including re-engineering of securities processing; securities netting; funding requirements for securities transactions; securities lending practices; prime brokerage practices; global settlement; and primary offerings, derivatives markets and corporate actions.

To advance the discussion of developing and achieving a T+0 standard settlement cycle, the Commission solicits comment on potential approaches to overcoming the operational and other barriers identified by market participants for shortening the standard settlement cycle beyond T+1. Specifically, the Commission in Part IV.A discusses three potential approaches that could be used to implement a T+0 settlement cycle, and solicits comment on all aspects of the approaches described. The Commission also discusses in Part IV.B the operational and other challenges that market participants have identified for implementing T+0, and solicits comment on the building blocks necessary to address or resolve those challenges to enable a T+0 settlement cycle.

²³³ In Part IV.B, the Commission solicits comment on the merits of this model versus the others described, as well as any other potential settlement models.

²³⁴ See T+2 Adopting Release, *supra* note 10, at 15598.

²³⁵ If price changes are uncorrelated across time periods then the variance of price change over T periods is T times the variance over a single period. Therefore, the standard deviation of price changes over T periods is T^{1/2} times the standard deviation over a single period.

²³⁶ See *id.*

²³⁷ See *id.*

²³⁸ See *supra* notes 76–79 and accompanying text.

²³⁹ T+1 Report, *supra* note 18, at 10; see also *supra* notes 76–77 and accompanying text (discussing the same).

²³² See *supra* note 12 and accompanying text.

A. Possible Approaches to Achieving T+0

To facilitate discussion of T+0 settlement, the Commission has identified three possible approaches or frameworks for considering how to implement T+0 settlement. These are presented not as an exhaustive, complete, or discrete list of pathways but rather as example cases that help illustrate the range of potential approaches, or combination of approaches, that might be useful in facilitating investments that improve the efficiency of the National C&S System, including the ability to implement a T+0 standard settlement cycle. The Commission provides these examples to help facilitate comment on the implications of a T+0 standard settlement cycle and the mechanics of implementation, as well as their potential impact on the challenges identified in Part IV.B. Comments received will help inform any future proposals.

1. Wide-Scale Implementation

One possible path to shortening the settlement cycle from T+1 to T+0 involves a wide effort, led by the Commission or an industry working group, to develop and publish documents like the ISG White Paper, the T+2 Playbook, and now the T+1 Report, in which industry experts identify the full set of potential impediments to T+0, propose solutions, and develop a timeline for education, testing, and implementation.

While this approach would mirror past efforts to shorten the settlement cycle, it necessarily requires industry-wide solutions to the impediments identified with respect to T+0, such as those that may be related to the considerations in Part IV.B. For this reason, the Commission believes that it may be helpful to consider two alternative paths to T+0: (i) An approach where implementation begins first with technology and operational changes by key infrastructure providers; and (ii) an approach where exchanges and clearing agencies offer pilots or similar small-scale programs to establish T+0 as an optional settlement cycle in certain circumstances.

2. Staggered Implementation Beginning With Key Infrastructure

An alternative approach to shortening the settlement cycle from T+1 to T+0 could begin by focusing efforts on improving key settlement infrastructure to support wide-scale implementation of T+0 settlement cycle. Such an approach could involve the development of

industry-led or academic research designed to identify the key improvements and to promote engagement with respect to development and implementation.

Under this approach, a key assumption is that achieving a T+0 standard settlement cycle, or the benefits anticipated from it, may not be possible until existing market infrastructure has sufficient capacity to support the full range of market participants who would settle their transactions on T+0, and that the challenges to achieving T+0 derive, in part, from insufficient capacity or capability to serve those market participants. Infrastructure providers have used this approach in the past to develop, test, and implement new technologies and services before wide-scale release. For example, as discussed in Part II.C, following implementation of a T+2 standard settlement cycle, DTCC began to pursue two sets of initiatives, accelerated settlement and settlement optimization, designed to improve its own infrastructure to support more efficient settlement processes. A similar effort following implementation of T+1 could identify improvements to existing infrastructure that could address the challenges identified in Part IV.B. For example, infrastructure providers like DTCC could explore mechanisms that expand the availability of money settlement, as discussed further in Part IV.B.3, or reduce the timing challenges associated with T+0 settlement, as discussed in Part IV.B.8.

3. Tiered Implementation Beginning With Pilot Programs

Exchanges and clearing agencies have often deployed new technologies in targeted environments to test new functionality and service offerings on a small scale. This approach could allow market participants to test T+0 settlement in a targeted environment, such as using a specific exchange or exchanges, specific securities, and/or specific settlement services at a registered clearing agency. SROs could consider pilot proposals that could help advance development of the operational and technological resources necessary to enable T+0 settlement.

For example, DTCC began exploring the use of distributed ledger in 2015, completed its Project ION case study in 2020,²⁴⁰ and recently announced plans to deploy its ION platform through its “minimal viable product” pilot

²⁴⁰ See DTCC, Project ION Case Study (May 2020), <https://www.dtcc.com/~media/Files/Downloads/settlement-asset-services/user-documentation/Project-ION-Paper-2020.pdf>.

program.²⁴¹ According to DTCC, the ION MVP program is a mechanism for NSCC and DTC participants to test the use of distributed ledger technology alongside “classic” settlement infrastructure at NSCC and DTC.²⁴² Similarly, BOX Exchange LLC recently implemented its Boston Security Token Exchange (“BSTX”) platform to enable access to accelerated settlement for certain securities.²⁴³ In India, where the Securities and Exchange Board of India recently announced plans to implement a T+1 settlement cycle, the securities regulator plans to allow local stock exchanges to offer T+1 settlement on certain securities, while retaining a T+2 settlement cycle for others. Each case presents examples where new technologies are offered on a select basis, such as on certain exchanges or for certain securities, in ways that could allow market participants to begin to adapt to T+0 settlement on an incremental basis in a controlled environment.

Such an approach potentially allows market participants to achieve T+0 without having to first address all of the challenges described in Part IV.B for all market participants, instead enabling experimentation and innovation to find solutions for certain segments over time. This could help minimize one challenge noted in the T+1 Report: That T+0 would likely require the adoption of new technologies, implementation costs that would disproportionately fall on small and medium-sized firms that rely on manual processing or legacy systems and may lack the resources to modernize their infrastructure rapidly.²⁴⁴

²⁴¹ See Press Release, DTCC, DTCC’s Project ION Platform Moves to Development Phase Following Successful Pilot with Industry (Sept. 15, 2021), <https://www.dtcc.com/news/2021/september/15/dtccs-project-ion-platform-moves-to-development-phase-following-successful-pilot-with-industry>.

²⁴² See *id.* To the extent that elements of the ION MVP program constitute rules, policies, or procedures of NSCC or DTC, it may be subject to the requirements for submitting proposed rule changes under Section 19 of the Exchange Act and Rule 19b-4. See 15 U.S.C. 78s(b); 17 CFR 240.19b-4. To the extent that this proposal would involve changes to rules, procedures, and operations that could materially affect the nature or level of risk presented by NSCC or DTC, they may also be required to submit an Advance Notice under the Dodd-Frank Act. See 12 U.S.C. 5465(e)(1)(A); 17 CFR 240.19b-4(n).

²⁴³ See Exchange Act Release No. 94092 (Jan. 27, 2022), 87 FR 5881 (Feb. 2, 2022) (order approving a proposed rule change to adopt rules governing the listing and trading of equity securities on BOX Exchange LLC through a facility of BOX Exchange LLC to be known as BSTX LLC).

²⁴⁴ See T+1 Report, *supra* note 18, at 10; see also *supra* notes 77–78 and accompanying text (discussing the same); *infra* note 385 and accompanying text (noting that some benefits may accrue to those market participants with high market power).

B. Issues To Consider for Implementing T+0

Below the Commission describes several challenges identified as impediments to implementing a T+0 standard settlement cycle, particularly in the short term. The Commission requests comment on these challenges, as well as any comments identifying other challenges or necessary building blocks associated with implementing T+0. More generally, with respect to each of these topics, the Commission solicits comment on ways to improve the efficiency of and reduce the risks that can result from the post-trade processes implicated by each of these challenges. The Commission is particularly interested in commenters that identify potential methods or building blocks that can enable T+0. In considering the below topics, the Commission also requests that commenters assess whether the three approaches identified in Part IV.A might affect the analysis of the below or otherwise reveal potential methods for addressing and implementing them.

1. Maintaining Multilateral Netting at the End of Trade Date

As discussed in Part II.B.1, multilateral netting by the CCP is an essential feature of the National C&S System. By substantially reducing the volume and value of transactions in equity securities that need to be settled each day, CCP netting unlocks substantial capital efficiencies for market participants while, at the same time, reducing credit, market, and liquidity risk in the National C&S System. While the Commission continues to consider how new technologies and business practices in the industry might further reduce risk and promote capital efficiency, the Commission preliminarily believes that the capital efficiencies and risk reduction benefits that result from the use of multilateral netting make it unlikely that market participants could cost-effectively implement a T+0 standard settlement cycle without the continued use of multilateral netting in some form.²⁴⁵

In particular, at this time the Commission believes that a transition from T+1 settlement to real-time settlement could not be achieved without substantial and significant changes to fundamental elements of market structure and infrastructure because real-time settlement, to the extent it requires gross settlement would

prevent the use of, or significantly reduce the utility of, multilateral netting before settlement. If market participants develop technologies and business practices that can support the use of a real-time settlement system in the U.S. at some point in the future, the Commission is interested in understanding how such technologies might interact with existing infrastructure that provides multilateral netting. Indeed, retaining multilateral netting in a T+0 environment poses challenges that include accommodating the submission of trades for clearing during and after the close of regular trading hours while still producing netting results with sufficient time to enable market participants to position their cash and securities to achieve final settlement before money settlement systems close for the day.²⁴⁶ The Commission observes that existing processes and computational tools used to complete the processing and settlement of trades currently rely on significantly more time than the few hours between the close of regular trading hours and the close of money settlement systems on a given day.

The Commission is interested in receiving public comments on both the utility of centralized multilateral netting as a feature of the National C&S System and any potential impediments or challenges associated with retaining such netting functionality while shortening the settlement cycle to T+0. The Commission is also interested in receiving public comments on potential benefits or costs associated with real-time settlement. In particular the Commission requests comment on the following:

73. Is it possible to shorten the settlement cycle in the U.S. markets to T+0 and retain multilateral netting? If so, what is the earliest time on T+0 that market participants could be prepared to settle their trades without eliminating multilateral netting, and what changes, if any, to existing netting processes would be necessary to move to a T+0 settlement cycle?

74. Could a real-time settlement model be successfully deployed in the National C&S System in a way that compliments the use of multilateral netting? If yes, please explain. For example, most institutional trades that use bank custodians generally are not submitted to CNS for netting. Would it be possible to settle those trades in a real-time settlement model while other trading activity would continue to rely

on multilateral netting? Alternatively, would it be beneficial to find ways to move more institutional trades into multilateral netting processes, such as by expanding access to multilateral netting systems to custodians? Why or why not? What are the impediments to expanding access to custodians?

75. If real-time settlement is not possible without eliminating or substantially curtailing multilateral netting activity, please explain.

76. If real-time settlement is not compatible with multilateral netting, would the potential benefits of real-time gross settlement still justify the elimination of multilateral netting in the National C&S System? Please explain why or why not.

77. What impact would the elimination of multilateral netting have on capital demands (e.g., margin requirements) imposed on market participants in connection with their settlement obligations? To the extent possible, please include any quantitative estimates or data that may be relevant to the request for comment.

78. How would the elimination of multilateral netting impact overall levels of market, liquidity and credit risk in the clearance and settlement system and how might such risks be distributed among market participants?

79. Are there disadvantages to multilateral netting and, if so, what are they? Does multilateral netting mandate the use of agreed timeframes to determine which trades will be included in netting (for example, trades settling on or executed on a given day or within a given hour)? Why or why not? Are there netting activities that currently only happen once a day that might need to occur more often for trades to settle at the end of trade date? If so, what are they and are there benefits, costs or risks to performing these activities more than once a day?

80. Does multilateral netting foster or require the use of batch processing? Does multilateral netting necessitate sequential processing activities that impede the adoption of same-day settlement? Why or why not? For example, do introducing broker-dealers that maintain omnibus accounts at clearing broker-dealers need to net their activity prior to submitting net trades to their clearing broker-dealers who, in turn, have a dependency before being able to calculate their own net figures? Are there computational or other technology upgrades that could be employed to accelerate these processes so that they could continue to function effectively under the shortened timeframes available in a T+0 environment? Are there other settlement

²⁴⁵ See *infra* Part V.B.1 (discussing the capital efficiencies and risk reducing effects that result from the use of multilateral netting).

²⁴⁶ Part IV.B.3 discusses existing limitations in money settlement infrastructure that may contribute to this challenge.

models, such as those deploying intraday or rolling settlement, that could improve the settlement process in such a way that facilitates an effective multilateral netting process at the end of the day in a T+0 environment?

2. Achieving Same-Day Settlement Processing

Moving settlement to the end of trade date would significantly compress the array of operational activities and processes required to achieve settlement, raising questions about whether the current arrangement of settlement processes can support T+0 settlement.

For example, in the current T+2 settlement environment, DTC processes certain transactions for settlement during the day on settlement date and other transactions the night before settlement date (“S–1”) during the so-called “night cycle,” which begins at 8:30 p.m. on S–1. Processing transactions during the night cycle allows for earlier settlement of certain transactions that are included in the night cycle, thereby reducing counterparty risk and, with respect to transactions that are cleared through NSCC, enables such transactions to be removed from members’ marginable portfolios, which in turn reduces such members’ NSCC margin requirements.

DTC uses a process called the “Night Batch Process” to control the order of processing of transactions in the night cycle.²⁴⁷ During the Night Batch Process, DTC evaluates each participant’s available positions, transaction priority and risk management controls, and identifies the transaction processing order that optimizes the number of transactions processed for settlement. The Night Batch Process allows DTC to run multiple processing scenarios until it identifies an optimal processing scenario. At approximately 8:30 p.m. on S–1, DTC subjects all transactions eligible for processing to the Night Batch Process, which is run in an “off-line” batch that is not visible to participants, allowing DTC to run multiple processing scenarios until the optimal processing scenario is identified. The results of the Night Batch Process are incorporated back into DTC’s core processing environment on a transaction-by-transaction basis.

Because trade date and settlement date would be the same day in a T+0 environment, shortening the standard

settlement cycle to T+0 would require DTC and its participants to initiate and complete their settlement processes much sooner relative to the time a trade is executed and without the benefit of any overnight processes. Compressing timeframes to achieve T+0 settlement necessarily removes the ability to perform any settlement activities on S–1. This has implications for how DTC conducts its existing “night cycle” process but, more broadly, for all the market participants who collect trading information that feeds into the night cycle process and any systems that they run overnight to prepare for settlement. Moving to a T+0 settlement cycle would also impact the processing timeframes for corporate actions.

The Commission requests public comment regarding the prospective impact that shortening the settlement cycle to T+0 would have on settlement processes such as those described above. In particular, the Commission requests comment on the following:

81. Would shortening the standard settlement cycle to T+0 allow sufficient time for settlement processes that are currently conducted by DTC and its participants to be completed on a timeframe that is compatible with timely settlement? If not, why not?

82. When would be the optimal time to complete existing processes that occur on S–1 in a T+0 environment? More generally, how would existing settlement processes that occur on S–1 need to change to accommodate a T+0 standard settlement cycle?

83. What would be the impact on market participants (clearing agencies, broker-dealers, buy side participants, retail investors, etc.) of any changes in processes necessary to accommodate T+0?

84. What risks, if any, arise by the compression of the settlement cycle to accommodate T+0, particularly as it relates to market, credit, liquidity, and systemic risk? What are the associated costs of these risks? How might these risks affect the market, trading behaviors, investors (both retail and institutional), and innovation? Is mitigation of these risks feasible, and if so, how?

3. Enhancing Money Settlement

To achieve final settlement on settlement date, DTCC and its clearing agency participants rely on access to two systems operated by the Federal Reserve Board, the National Settlement Service and Fedwire.²⁴⁸ These systems settle the cash portions of securities transactions. Final settlement at NSS

and Fedwire currently must occur by 6:30 p.m., leaving little time in a T+0 environment for market participants to settle their positions in an end-of-day process after most major U.S. stock exchanges typically close at 4:00 p.m. Although Fedwire (but not NSS) reopens at 9:00 p.m., payments posted are processed overnight and, like NSCC/DTC securities movements processed during the night cycle, do not settle until the following day. NSS is available throughout the trading day, although currently DTCC only makes use of it at defined points during the day.

85. To achieve T+0, would NSS and FedWire services need to have their availability expanded? If so, how? What timeframes (both minimum and desired standards) would be necessary to accommodate T+0?

86. What other changes to NSS or FedWire, if any, would be necessary to accommodate a T+0 settlement environment? If the available windows for NSS or FedWire were to change, what changes would market participants need to make to their own systems and processes to accommodate such changes?

87. Are there ways to manage the money settlement process in a T+0 environment that do not require changes to NSS or FedWire? Please explain.

4. Mutual Fund and ETF Processing

Purchases and redemptions of shares of open-end mutual funds generally settle today on a T+1 basis, except for certain retail funds and ETFs sold through intermediaries,²⁴⁹ which typically settle on T+2. For open-end funds, several mutual fund families offer investors the ability to open an account directly with the fund’s transfer agent and trade through that account. In other cases, orders are placed with intermediaries, such as broker-dealers, banks and retirement plan recordkeepers. Much of this intermediary activity is processed through DTCC’s Fund/SERV system, in which intermediaries submit orders through Fund/SERV that are then routed to mutual fund transfer agents to be executed at the current net asset value (“NAV”)²⁵⁰ next calculated by the fund’s administrator after receipt of the order, pursuant to Rule 22c–1 of the Investment Company Act.²⁵¹ These

²⁴⁹ ETFs are investment companies registered under the Investment Company Act. See 15 U.S.C. 80a–3(a)(1). Historically, ETFs have been organized as open-end funds or UITs.

²⁵⁰ See 17 CFR 270.2a–4 (defining “current net asset value”).

²⁵¹ Open-end funds are required by law to redeem their securities on demand from shareholders at a price approximating their proportionate share of the

²⁴⁷ See DTC, Settlement Service Guide, at 68 (June 24, 2021), <https://www.dtcc.com/-/media/Files/Downloads/legal/service-guides/Settlement.pdf>.

²⁴⁸ See *id.* at 18–19.

orders may be submitted on an omnibus basis and in one of three ways: As a request to purchase or redeem a given number of shares or units, as a request to purchase or redeem a given U.S. dollar value, or as a request to exchange a given number of shares/units or U.S. dollar value for another fund. Because the NAV becomes the ‘price’ for each order, the net money to be paid or received at settlement cannot be calculated until after the NAV has been calculated and published. Once the NAV is available, the transfer agent is able to issue confirmations to the intermediaries acknowledging receipt and execution of the orders submitted. For orders submitted as share quantities, the net confirmation includes not only the quantity executed, but the net amount of money to be exchanged at settlement. For orders submitted as U.S. dollar amounts, the transfer agent can calculate the quantity purchased or redeemed and include it in the confirm. For exchanges of shares in one fund for shares in another, the NAV of both funds is required to determine both the quantity and the net settlement amount for each fund.

In general, mutual fund families will utilize prices as of 4:00 p.m. ET to value the underlying holdings in each fund for the current day.²⁵² This is a critical input to the calculation of the NAV and, as such, 4:00 p.m. ET is a dependency in the NAV calculation process. Prior to 4:00 p.m. ET, fund administrators are able to reconcile holdings to custodians, calculate and apply any income and expense accruals, update the shares outstanding based on the prior day’s purchase and redemption activity and in general prepare for the receipt of current-day prices. Once those prices are available, fund administrators are able to apply prices to holdings, perform a variety of validation checks on the prices and fund and ultimately calculate or “strike” the NAV, then submitting or publishing the NAV to pricing vendors, newspapers and intermediaries. This tends to occur between 6:00 p.m. ET and 8:00 p.m. ET.

Once the day’s NAV of a fund is available and each intermediary calculates the settlement quantity or monetary amount for each order,²⁵³ the

fund’s NAV at the time of redemption. See 15 U.S.C. 80a–22(d).

²⁵² As noted in Part IV.B.3, most major U.S. stock exchanges typically close at 4:00 p.m. ET during standard (*i.e.*, non-holiday) trading hours.

²⁵³ For example, if an order were placed as shares, the intermediary would multiply the share quantity and the NAV to determine the amount of money to be paid or received. If an order were placed as a dollar amount, the intermediary would divide this amount by the NAV to calculate the share quantity traded. (These calculations may be further adjusted

intermediary aggregates and nets the amount of money to be paid to or received from each fund’s agent bank. These values are aggregated and netted to determine a single payment or receipt per bank and instructions are sent to the intermediary’s bank to arrange for payments.

In the event an intermediary is an introducing broker, these introducing broker calculations are then forwarded to the clearing broker, which, in turn, aggregates values received from other introducing brokers as well as any of its own order activity. Ultimately the clearing broker determines a single net payment or receipt for each agent bank representing all of the funds traded. The clearing broker must receive calculations for all its introducing brokers before it can finalize its own calculations.

Given the current timing of NAV calculation and publication, we understand that many market participants are not able to calculate net settlement amount or quantity traded until after 8:00 p.m. ET. This is 90 minutes later—to the extent this activity occurs on 8:00 p.m. ET—than the time the Federal Reserve’s NSS system, which moves the cash necessary to effect settlement of securities transactions, closes at 6:30 p.m.²⁵⁴ Even when a NAV is available at 6:00 p.m. ET, there is only a 30-minute window for intermediaries to obtain the NAV, calculate settlement quantity or net amount, determine the net cash to be paid or received for each fund, further determine the net payment or receipt for each agent bank across all funds traded and to submit these values to NSS prior to its close at 6:30 p.m. ET. In addition, if the intermediary services other intermediaries at another omnibus “tier,” such as a clearing broker servicing one or more introducing brokers, the intermediary must wait on calculations from others before finalizing its own numbers and submitting instructions. This sequential processing introduces a greater number of activities that must occur in the approximately 30-minute window that would typically be available for same-day settlement.

As noted earlier, to receive a given day’s NAV, intermediaries must receive orders prior to the time at which the fund’s NAV is calculated, but intermediaries may not submit these orders to Fund/SERV or the transfer

for commissions or other fees.) Exchange transactions would require two calculations: One for the redemption side of any exchange, and then a second calculation for the subscription side of the exchange.

²⁵⁴ See *supra* note 248 and accompanying text.

agent until after the NAV calculation time, in some cases as late as around 7:30 a.m. ET on T+1.²⁵⁵ The Commission understands this is often the case with retirement plan recordkeepers who perform compliance and other checks on orders before they are finalized for submission to Fund/SERV. Such timing would require modification to support end of day settlement on T+0.

Unlike mutual funds, ETFs do not sell or redeem individual shares. Instead, APs that have contractual arrangements with the ETF purchase and redeem ETF shares directly from the ETF in blocks called “creation units.” An AP that purchases a creation unit of ETF shares directly from the ETF deposits with the ETF a “basket” of securities and other assets identified by the ETF that day, and then receives the creation unit of ETF shares in return for those assets. After purchasing a creation unit, the AP may hold the individual ETF shares, or sell some or all of them in secondary market transactions. The redemption process is the reverse of the purchase process: The AP redeems a creation unit of ETF shares for a basket of securities and other assets. Secondary market trading of ETF shares occurs at market-determined prices (*i.e.*, at prices other than those described in the prospectus or based on NAV), and the settlement values will be known at the time of execution, similar to an exchange-traded equity security.²⁵⁶ Secondary market ETF share transactions settle today on a T+2 basis. Currently, most securities in a “creation basket” settle in a similar timeframe (T+2) as the settlement time for a “creation unit,” which is also the same as the settlement time for the ETF shares sold to APs, as well as ETF shares traded in the secondary market.

NAVs are calculated for ETF shares in a manner similar to the process for open-end mutual funds, with comparable times for capturing prices of underlying holdings and for publishing the NAVs. Secondary market purchases and sales of ETF shares occur throughout the business day and often occur at prices that differ from the ETF’s

²⁵⁵ Per a 2017 ICI survey based on 3Q 2016 data, only 70% of trade flow, including estimated trade flow, is known by funds or their transfer agents around 5:00 p.m. ET and that number remains rather constant until approximately 7:00 a.m. ET on T+1. See ICI, *Evaluating Swing Pricing: Operational Considerations*, at 4 (June 2017), https://www.ici.org/system/files/attachments/pdf/ppr_17_swing_pricing_summary.pdf.

²⁵⁶ Purchases and sales of ETFs in the secondary market may offset one another and do not always result in a primary market transaction between the AP and the ETF to create or redeem units.

NAV.²⁵⁷ Those trading ETF shares in the secondary market during the day will know their settlement amount almost immediately, because the transaction price is the market price of the shares. Therefore, secondary market ETF share transactions generally do not present the same challenges presented by open-end mutual funds when considering same-day settlement.²⁵⁸

The Commission requests comment on the challenges open-end mutual funds and ETFs might experience if U.S. markets were to adopt T+0 settlement.

88. Are there additional factors that may negatively affect same-day settlement of open-end mutual funds and ETFs that we have not described, and if so, what are they? Please provide as much detail as possible.

89. Are fund administrators able to calculate and release NAVs any earlier while still relying on 4:00 p.m. ET prices? What can they do to optimize their processes, including the publication of the NAV?

90. Is our description of the netting across multiple omnibus “tiers”—and the subsequent sequential processing that results—an accurate portrayal? If so, how many tiers might exist that would necessitate sequential processes and how long might each tier be expected to need to perform its calculations to pass on to the next tier? What factors influence this processing? Are there potential solutions to this sequential processing challenge and, if so, what are they? Are there ways in which intermediaries might process information concurrently? If this description of netting across multiple omnibus tiers does not capture current processes, please provide an explanation of the way(s) it does occur today.

²⁵⁷ The combination of the creation and redemption process with secondary market trading in ETF shares and underlying securities provides arbitrage opportunities that are designed to help keep the market price of ETF shares at or close to the NAV per share of the ETF. See Exchange-Traded Funds, Investment Company Act Release No. 33646 (Sept. 25, 2019), 84 FR 57162, 57165 n.31 (Oct. 24, 2019).

²⁵⁸ We understand that some institutional investors may opt to place orders to trade ETFs at the end-of-day NAV. These are generally placed with a market maker who may or may not be an AP. The market maker will guarantee the end-of-day NAV price plus (or less) a fee (depending on the direction of the trade) to cover transaction costs and profit. The market makers can either trade with the institutional investor as a proprietary or principal trade or they can submit a creation/redemption as agent on behalf of the institutional investor and deliver/receive cash or the basket in exchange for the ETF shares. Under these circumstances, secondary market investors in ETF shares would incur the same time compression described above for open-end mutual funds to settle on a T+0 basis.

91. Could open-end mutual funds and ETFs settle on a T+1 basis even if other security types, such as equities and corporate bonds, move to T+0 settlement? If so, what risks would be introduced to open-end mutual funds and ETFs from holding positions in securities that settle on a T+0 basis when trades of the fund’s shares occur on a T+1 basis? Should these funds receive large amounts of purchases from investors, would they wait a day for those purchase transactions to settle before investing cash in securities? Would they rely on borrowing facilities and, if so, does that introduce new issues or risks? For large redemption requests by investors, would these funds have additional time to liquidate underlying holdings or would they increase their cash position in the interim?

92. Are there additional considerations for APs if securities in a creation basket settle on a different basis than the shares of the ETF? What are the current risks and considerations in this process where the securities in a creation basket settle on a different basis than the shares of the ETF itself, such as is the case with U.S. Treasury securities, which commonly settle on a T+1 basis today while the ETF shares settle on a T+2 basis?

93. What time do market intermediaries believe would be necessary for open-end mutual funds and ETFs to publish NAVs in order to achieve same-day settlement and why?

94. What are the reasons intermediaries do not submit orders to purchase or sell mutual fund shares to Fund/SERV or the transfer agent earlier on trade date? What are the reasons some intermediaries may be delayed in the submission of those orders until T+1 in the current environment? Please be as specific as possible and include data if available on submission times. What would be needed to accelerate these timeframes?

95. Would open-end mutual funds potentially establish an earlier cut-off time for placing orders to purchase or sell fund shares than is currently used (*i.e.*, earlier than 4:00 p.m. ET) to capture prices for NAV calculations, in order to speed the time at which a NAV can be published? If so, what time might be most likely and why? If different funds opted to use different times, would this create new market opportunities for funds? What challenges would this introduce?

96. The Commission understands that some ETFs calculate NAVs more than once per day. Are there unique challenges and opportunities these

funds may have with same-day settlement?

97. Currently, Rule 22c-1(a) of the Investment Company Act limits the ability to transact in fund shares at a price other than “a price based on the current net asset value . . . which is next computed after receipt of a tender of such security for redemption or of an order to purchase or sell such security.” In the event a fund elects to calculate its NAV using intra-day prices for the underlying securities held in the fund, such as utilizing 2:00 p.m. ET prices to value its portfolio in order to produce a NAV earlier in the day to support same-day settlement, how would this limitation impact the acceptance of orders to purchase or redeem shares of the fund? Would a fund establish a cut-off time for acceptance of orders that is based on the time when a snapshot of prices is captured to value the fund’s securities positions? Would it be possible in different scenarios for investors to have an information advantage and, if so, how? For funds that may currently utilize prices for U.S. securities prior to the U.S. market close, how has such an approach modified timelines and processes for acceptance of orders and publication of the NAV?

98. If different funds adopt differing policies for the time to capture prices or to publish NAVs, and subsequently impose different cut-off times for receipt of orders pursuant to Rule 22c-1, would intermediaries be able to accommodate such differences on a fund-specific basis?

99. Might funds consider requiring orders to be received by the fund’s transfer agent, rather than an intermediary, by the cut-off time? Are there other ways in which a movement to T+0 settlement would affect transfer agents’ processes, and if so, how should those processes be changed?

100. If receipt by an intermediary is sufficient (as opposed to requiring orders be received by the fund’s transfer agent by the cut-off time), as is the case today, how do intermediaries or others monitor intermediary compliance?

101. Does monitoring of order receipt relative to cut-off times differ by types of intermediaries? For example, are there different processes to monitor “authorized agents” as opposed to other types of intermediaries? What are the differences between “authorized agents” and other intermediaries?

102. If ETFs were to utilize an earlier time in the day to capture prices of their portfolio investments for purpose of calculating the ETF’s shares’ NAV (that is, the price that would form the basis for APs’ purchases and redemptions of creation units), how would this affect

primary market transactions in ETF shares? Would this affect secondary market ETF share transactions in any way, for example, transactions by institutional investors who may opt to place orders to trade ETFs at the end-of-day NAV?

103. Should the Commission consider elimination of omnibus processing to facilitate the adoption of T+0 settlement for open-end mutual funds? Since any investor account must be maintained by at least one party, how does omnibus accounting by intermediaries rather than maintaining investor-specific accounts at each fund's transfer agent reduce costs to investors?

104. Are there any additional unique considerations for open-end mutual funds or ETFs that hold non-U.S. securities if the Commission were to adopt a same-day settlement standard while non-U.S. markets may continue with longer settlement timeframes, including T+1 and T+2? What potential liquidity impacts might such funds experience?

5. Institutional Trade Processing

As discussed throughout this release, while significant improvements to the infrastructure for institutional trade processing have decreased reliance on manual activities and enabled more transparency into and standardization of trade information, several operational and technology challenges continue to limit the speed, accuracy, and efficiency of institutional trade processing, all of which would be more acute in a T+0 environment.

As discussed previously, the T+1 Report recommends that allocations for all institutional trades be made and communicated by 7:00 p.m. on trade date and these trades be confirmed and affirmed by 9:00 p.m. ET on trade date.²⁵⁹ The industry has identified a number of issues related to the institutional trade process that would need to be addressed in a T+1 settlement cycle, including, but not limited to, trade systems and reference data, the trade allocations, confirmation and affirmation cut-off times, batch cycle timing, migration to trade date

²⁵⁹ T+1 Report, *supra* note 18, at 13; *see also supra* note 164 and accompanying text (discussing the same). Additionally, the industry has recommended the adoption of Commission or SRO rules requiring: (i) Broker-dealers to obtain an agreement from their customers at the outset of the relationship or at the time of the trade to participate in and to comply with the operational requirements of interoperable trade-match systems as a condition to settling trades on an RVP/DVP basis; and (ii) investment managers to participate in a trade-match system, similar to the way broker-dealers and institutions are required by the SRO confirmation/affirmation rules to participate in a confirmation/affirmation system.

matching, and identification of automated vendor solutions to alleviate manual processing.²⁶⁰ In addition, improvements in the quality and standardization of settlement instructions, the quality of static settlement data maintenance, the use of automation and the expansion of straight-through processing capabilities would all help facilitate higher affirmation rates and faster processing.

As discussed in Part III.D, the Commission has previously explained that a shortened settlement cycle may lead to increased reliance on the use of CMSPs, with a focus on improving and accelerating the allocation, confirmation, and affirmation processes and enhancing efficiencies in the services and operations of the CMSPs.²⁶¹ Improved automation in the settlement process has enabled better straight-through processing and contributed to increases in affirmation rates on trade date and increases in settlement rates, with an attendant decrease in exceptions and fails. Moving to T+1 may promote continued improvements in technology and operations, encourage incremental increases in the utilization by certain market participants of CMSPs, and focus the industry on improving and accelerating the allocation, confirmation and affirmation processes by completing those processes earlier and more efficiently.

However, it is unclear whether addressing these issues would (i) facilitate further shortening of the settlement cycle beyond T+1; (ii) whether these issues would continue to be relevant in a T+0 environment; or (iii) whether new technologies or operational processes would need to be designed and implemented to accommodate T+0 for institutional trade processing. Accordingly, the Commission is requesting comment on all issues pertaining to improving the institutional trade processing in order to achieve a T+0 standard settlement cycle. In addition, the Commission is seeking comment on the following:

105. What operational, technological and regulatory issues related to institutional trade processing should be considered in further shortening of the settlement cycle to T+0, particularly any impediments to investors and other market participants?

106. What, if anything, should the Commission do to facilitate T+0, particularly as it relates to the standardization of reference data, the

²⁶⁰ *See supra* note 259.

²⁶¹ *See* T+2 Proposing Release, *supra* note 30, at 69258.

use of standardized industry protocols by broker-dealers, asset managers, and custodians, and the use of matching services?

107. Does moving to T+0 introduce any new risks in the processing of institutional trades? If so, please describe such risks and whether mitigation is possible. Can such risks be quantified?

108. What are the benefits and costs of settling institutional trades in a T+0 environment? What are the relative challenges for the different market participants involved? Do the benefits of T+0 accrue to all participants—brokers, institutional customers, custodians, or matching utilities? Do they accrue to large, medium, and small entities?

109. How would the current systems and processes used in the institutional post-trade process need to change to accommodate a T+0 settlement requirement?

110. Would any or all of the changes contemplated by the Industry Working Group to address the building blocks considered essential for institutional trade settlement in T+1 be useful should the settlement cycle move to T+0?

111. How would the allocation, confirmation and affirmation process be accomplished in a T+0 environment? In particular, what timeframes would be necessary to ensure settlement on T+0? To what extent would the roles of CMSPs, broker-dealers, or bank custodians need to change to accommodate T+0 settlement? To what extent does the use of a custodian foster or impair a transition to a T+0 settlement cycle? Please explain.

112. What effect would T+0 have on the relationship between a broker-dealer and its customer? What effect would T+0 have on the relationship between an investor and its custodian?

6. Securities Lending

Both the ISG White Paper and the T+2 Playbook highlighted the potential impact shortening the settlement to T+2 may have on securities lending practices in the U.S. For example, the ISG White Paper noted that securities lenders may have less time to recall loaned securities, and securities borrowers should be cognizant of the reduced timeframe between execution and settlement when loaning securities, particularly when transacting in hard to borrow securities.²⁶² The ISC White Paper further stated that service providers may need to update their

²⁶² ISG White Paper, *supra* note 26, at 26.

products and services to accurately process such transactions.²⁶³

The T+2 Playbook included several recommendations regarding actions firms should take to address the potential impact that shortening the standard settlement cycle may have on securities lending practices in the industry. For example, the T+2 Playbook recommended that market participants' decisions to loan securities should take into account the shortened settlement cycle, and stock borrow positions should be evaluated to reduce exposure to counterparty risk based on the shortened settlement cycle.²⁶⁴ More recently industry working groups tasked with understanding industry requirements for shortening the standard settlement cycle to T+1 have begun to analyze how shortening the settlement cycle may require additional changes to securities lending practices.²⁶⁵

While market participants have yet to explore in significant detail how shortening the settlement cycle to T+0 might impact securities lending practices in the U.S. markets, the Commission preliminarily believes that such a move would likely impact these practices further, and may necessitate further changes to procedures, operations and technologies that facilitate securities lending and borrowing. Additionally, the Commission is interested in learning whether shortening the standard settlement cycle to T+0 could impact overall liquidity in the U.S. markets to the extent that market participants may curtail their participation in the securities lending markets in response to such a move.

The Commission is requesting public comment regarding all aspects of the potential impact that shortening the settlement cycle to T+0 could have on securities lending in the U.S. In particular, the Commission requests comment on the following:

113. To what extent would shortening the standard settlement cycle to T+0 make it difficult for securities lenders to timely recall securities on loan?

114. To what extent would the Commission need to amend Regulation SHO to accommodate securities lending in a T+0 environment? Are there changes to Regulation SHO that can be made to help facilitate lending in a T+0 environment?

115. Please describe any technology changes that might be necessary to support securities lending operations of

market participants if the settlement cycle were shortened to T+0. Please include in any comments descriptions of existing technologies that may help the Commission identify and understand the limitations, if any, of such technologies with respect to a T+0 settlement cycle.

116. With respect to stock loan recalls, are there ways to improve the level of coordination between investment managers and third-party lending agents for underlying funds, and to facilitate partial stock loan recalls from bulk lending positions aggregated from multiple institutional investors?²⁶⁶

117. To what extent might securities lenders need to rely on predictive analytics to make decisions regarding which securities to recall before lenders can be sure such recalls will be necessary? What additional costs, if any, might be associated with the increased use of predictive analytics?

118. How might shortening the standard settlement cycle to T+0 impact market participants seeking to borrow securities in the U.S. markets? Please include discussion regarding the possible impact on market participants' ability to borrow securities that might be difficult to borrow.

119. How might shortening the standard settlement cycle to T+0 impact the decisions of securities lenders and borrows to lend and borrow securities, respectively?

120. What impact, if any, would shortening the standard settlement cycle to T+0 have on the cost of borrowing securities in the U.S.?

121. What impact would shortening the settlement cycle to T+0 have on costs related to loaning securities (e.g., investments in technology improvements, analytics, etc.)?

122. To what extent might shortening the standard settlement cycle to T+0 reduce revenue securities lenders generate from loaning securities compared with a T+2 or T+1 settlement cycle?

123. What impact, if any, might a T+0 settlement cycle have on overall liquidity in the U.S. markets if such a move were to reduce securities lending activity?

124. Please describe any indirect impact that shortening the standard settlement cycle to T+0 might have on market structure or trading activity as a result of changes to securities lending in the U.S. markets. For example, if shortening the settlement cycle to T+0 would reduce the availability of difficult

to borrow securities, how would such a reduction impact short selling practices in the U.S. markets?

125. Please describe any other impacts that shortening the settlement cycle to T+0 might have on securities lending markets in the U.S.

7. Access to Funds and/or Prefunding of Transactions

A T+0 settlement cycle may increase prefunding requirements for investors, shifting some costs from broker-dealers and banks to retail and institutional investors.²⁶⁷ When purchasing securities in the U.S. market, retail and institutional investors must be ready to provide cash to settle their securities transaction. Cash is typically held in a short-term sweep account, such as a money market fund (MMF) or commingled vehicle, and therefore requires that the investor redeem cash from the sweep vehicle to finance the securities transaction. Alternatively, it may simply be held in a cash account. In some cases, funds will be converted to USD from another currency through an FX transaction. The specific needs, timing and arrangements vary for retail versus institutional investors. Retail investors may fund their securities transactions using cash accounts, and in such cases FINRA rules permit the brokers to require the payment of purchase money to be paid "upon delivery,"²⁶⁸ which functionally means no later than settlement. Some brokers require their retail clients to prefund their transactions—in other words, deposit sufficient cash for settlement in their brokerage account before the broker acts on their orders and executes a purchase trade. Alternatively, retail clients may be permitted to fund transactions through use of a margin account. An institutional investor is required, pursuant to its contractual relationships with its brokers and custodians, to provide cash (or have credit available) on the day that the custodian or broker receives the purchased securities and credits them to the investor's account.

In a T+0 environment, investors will not have time after markets close to identify and obtain the cash necessary for settlement of a securities transaction, as settlement of the securities transaction will occur on the same day. This could have a number of potential effects, and the Commission is requesting comment on the following:

²⁶⁷ This discussion concerns the settlement arrangements between investors and their brokers or custodians. These arrangements are separate from obligations of brokers and custodians to NSCC and DTC.

²⁶⁸ See FINRA Rule 11330.

²⁶³ *Id.*

²⁶⁴ T+2 Playbook, *supra* note 27, at 86.

²⁶⁵ T+1 Report, *supra* note 18, at 24–25.

²⁶⁶ See, e.g., ISITC Virtual Winter Forum, Securities Lending Working Group discussion (Dec. 13, 2021).

126. Will there be a significant increase in prefunding requirements for securities transactions across market participants? Would some investors have to start planning in advance before the trade date to accurately position necessary funds for redemption and securities and cash for settlement? To what extent might retail investors alter their funding behaviors or their use of margin accounts in response to added prefunding requirements?

127. Would a prefunding requirement shift risk from the broker-dealer and bank community to the investor, both retail and institutional?

128. To the extent that an investor would need to redeem shares of a money market fund to receive cash to settle a separate securities transaction, how would such redemptions be effected? Would redemptions of money market fund shares need to be effected in the morning of T+0 to receive cash to settle a separate securities transaction on the same day?

129. How would this affect the borrowing of cash from clearing members, prime brokers, custodians, and other liquidity providers when an institutional investor cannot successfully redeem funds or otherwise convert assets to cash in time to settle?

130. How would T+0 affect FX transactions used to finance the settlement of transactions?

131. Could T+0 affect the volume of securities trading at various points throughout the trading day?

8. Potential Mismatches of Settlement Cycles

The Commission preliminarily believes that shortening the standard settlement cycle to T+0 could create mismatches between settlement timeframes in different markets, or could increase the degree to which certain settlement timeframes may already be mismatched at the time a T+0 settlement cycle might be implemented. For example, most major securities markets in non-U.S. jurisdictions currently settle transactions on a T+2 basis, as do FX markets generally. When the Commission amended Exchange Act Rule 15c6-1(a) in 2017 to shorten the standard settlement cycle to T+2, several major securities markets had already adopted a T+2 settlement cycle, and the move to T+2 in the U.S. harmonized large portions of the U.S. settlement cycle with prevailing settlement cycles in those markets.²⁶⁹

In the T+2 Adopting Release the Commission stated that the prospective

harmonization of the standard settlement cycle in the U.S. with settlement cycles in foreign markets that settle transactions on a T+2 settlement cycle may reduce the need for some market participants engaging in cross-border and cross-asset transactions to hedge risks stemming from mismatched settlement cycles and reduce related financing and borrowing costs, resulting in additional benefits.²⁷⁰ The T+2 Adopting Release also noted that shortening the settlement cycle further than T+2 at that time could increase funding costs for market participants who rely on the settlement of FX transactions to fund securities transactions that settle regular way.²⁷¹

Whether shortening the standard settlement cycle for securities transactions in the U.S. to T+0 would in fact result in mismatched settlement cycles vis-à-vis major foreign securities markets, or the settlement cycle for FX transactions, may depend on future developments that are unknown at this time, including the extent to which settlement cycles in those markets might be shortening in response to the implementation of a shorter settlement cycle for securities in the U.S., or in response to other future developments in global markets.

The Commission notes that mutual funds and investment advisers have invested in markets with mismatched settlement cycles for many years.²⁷² Many investors evaluate an investment portfolio based on traded positions without reference to pending or actual settlement because entitlement to trade, receive income or corporate actions and performance calculations generally are based on trade-date information.

²⁷⁰ T+2 Adopting Release, *supra* note 10, at 15574.

²⁷¹ *Id.* at 15599. Both the T+2 Proposing Release and the T+2 Adopting Release stated that, because the settlement of FX transactions occurs on T+2, market participants who seek to fund a cross-border securities transaction with the proceeds of an FX transaction would, in a T+1 or T+0 environment, be required to settle the securities transaction before the proceeds of the FX transaction become available and would be required to pre-fund securities transactions in foreign currencies. Under these circumstances, a market participant would either incur opportunity costs and currency risk associated with holding FX reserves or be exposed to price volatility by delaying securities transactions by one business day to coordinate settlement of the securities and FX legs. *Id.*

²⁷² As noted earlier, U.S. equities securities have moved from settling T+5 to T+3 and more recently to T+2, while U.S. Treasury securities have settled on a T+1 basis throughout. Portfolios that invest globally have encountered mismatched settlement cycles, especially prior to October 6, 2014 when twenty-nine European markets moved to T+2 settlement in an effort to harmonize settlement times in Europe. See European Central Securities Depositories Association, A Very Smooth Transition to T+2, <https://ecdsa.eu/archives/3793>.

Nonetheless, institutional and retail investors alike often consider anticipated settlement dates when managing cash balances to ensure that settlements do not conflict or create an unexpected shortfall of cash, or an unplanned event that results in an uninvested cash balance.

The Commission is interested in receiving public comment regarding the impact a T+0 standard settlement cycle in the U.S. securities markets might have on global harmonization of settlement cycles, including any indirect impact on market participants. Specifically the Commission requests comment on the following:

132. Would shortening the standard settlement cycle to T+0 in the U.S. securities markets result in decreased harmonization of settlement cycles generally? Which markets would be impacted by such decreased harmonization? Could solutions be applied to mitigate the effects of de-harmonization? For example, to what extent could other asset classes, such as FX, transition to a shorter settlement cycle? What are the impediments to shortening settlement cycles for these other asset classes? Could FX transactions transition to a T+0 settlement cycle? Please explain.

133. Would certain non-U.S. markets move to a T+0 settlement cycle in response to a prospective move to T+0 in the U.S.?

134. How might shortening the standard settlement cycle to T+0 in the U.S. impact market participants who seek to fund cross-border transactions with the proceeds of an FX transaction?

135. To what extent might any adverse impact from increased settlement cycle mismatches be mitigated if the standard settlement cycle in the U.S. is shortened to T+1 prior to a move to a T+0 standard settlement cycle at a later time?

136. To what extent might monitoring of anticipated settlement-date balances change if the U.S. moved to a T+1 settlement cycle? How would such monitoring be impacted if the U.S. moved to a T+0 standard settlement cycle?

9. Dematerialization

Currently the vast majority of securities asset classes trading in the U.S. markets, including government securities, options, most mutual fund securities, and some municipal bonds, are issued in book-entry form only (*i.e.*, dematerialized).²⁷³ In contrast, other

²⁷³ Dematerialization of securities occurs where securities owned by an investor are not represented

²⁶⁹ See T+2 Proposing Release, *supra* note 30, at 69241-42.

asset classes, such as listed equities, unlisted equities that have been admitted as DTC-eligible, and some debt securities, can be immobilized²⁷⁴ using DTC and dematerialized using the Direct Registration System (“DRS”) services enabled by DTC’s facilities, but many issuers of these equity and debt securities continue to allow their investors to obtain paper certificates.²⁷⁵

While the U.S. markets have made significant strides over the past twenty

by paper certificates, and transfers of ownership of those securities are made through book-entry movements. For more information on issues related to the use of certificates in the U.S. Markets, see Concept Release, *supra* note 149, at 12932–34.

²⁷⁴ Immobilization of securities occurs where the underlying certificate is kept in a securities depository (or held in custody for the depository by the issuer’s transfer agent) or at a custodian and transfers of ownership are recorded through electronic book-entry movements between the depository or custodian’s internal accounts. These types of securities are often referred to as being held in “street name.” An issue is partially immobilized (as is the case with most equity securities traded on an exchange), when the street name positions beneficially owned by investors are linked through chains of beneficial ownership through intermediaries (such as brokers) to the certificate immobilized at the securities depository, but certificates are still available to investors directly registered on the issuer’s books. *Id.* at 12931 n.107; see also Exchange Act Release No. 76743 (Dec. 22, 2015), 80 FR 81948, 81952 n.39 (Dec. 31, 2015).

²⁷⁵ DRS facilitates and automates the process whereby an investor, generally in equities, can establish a direct book-entry position registered in the investor’s own name on the issuer’s master securityholder file; such DRS issues are maintained by 61 transfer agents (as of December 31, 2021) that have been admitted to DRS by DTC (out of a total, as of September 30, 2021, of 403 registered transfer agents). Where an issuer has authorized ownership in book-entry form and is serviced by a transfer agent that has been admitted by DTC as DRS-eligible and an investor currently holds the securities in street name form in the investor’s broker-dealer account, the investor can arrange, assuming the broker-dealer supports DRS servicing at DTC, to have its securities electronically withdrawn from the account and forwarded to the transfer agent. The procedure avoids the risks and custodial costs of moving certificates; in response to the investor’s instruction to the broker-dealer, the investor’s shares are changed into DRS form when the transfer agent receives an electronic file from DTC specifying the investor’s details supplied by the broker-dealer, cancels the prior registration in the name of DTC’s Cede & Co. nominee, and re-registers the securities directly in the investor’s name, with the investor receiving a statement. Conversely, if the investor later elects to transfer the securities back to the investor’s broker-dealer account (*i.e.*, change the form of ownership of the securities from DRS back into street-name form held through the broker-dealer account), the investor most commonly would request the broker-dealer to withdraw the securities from DRS, with the transfer agent re-registering the securities in the name of DTC’s nominee, and the broker-dealer crediting the securities to the investor’s account. Some frictions remain: DRS is not authorized by all issuers and not available for all registered securities types; a number of the transfer agents for DTC-eligible issues do not meet DTC’s qualifications to participate in DRS; some brokers may not support DRS transfers or promptly process investors’ instructions to facilitate the transfer of securities into DRS form. See Concept Release, *supra* note 139, at 12932.

years in achieving immobilization and dematerialization, many industry representatives believe that the small percentage of securities held in certificated form impose unnecessary risk and expense to the industry and to investors.²⁷⁶ Moreover, the ISG previously identified the dematerialization of securities certificates as a necessary building block to achieve shorter settlement timeframes.²⁷⁷ The industry has long asserted that, despite the reduction in the use of paper certificates in the U.S. markets, certificates continue to pose risks, create inefficiencies and increase costs,²⁷⁸ many of which will be exacerbated as the settlement cycle shortens. Fully transitioning from paper certificates to book-entry (*i.e.*, electronic records) would not only contribute to a more cost-effective, efficient, secure, and resilient marketplace by addressing operational issues related to record-keeping, inventory management, resilience and controls, but would facilitate a more efficient transition to shorter settlement cycles.²⁷⁹

The Commission has long advocated a reduction in the use of certificates in the trading environment by immobilizing or dematerializing securities and has acknowledged that the use of certificates increases the costs and risks of clearing and settling securities for all parties processing the securities, including those involved in

²⁷⁶ The processing of paper securities certificates has long been identified as an inefficient and risk-laden mechanism by which to hold and transfer ownership. Because paper certificates require manual processing and multiple touchpoints between investors and financial intermediaries, their use can result in significant delays and expenses in processing securities transactions and can raise risk concerns associated with lost, stolen, and forged certificates. See *id.* at 12930–31; Transfer Agents Operating Direct Registration System, Exchange Act Release No. 35038 (Dec. 1, 1994), 59 FR 63652, 63653 (Dec. 8, 1994) (“1994 Concept Release”); see also SIA Business Case Report, *supra* note 21, at 10; BCG Study, *supra* note 22, at 59, 62; DTCC, From Physical to Digital: Advancing the Dematerialization of U.S. Securities, at 4, 6 (Sept. 2020) (“DTCC 2020 Dematerialization White Paper”), <https://www.dtcc.com/-/media/Files/PDFs/DTCC-Dematerialization-Whitepaper-092020.pdf>.

²⁷⁷ See, e.g., William M. Martin, Jr., The Securities Markets: A Report with Recommendations, Submitted to The Board of Governors of the New York Stock Exchange (Aug. 5, 1971) (“Martin Report”), https://www.sechistorical.org/collection/papers/1970/1971_0806_MartinReport.pdf.

²⁷⁸ *Id.* DTCC estimates that only a small portion of securities positions remains certificated and states that requests for certificates are declining, but also explains that the risks and costs associated with processing the remaining certificates in the marketplace are substantial and avoidable. See DTCC 2020 Dematerialization White Paper, *supra* note 276, at 4.

²⁷⁹ See DTCC 2020 Dematerialization White Paper, *supra* note 276, at 11.

the National C&S System.²⁸⁰ Most of these costs and risks are ultimately borne by investors.²⁸¹ For example, in response to the COVID–19 pandemic, DTC suspended all physical securities processing services for approximately six weeks to minimize the risk of transmission of COVID–19 among its employees, who would otherwise be on site at DTC’s vault that holds physical securities on deposit.²⁸² While this service disruption did not affect the electronic book-entry settlement of securities transactions, DTC instituted alternative methods of handling certain transactions, such as the use of letters of possession and an emergency rider in connection with underwriting new securities issues.²⁸³

The COVID–19 pandemic has highlighted the importance of continuing to immobilize or dematerialize the U.S. market to decrease risks and costs associated with physical certificates, but the Commission preliminarily believes that dematerialization is not a prerequisite to shortening the settlement cycle. Mechanisms in place today to facilitate immobilizing paper certificates can adequately address the risk and efficiency issues associated with such certificates (as evidenced by the COVID–19 example above), and can accommodate shorter settlement cycles, up to and including T+0. In particular, DRS provides a viable alternative to street-name holding for those investors who do not want to hold securities at a broker-dealer or who want their securities registered in their own

²⁸⁰ Concept Release, *supra* note 149, at 12934. The Commission also stated in the Concept Release that, while investors should have the ability to register securities in their own names, it was time to explore ways to further reduce certificates in the trading environment due to the significant risk, inefficiency, and cost related to the use of securities certificates. *Id.* The possibility exists that investors’ attachment to the certificate may be based more on sentiment than need, particularly in light of the fact that today non-negotiable records of ownership (*e.g.*, account statements) evidence ownership of not only most securities issued in the U.S. but also other financial assets, such as money in bank accounts. See *id.* at 12934–35. DRS allows an investor to have securities registered in the investor’s name without having a certificate issued to the investor and the ability to electronically transfer securities between the investor’s broker-dealer and the issuer’s transfer agent without the risk and delays associated with the use of certificates. *Id.* at 12932.

²⁸¹ *Id.* at 12934.

²⁸² See, e.g., DTCC, Important Notice (May 14, 2020), <https://www.dtcc.com/-/media/Files/pdf/2020/5/14/13402-20.pdf>; DTCC, Important Notice (Apr. 8, 2020), <https://www.dtcc.com/-/media/Files/pdf/2020/4/8/13276-20.pdf>.

²⁸³ See, e.g., DTCC, Important Notice (Mar. 12, 2020), <https://www.dtcc.com/-/media/Files/pdf/2020/3/13/13099-20.pdf>.

name.²⁸⁴ Investors can use the linkages enabled by DTC to transfer their securities back and forth between DRS at the transfer agent and book-entry form on the books of a broker-dealer as it suits their needs.²⁸⁵

The key issues appear to be processing time and access to transfers between DRS at the transfer agent and book-entry form at the broker-dealer. With regard to processing time, the Commission is concerned that broker-dealer processes, whereby an investor requests that its broker-dealer change the investor's form of ownership from certificate form into street name form at the broker-dealer, can take days or weeks. Those processing timeframes will need to be significantly compressed or completed in real time to accommodate T+0. Broker-dealers might require investors to complete the process of transferring paper certificates into book-entry either through the transfer agent or the broker-dealer prior to trade execution, thereby allowing the broker-dealer assurances the securities can be delivered in time for settlement. With regard to access, only investors who have an issuer and transfer agent that offer DRS services can move their securities between DRS at the transfer agent and book-entry form at the broker-dealer.

The Commission is seeking comment on these issues, as well as a number of other issues related to the consideration of dematerialization as a building block to achieving T+0.

137. Is the elimination of the paper certificate necessary to achieve T+0? If so, why? If not, why?

138. Would further dematerialization, immobilization, or some combination thereof, without the elimination of the paper certificate, be sufficient to facilitate a T+0 settlement cycle? Please describe how and why this would or would not be the case.

139. If further dematerialization or immobilization is necessary to achieve T+0 settlement, what needs to be done on either an operational or regulatory

basis to achieve such an objective? Please be as specific as possible, particularly where your answer relates to regulatory initiatives. For example, should the Commission consider mandating the dematerialization of certain types of securities? If so, which securities? Should such a mandate be limited to securities traded on an exchange, or focused on particular asset classes?

140. Should any potential requirements regarding dematerialization be imposed in stages or, instead, be comprehensive from the outset? For example, should such requirements be phased by addressing: (i) First, newly listed companies, (ii) then, new issues of securities by all listed companies, and (iii) all outstanding securities?

141. In order to better accommodate a T+0 environment, what changes, if any, would need to be made to broker-dealer processes for responding to investor requests to transfer investors' paper certificates into holdings in street-name book-entry form at the broker-dealer?

142. Do laws in other jurisdictions present any barriers to achieving complete dematerialization, such as laws that require an issuer to issue certificates or prohibit book-entry ownership? If so, please describe the jurisdictions and the specific laws that raise potential issues.

143. What are the costs and benefits with requiring investors who hold paper certificates to complete the transfer of such securities into book-entry prior to the execution of a trade?

V. Economic Analysis

The Commission is mindful of the economic effects that may result from the proposed amendments, including the benefits, costs, and the effects on efficiency, competition, and capital formation.²⁸⁶ This section analyzes the expected economic effects of the proposed rules relative to the current baseline, which consists of the current market and regulatory framework.

This economic analysis begins with a discussion of the risks inherent in the settlement cycle and how a reduction in the cycle's length may affect the management and mitigation of these risks. Next, it discusses market frictions that potentially impair the ability of market participants to shorten the settlement cycle in the absence of a Commission rule. These settlement cycle risks and market frictions frame our subsequent analysis of the rule's benefits and costs. The Commission preliminarily believes that the proposed amendment to Exchange Act Rule 15c6-1(a) and the proposed deletion of Exchange Act Rule 15c6-1(c) ameliorate some or all of these market frictions and thus reduce the risks inherent in the settlement process.

The Commission preliminarily believes that, to successfully shorten the settlement timeframes to T+1 while minimizing settlement fails in the institutional trade processing environment, will require further enhancing automation, standardization, and the percentage of trades that are allocated, confirmed, and affirmed by the end of the trade date.²⁸⁷ To this end the Commission is also proposing (i) new Rule 15c6-2 to require that, where parties have agreed to engage in an allocation, confirmation, or affirmation process, a broker or dealer would be prohibited from effecting or entering into a contract for the purchase or sale of a security (other than an exempted security, a government security, a municipal security, commercial paper, bankers' acceptances, or commercial bills) on behalf of a customer unless such broker or dealer has entered into a written agreement with the customer that requires the allocation, confirmation, affirmation, or any combination thereof, be completed no later than the end of the day on trade date in such form as may be necessary to achieve settlement in compliance with Rule 15c6-1(a),²⁸⁸ (ii) an amendment to Rule 204-2 under the Advisers Act to require investment advisers that are parties to agreements under Exchange Act Rule 15c6-2 to maintain a time stamped record of confirmations received, and when allocations and affirmations were sent to a broker or dealer,²⁸⁹ and (iii) new Rule 17Ad-27 under the Exchange Act to require policies and procedures that require CMSPs facilitate the ongoing development of operational and technological improvements associated with institutional trade processing,

²⁸⁴ Due to the expanded use in today's market, DRS is considered a viable alternative to holding physical certificates, allowing transfers to be made relatively quickly and without the risk and delays associated with the use of certificates. See DTCC 2020 Dematerialization White Paper, *supra* note 276, at 4 n.2.

²⁸⁵ Specifically, DTC participants can use the linkages enabled by DTC and qualified FAST transfer agents to withdraw securities electronically. Upon the investor's request, a broker can use DRS, if available for the particular securities issue, to transfer securities from the broker's account (where it is in DTC's nominee registration) to be held in an investor's own name on the transfer agent's book. DTC's balance in that security drops and the investor receives a statement of its holdings, rather than a certificate.

²⁸⁶ Exchange Act Section 3(f) requires the Commission, when it is engaged in rulemaking pursuant to the Exchange Act and is required to consider or determine whether an action is necessary or appropriate in the public interest, to consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation. See 15 U.S.C. 78c(f). In addition, Exchange Act Section 23(a)(2) requires the Commission, when making rules pursuant to the Exchange Act, to consider among other matters the impact that any such rule would have on competition and not to adopt any rule that would impose a burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act. See 15 U.S.C. 78w(a)(2).

²⁸⁷ See *supra* Part III.B.2; *infra* Part V.C.

²⁸⁸ See *supra* Part III.B.

²⁸⁹ See *supra* Part III.C.

which may in turn also facilitate further shortening of the settlement cycle in the future.²⁹⁰

The discussion of the economic effects of the proposed amendment to Rule 15c6–1(a), the proposed deletion of Rule 15c6–1(c), the proposed Rule 15c6–2, the proposed amendment to Rule 204–2, and the proposed Rule 17Ad–27 begins with a baseline of current practices. The economic analysis then discusses the likely economic effects of the proposal as well as its effects on efficiency, competition, and capital formation. The Commission has, where practicable, attempted to quantify the economic effects expected to result from this proposal. In some cases, however, data needed to quantify these economic effects is not currently available or otherwise publicly available. As noted below, the Commission is unable to quantify certain economic effects and solicits comment, including estimates and data from interested parties, that could help inform the estimates of the economic effects of the proposal.

A. Background

As previously discussed, the proposed amendment to Rule 15c6–1(a) would prohibit, unless otherwise expressly agreed to by both parties at the time of the transaction, a broker-dealer from effecting or entering into a contract for the purchase or sale of certain securities that provides for payment of funds and delivery of securities later than the first business day after the date of the contract subject to certain exceptions provided in the rule. In its analysis of the economic effects of the proposal, the Commission has considered the risks that market participants, including broker-dealers, clearing agencies, and institutional and retail investors are exposed to during the settlement cycle and how those risks change with the length of the cycle.

The settlement cycle spans the time between when a trade is executed and when cash and securities are delivered to the seller and buyer, respectively. During this time, each party to a trade faces the risk that its counterparty may fail to meet its obligations to deliver cash or securities. When a counterparty fails to meet its obligations to deliver cash or securities, the non-defaulting party may bear costs as a result. For example, if the non-defaulting party chooses to enter into a new transaction, it will be with a new counterparty and will occur at a potentially different

price.²⁹¹ The length of the settlement cycle influences this risk in two ways: (i) Through its effect on counterparty exposures to price volatility, and (ii) through its effect on the value of outstanding obligations.

First, additional time allows asset prices to move further away from the price of the original trade. For example, in a simplified model where daily asset returns are statistically independent, the variance of an asset's return over t days is equal to t multiplied by the daily variance of the asset's return. Thus when the daily variance of returns is constant, the variance of returns increases linearly in the number of days.²⁹² In other words, the more days that elapse between when a trade is executed and when a counterparty defaults, the larger the variance of price change will be, and the more likely that the asset's price will deviate from the execution price. The price change could be positive or negative, but in the event of a price increase, the buyer must pay more than the original execution price, and in the event of a price decrease, the buyer may buy the security for less than the original execution price.²⁹³

Second, the length of the settlement cycle directly influences the quantity of transactions awaiting settlement. For example, assuming no change in transaction volumes, the volume of unsettled trades under a T+1 settlement cycle is approximately half the volume of unsettled trades under a T+2 settlement cycle.²⁹⁴ Thus, in the event of a default, counterparties would have to enter into a new transaction, or otherwise close out approximately half as many trades under a T+1 standard settlement cycle than under a T+2 standard. This means that for a given adverse move in prices, the financial losses resulting from a counterparty

default will be approximately half as large under a T+1 standard settlement cycle.

Market participants manage and mitigate settlement risk in a number of specific ways.²⁹⁵ Generally, these methods entail costs to market participants. In some cases, these costs may be explicit. For instance, clearing brokers typically explicitly charge introducing brokers to clear trades. Other costs are implicit, such as the opportunity cost of assets posted as collateral or limits placed on the trading activities of a broker's customers.

The Commission acknowledges that, given current trading volumes and complexity, certain market frictions may prevent securities markets from shortening the settlement cycle in the absence of regulatory intervention. The Commission has considered two key market frictions related to investments required to implement a shorter settlement cycle. The first is a coordination problem that arises when some of the benefits of actions taken by one or more market participants are only realized when other market participants take a similar action. For example, under the current regulatory structure, if a particular institutional investor were to make a technological investment to reduce the time it requires to match and allocate trades without a corresponding action by its clearing broker-dealers, the institutional investor cannot fully realize the benefits of its investment, as the settlement process is limited by the capabilities of the clearing agency for trade matching and allocation. More generally, when every market participant must bear the costs of an upgrade for the entire market to enjoy a benefit, the result is a coordination problem, where each market participant may be reluctant to make the necessary investments until it can be reasonably certain that others will also do so. In general, these coordination problems may be resolved if all parties can credibly commit to the necessary infrastructure investments. Regulatory intervention is one possible way of coordinating market participants to undertake the investments necessary to support a shorter settlement cycle. Such intervention could come through Commission rulemaking or through a coordinated set of SRO rule changes.

In addition to coordination problems, a second market friction related to the settlement cycle involves situations where one market participant's

²⁹¹ This applies to the general case of a transaction that is not novated to a CCP. As described above, in its role as a CCP, NSCC becomes counterparty to both initial parties to a centrally cleared transaction. In the case of such transactions, while each initial party is not exposed to the risk that its original counterparty defaults, both are exposed to the risk of CCP default. Similarly, the CCP is exposed to the risk that either initial party defaults.

²⁹² More generally, because total variance over multiple days is equal to the sum of daily variances and variables related to the correlation between daily returns, total variance increases with time so long as daily returns are not highly negatively correlated. See, e.g., Morris H. DeGroot, *Probability and Statistics* 216 (Addison-Wesley Publishing Co., 1986).

²⁹³ Similarly, a seller whose counterparty fails faces similar risks with respect to the security price but in the opposite direction.

²⁹⁴ The relationship is approximate because some trades may settle early or, if both counterparties agree at the time of the transaction, settle after the time limit in Rule 15c6–1(a).

²⁹⁵ See T+2 Proposing Release, *supra* note 30, at 69251 (discussing the entities that compose the clearance and settlement infrastructure for U.S. securities markets).

²⁹⁰ See *supra* Part III.D.

investments result in benefits for other market participants. For example, if a market participant invests in a technology that reduces the error rate in its trade matching, not only does it benefit from fewer errors, but its counterparties and other market participants may also benefit from more robust trade matching. However, because market participants do not necessarily take into account the benefits that may accrue to other market participants (also known as “externalities”) when market participants choose the level of investment in their systems, the level of investment in technologies that reduce errors might be less than efficient for the entire market. More generally, underinvestment may result because each participant only takes into account its own costs and benefits when choosing which infrastructure improvements or investments to make, and does not take into account the costs and benefits that may accrue to its counterparties, other market participants, or financial markets generally.

Moreover, because market participants that incur similar costs to move to a shorter settlement cycle may nevertheless experience different levels of economic benefits, there is likely heterogeneity across market participants in the demand for a shorter settlement cycle. This heterogeneity may exacerbate coordination problems and underinvestment. Market participants that do not expect to receive direct benefits from settling transactions earlier may lack incentives to invest in infrastructure to support a shorter settlement cycle and thus could make it difficult for the market as a whole to realize the overall risk reduction that the Commission believes a shorter settlement cycle may bring.

For example, the level and nature of settlement risk exposures vary across different types of market participants. A market participant’s characteristics and trading strategies can influence the level of settlement risk it faces. For example, large market participants will generally be exposed to more settlement risk than small market participants because they trade in larger volume. However, large market participants also trade across a larger variety of assets and may face less idiosyncratic risk in the event of counterparty default if the portfolio of trades that may have to be replaced is diversified.²⁹⁶ As a corollary, a market

participant who trades a single security in a single direction against a given counterparty may face more idiosyncratic risk in the event of counterparty failure than a market participant who trades in both directions with that counterparty.

Furthermore, the extent to which a market participant experiences any economic benefits that may stem from a shortened standard settlement cycle likely depends on the market participant’s relative bargaining power. While larger intermediaries may experience direct benefits from a shorter settlement cycle as a result of being required to post less collateral with a CCP, if they do not effectively compete for customers through fees and services as a result of market power, they may pass only a portion of these cost savings through to their customers.²⁹⁷

The Commission preliminarily believes that the proposed amendment to Rule 15c6–1(a), which would shorten the standard settlement cycle from T+2 to T+1 may mitigate the market frictions of coordination and underinvestment described above. The Commission believes that by mitigating these market frictions and for the reasons discussed below, the transition to a shorter standard settlement cycle will reduce the risks inherent in the clearance and settlement process.

The shorter standard settlement cycle might also affect the level of operational risk in the National C&S System.

Shortening the settlement cycle by one day would reduce the time that market participants have to resolve any errors that might occur in the clearance and settlement process. Tighter operational timeframes and linkages required under a shorter standard settlement cycle might introduce new fragility that could affect market participants, specifically an increased risk that operational issues could affect transaction processing and related securities settlement.²⁹⁸

In part to lessen the likelihood that shortening the settlement cycle might

1988), <https://rodneywhitecenter.wharton.upenn.edu/wp-content/uploads/2014/04/8840.pdf>; see also John H. Cochrane, *Asset Pricing* 15 (Princeton Univ. Press rev. ed. 2009) (defining the idiosyncratic component of any payoff as the part that is uncorrelated with the discount factor).

²⁹⁷ See *infra* Parts V.C.1 (Benefits) and V.C.2 (Costs).

²⁹⁸ For example, the ability to compute an accurate net asset value (“NAV”) within the settlement timeframe is a key component for settlement of ETF transactions. See, e.g., Barrington Partners White Paper, *An Extraordinary Week: Shared Experiences from Inside the Fund Accounting Systems Failure of 2015* (Nov. 2015), https://www.mfdf.org/docs/default-source/fromjoomla/uploads/blog_files/sharedexperiencefromfasystemfailure2015.pdf.

negatively affect operational risk, the Commission and market participants have emphasized on multiple occasions the importance of accelerating the institutional trade clearance and settlement process by improving, among other things, the allocation, confirmation and affirmation processes for the clearance and settlement of institutional trades, as well as improvements to the provision of central matching and electronic trade confirmation.²⁹⁹ A 2010 DTCC paper published when the standard settlement cycle in the U.S. was still T+3, described same-day affirmation as “a prerequisite” of shortening the settlement cycle because of its impact on settlement failure rates and operational risk.³⁰⁰ According to previously cited statistics published by DTCC in 2011 regarding affirmation rates achieved through industry utilization of a certain matching/ETC provider, on average, 45% of trades were affirmed on trade date, 90% were affirmed by T+1, and 92% were affirmed by noon on T+2.³⁰¹ Currently, only about 68% of trades achieve affirmation by 12:00 midnight at the end of trade date.³⁰² While these numbers have improved over time, the improvements have been incremental and fallen short of achieving an affirmed confirmation by the end of trade date as is considered a securities industry best practice.³⁰³ Accordingly, and as described more fully below, to achieve the maximum efficiency and risk reduction that may result from completing the allocation, confirmation and affirmation process on trade date, and to facilitate shortening the settlement cycle to T+1 or shorter, the Commission is proposing new Rule 15c6–2 under the Exchange Act to facilitate trade date completion of institutional trade allocations, confirmations and affirmations.

B. Economic Baseline and Affected Parties

The Commission uses as its economic baseline the clearance and settlement process as it exists at the time of this proposal. In addition to the current process that is described in Part II.B above, the baseline includes rules adopted by the Commission, including Commission rules governing the clearance and settlement system, SRO

²⁹⁹ See *supra* Part III.B; see also *supra* notes 146–148 and accompanying text.

³⁰⁰ See *supra* note 155.

³⁰¹ See *supra* note 156.

³⁰² See *supra* note 157.

³⁰³ See *supra* note 57.

²⁹⁶ See Ananth Madhavan et al., *Risky Business: The Clearance and Settlement of Financial Transactions 4–5* (U. Pa. Wharton Sch. Rodney L. White Ctr. for Fin. Res. Working Paper No. 40–88,

rules,³⁰⁴ as well as rules adopted by regulators in other jurisdictions to regulate securities settlement in those jurisdictions. The following section discusses several additional elements of the baseline that are relevant for the economic analysis of the proposed amendment to Rule 15c6-1(a) because they are related to the financial risks faced by market participants that clear and settle transactions and the specific means by which market participants manage these risks.

1. Central Counterparties

NSCC, a subsidiary of DTCC, is a clearing agency registered with the Commission that operates the CCP for U.S. equity securities transactions.³⁰⁵ One way that NSCC mitigates the credit, market, and liquidity risk that it assumes through its novation and guarantee of trades as a CCP is by multilateral netting of securities trades' delivery and payment obligations across its members. By offsetting its members' obligations, NSCC reduces the aggregate market value of securities and cash it must deliver to clearing members. While netting reduces NSCC's settlement payment obligations by a daily average of 98%,³⁰⁶ it does not fully eliminate the risk posed by unsettled trades because NSCC is responsible for payments or deliveries on any trades that it cannot fully net. NSCC reported clearing an average of approximately \$2.251 trillion each day during the first quarter of 2021,³⁰⁷ suggesting an average net settlement obligation of approximately \$45 billion each day.³⁰⁸

The aggregate settlement risk faced by NSCC is also a function of the probability of clearing member default. NSCC manages the risk of clearing member default by imposing certain

³⁰⁴ Certain SRO rules currently define "regular way" settlement as occurring on T+2 and, as such, would need to be amended in connection with shortening the standard settlement cycle to T+1. See, e.g., MSRB Rule G-12(b)(ii)(B); FINRA Rule 11320(b). Further, certain timeframes or deadlines in SRO rules key off the current settlement date, either expressly or indirectly. In such cases, the SROs may also need to amend these rules. See *supra* Part III.E.5 (further discussing the impact of the proposal on SRO rules and operations).

³⁰⁵ A second DTCC subsidiary, DTC, also a clearing agency registered with the Commission, operates a CSD with respect to securities transactions in the U.S. in several types of eligible securities including, among others, equities, warrants, rights, corporate debt and notes, municipal bonds, government securities, asset-backed securities, depositary receipts and money market instruments.

³⁰⁶ See *supra* note 62.

³⁰⁷ See NSCC, Q1 2021 Fixed Income Clearing Corporation and NSCC Quantitative Disclosure for Central Counterparties, at 20 (June 2021), <http://www.dtcc.com/legal/policy-and-compliance>.

³⁰⁸ Calculated as \$2.251 trillion × 2% = \$45.02 billion.

financial responsibility requirements on its members. For example, as of 2021, broker-dealer members of NSCC that are not municipal securities brokers and do not intend to clear and settle transactions for other broker-dealers must have excess net capital of \$500,000 over the minimum net capital requirement imposed by the Commission and \$1,000,000 over the minimum net capital requirement if the broker-dealer member clears for other broker-dealers.³⁰⁹ Furthermore, each NSCC member is subject to other ongoing membership requirements, including a requirement to furnish NSCC with assurances of the member's financial responsibility and operational capability, including, but not limited to, periodic reports of its financial and operational condition.³¹⁰

In addition to managing the member default risk, NSCC also takes steps to mitigate the impacts of a member default. For example, in the normal course of business, CCPs are generally not exposed to market or liquidity risk because they expect to receive every security from a seller they are obligated to deliver to a buyer and they expect to receive every payment from a buyer that they are obligated to deliver to a seller. However, when a clearing member defaults, the CCP can no longer expect the defaulting member to deliver securities or make payments. CCPs mitigate this risk by requiring clearing members to make contributions of financial resources to the CCP so that it may make payments or deliver securities in the event of a member default. The level of financial resources CCPs require clearing members to commit may be based on, among other things, the market and liquidity risk of a member's portfolio, the correlation between the assets in the member's portfolio and the member's own default probability, and the liquidity of the assets posted as collateral.

2. Market Participants—Investors, Broker-Dealers, and Custodians

As discussed in Part II.B, broker-dealers serve both retail and institutional customers. Aggregate statistics from the Board of Governors of the Federal Reserve System suggest that at the end of the second quarter 2021,

³⁰⁹ For a description of NSCC's financial responsibility requirements for registered broker-dealers, see NSCC Rules and Procedures, at 336 (effective Jan. 24, 2022) ("NSCC Rules and Procedures"), https://www.dtcc.com/~media/Files/Downloads/legal/rules/nscc_rules.pdf. Pursuant to Rule 11 and Addendum K to NSCC's Rules and Procedures, NSCC guarantees the completion of CNS settling trades ("NSCC trade guaranty") that have been validated. *Id.* at 74–79, 363.

³¹⁰ See, e.g., *id.* at 89.

U.S. households held approximately 40% of the value of corporate equity outstanding, and 57% of the value of mutual fund shares outstanding, which provide a general picture of the share of holdings by retail investors.³¹¹

In the third quarter of 2021, approximately 3,500 broker-dealers filed FOCUS Reports³¹² with FINRA. These firms varied in size, with median assets of approximately \$1.3 million and average assets of approximately \$1.5 billion. The top 1% of broker-dealers held 81% of the assets of broker-dealers overall, indicating a high degree of concentration in the industry. Of the approximately 3,500 filers, as of the end of 2020, 156 reported self-clearing public customer accounts, while 1,126 reported acting as an introducing broker and sending orders to another broker-dealer for clearing and not self-clearing. Broker-dealers that identified themselves as self-clearing broker-dealers, on average, had higher total assets than broker-dealers that identified themselves as introducing broker-dealers. While the decision to self-clear may be based on many factors, this evidence is consistent with the argument that there may currently be high barriers to entry for providing clearing services as a broker-dealer.

Clearing broker-dealers face liquidity risks as they are obligated to make payments to clearing agencies on behalf of customers who purchase securities. As discussed in more detail below, because customers of a clearing broker may default on their payment obligations to the broker, particularly when the price of a purchased security declines before settlement, clearing broker-dealers routinely seek to reduce the risks posed by their customers. For example, clearing broker-dealers may require customers to contribute financial resources in the form of margin to margin accounts, to pre-fund purchases in cash accounts, or may restrict the use of customers' unsettled funds. These measures are in many ways analogous to measures taken by clearing agencies to reduce and mitigate the risks posed by their clearing members. In addition, clearing broker-dealers may also mitigate the risks

³¹¹ See Board of Governors of the Federal Reserve System, Statistical Release Z.1, Financial Accounts of the United States: Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts, at 130 (Sept. 23, 2021), available at <https://www.federalreserve.gov/releases/z1/20210923/z1.pdf>.

³¹² FOCUS Reports, or "Financial and Operational Combined Uniform Single" Reports, are monthly, quarterly, and annual reports that broker-dealers generally are required to file with the Commission and/or SROs pursuant to Exchange Act Rule 17a-5, 17 CFR 240.17a-5.

posed by customers by charging higher transaction fees that reflect the value of the customer's option to default, thereby causing customers to internalize the cost of default that is inherent in the settlement process.³¹³ While not directly reducing the risk posed by customers to clearing members, these higher transaction fees at least allocate to customers a portion of the expected direct costs of customer default.

Another way the settlement cycle may affect transaction prices involves the potential use of funds during the settlement cycle. To the extent that buyers may use the cash to purchase securities during the settlement cycle for other purposes, they may derive value from the length of time it takes to settle a transaction. Testing this hypothesis, studies have found that sellers demand compensation for the benefit that buyers receive from deferring payment during the settlement cycle and that this compensation is incorporated in equity returns.³¹⁴

The settlement process also exposes investors to certain risks. The length of the settlement cycle sets the minimum amount of time between when an investor places an order to sell securities and when the customer can expect to have access to the proceeds of that sale. Investors take this into account when they plan transactions to meet liquidity needs. For example, under T+2 settlement, investors who experience liquidity shocks, such as unexpected expenses that must be met within one day, could not rely on obtaining funding solely through a sale of securities because the proceeds of the sale would not typically be available until the end of the second day after the sale. One possible strategy to deal with such a shock under T+2 settlement would be to borrow to meet payment obligations on day T+1 and repay the loan on the following day with the proceeds from a sale of securities, incurring the cost of one day of interest. Another strategy that investors may use is to hold financial resources to insure themselves from liquidity shocks.

³¹³ See *infra* Parts V.C.2 and V.C.4.

³¹⁴ See Victoria Lynn Messman, Securities Processing: The Effects of a T+3 System on Security Prices (May 2011) (Ph.D. dissertation, University of Tennessee—Knoxville), http://trace.tennessee.edu/utk_graddiss/1002/; Josef Lakonishok & Maurice Levi, *Weekend Effects on Stock Returns: A Note*, 37 J. Fin. 883 (1982), <https://www.jstor.org/stable/pdf/2327716.pdf>; Ramon P. DeGennaro, *The Effect of Payment Delays on Stock Prices*, 13 J. Fin. Res. 133 (1990), <http://onlinelibrary.wiley.com/doi/10.1111/j.1475-6803.1990.tb00543.x/abstract>.

3. Investment Companies and Investment Advisers

Shares issued by investment companies may settle on different timeframes. ETFs, certain closed-end funds, and mutual funds that are sold by brokers generally settle on T+2.³¹⁵ By contrast, mutual fund shares that are directly purchased from the fund generally settle on T+1. Mutual funds that settle on a different basis than the underlying investments currently face liquidity risk as a result of a mismatch between the timing of mutual fund share transaction settlement and the timing of fund portfolio security transaction order settlements. Mutual funds may manage these particular liquidity needs by, among other methods, using cash reserves, back-up lines of credit, or interfund lending facilities to provide cash to cover the settlement mismatch.³¹⁶ As of the end of 2020, there were 11,323 open-end funds (including money market funds and ETFs).³¹⁷ The assets of these funds were approximately \$29.3 trillion.³¹⁸ Of the 11,323 funds noted, 2,296 were ETFs with combined assets of \$5.5 trillion.³¹⁹

Under Section 22(e) of the Investment Company Act, an open-end fund generally is required to pay shareholders who tender shares for redemption within seven days of their tender.³²⁰ Open-end fund shares that are sold through broker-dealers must be redeemed within two days of a redemption request because broker-dealers are subject to Rule 15c6-1(a).

Furthermore, Rule 22c-1 under the Investment Company Act,³²¹ the “forward pricing” rule, requires funds, their principal underwriters, and dealers to sell and redeem fund shares at a price based on the current NAV next computed after receipt of an order to purchase or redeem fund shares, even though cash proceeds from purchases may be invested or fund assets may be sold in subsequent days in order to

³¹⁵ See *supra* note 84.

³¹⁶ 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 62274, 62285 n.100 (Oct. 15, 2015).

³¹⁷ See ICI, 2021 Investment Company Fact Book, at 40 (May 2021) (“2021 ICI Fact Book”), available at <https://www.ici.org/>. This comprises 9,027 open-end mutual funds, including mutual funds that invest primarily in other mutual funds, and 2,296 ETFs, including ETFs that invest primarily in other ETFs.

³¹⁸ See *id.* at 41.

³¹⁹ See *id.* at 40–41.

³²⁰ 15 U.S.C. 80a-22(e).

³²¹ 17 CFR 270.22c-1.

satisfy purchase requests or meet redemption obligations.

Based on Investment Adviser Registration Depository data as of December 2020, approximately 13,804 advisers registered with the Commission are required to maintain copies of certain books and records relating to their advisory business. The Commission further estimates that 2,521 registered advisers required to maintain copies of certain books and records relating to their advisory business would not be required to make and keep the proposed required records because they do not have any institutional advisory clients.³²² Therefore, the remaining 11,283 of these advisers, or 81.74% of the total registered advisers required to maintain copies of certain books and records relating to their advisory business, would enter a contract with a broker or dealer under proposed Rule 15c6-2 and therefore be subject to the related proposed amendment to Rule 204-2 under the Advisers Act (*i.e.*, to retain copies of confirmations received, and any allocation and each affirmation sent, with a date and time stamp for each allocation (if applicable) and affirmation that indicates when the allocation or affirmation was sent to the broker or dealer).

4. Current Market for Clearance and Settlement Services

As described in Part II.B, two affiliated entities, NSCC and DTC, facilitate clearance and settlement activities in U.S. securities markets in most instances. There is limited competition in the provision of the services that these entities provide. NSCC is the CCP for trades between broker-dealers involving equity securities, corporate and municipal debt, and UITs for the U.S. market. DTC is the CSD that provides custody and book-entry transfer services for the vast majority of securities transactions in the U.S. market involving equities, corporate and municipal debt, money market instruments, ADRs, and ETFs. CMSPs electronically facilitate communication among a broker-dealer, an institutional investor or its investment adviser, and the institutional investor's custodian to reach agreement on the details of a securities trade, thereby creating binding terms.³²³ As discussed further in Part III.D, FINRA currently requires broker-dealers to use a clearing agency, such as DTC or a CMSP, or a qualified vendor under the

³²² See *infra* note 425.

³²³ See *supra* Part II.B.1; see also T+2 Proposing Release, *supra* note 30, at 69246.

rule to complete delivery-versus-payment transactions with their customers.³²⁴

Broker-dealers compete to provide services to retail and institutional customers. Based on the large number of broker-dealers, there is likely a high degree of competition among broker-dealers. However, the markets that broker-dealers serve may be segmented along lines relevant for the analysis of competitive effects of the proposed amendment to Rule 15c6-1(a). As noted above, the number of broker-dealers that self-clear public customer accounts is smaller than the set of broker-dealers that introduce and do not self-clear. This could mean that introducing broker-dealers compete more intensively for customers than clearing broker-dealers. Further, clearing broker-dealers must meet requirements set by NSCC and DTC, such as financial responsibility requirements and clearing fund requirements. These requirements represent barriers to entry for brokers that may wish to become clearing broker-dealers, limiting competition among such entities.

Competition for customers affects how the costs associated with the clearance and settlement process are allocated among market participants. In managing the expected costs of risks from their customers and the costs of compliance with SRO and Commission rules, clearing broker-dealers decide what fraction of these costs to pass through to their customers in the form of fees and margin requirements, and what fraction of these costs to bear themselves. The level of competition that a clearing broker-dealer faces for customers will dictate the extent to which it is able to pass these costs through to its customers.

In addition, several factors affect the current levels of efficiency and capital formation in the various functions that make up the market for clearance and settlement services. First, at a general level, market participants occupying

various positions in the clearance and settlement system must post or hold liquid financial resources, and the level of these resources is a function of the length of the settlement cycle. For example, NSCC collects clearing fund contributions from members to help ensure that it has sufficient financial resources in the event that one of its members defaults on its obligations to NSCC. As discussed above, the length of the settlement cycle is one determinant of the size of NSCC's exposure to clearing members. As another example, mutual funds may manage liquidity needs by, among other methods, using cash reserves, back-up lines of credit, or interfund lending facilities to provide cash. These liquidity needs, in turn, are related to the mismatch between the timing of mutual fund transaction order settlements and the timing of fund portfolio security transaction order settlements.

Holding liquid assets solely for the purpose of mitigating counterparty risk or liquidity needs that arise as part of the settlement process could represent an allocative inefficiency. That is, because firms that are required to hold these assets might prefer to put them to alternative uses and because these assets may be more efficiently allocated to other market participants who value them for their fundamental risk and return characteristics rather than for their value as collateral. To the extent that any intermediaries between buyer and seller who facilitate clearance and settlement of the trade bear costs as a result of inefficient allocation of collateral assets, these inefficiencies may be reflected in higher transaction costs.

The settlement cycle may also have more direct impacts on transaction costs. As noted above, clearing broker-dealers may charge higher transaction fees to reflect the value of the customer's option to default and these fees may cause customers to internalize the cost of the default options inherent in the settlement process. However, these fees also make transactions more

costly and may influence the willingness of market participants to efficiently share risks or to supply liquidity to securities markets. Taken together, inefficiencies in the allocation of resources and risks across market participants may serve to impair capital formation.

Finally, market participants may make processing errors in the clearance and settlement process.³²⁵ Market participants have stated that manual processing and a lack of automation result in processing errors.³²⁶ Although some of these errors may be resolved within the settlement cycle and not result in a failed trade, those that are not may result in failed trades, which appear in the failure to deliver data.³²⁷ Further, market participants may incorporate the likelihood that processing errors result in delays in payments or deliveries into securities prices.³²⁸

Figure 5 shows total fails to deliver in shares by month from January 2016 through November 2021. The change in the U.S. settlement cycle from T+3 to T+2 became effective in September 2017. Although processing errors are only one reason a trade may result in a fail to deliver, there is no marked change in the fails data around the previous shortening of the settlement cycle.

³²⁵ See, e.g., Omgeo Study, *supra* note 155, at 12; see also T+1 Report, *supra* note 18, at 26.

³²⁶ Matthew Stauffer, Managing Director, Head of Institutional Trade Processing at DTCC, stated, "The findings of our survey highlight the benefits of leveraging automated post-trade solutions to reduce the costs of operational functions and the risk inherent in manual processes." See DTCC, DTCC Identifies Seven Areas of Broker Cost Savings as a Result of Greater Post-Trade Automation (Nov. 18, 2020), <https://www.dtcc.com/news/2020/november/18/dtcc-identifies-seven-areas-of-broker-cost-savings-as-a-result-of-greater-post-trade-automation>;

³²⁷ See Statement by The Depository Trust & Clearing Corporation, U.S. Securities and Exchange Commission Securities Lending and Short Sales Roundtable, at 3 (Sept. 30, 2009), <https://www.sec.gov/comments/4-590/4590-32.pdf>; see also T+1 Report, *supra* note 18, at 26.

³²⁸ See Messman, *supra* note 314.

³²⁴ See *supra* note 181 and accompanying text.

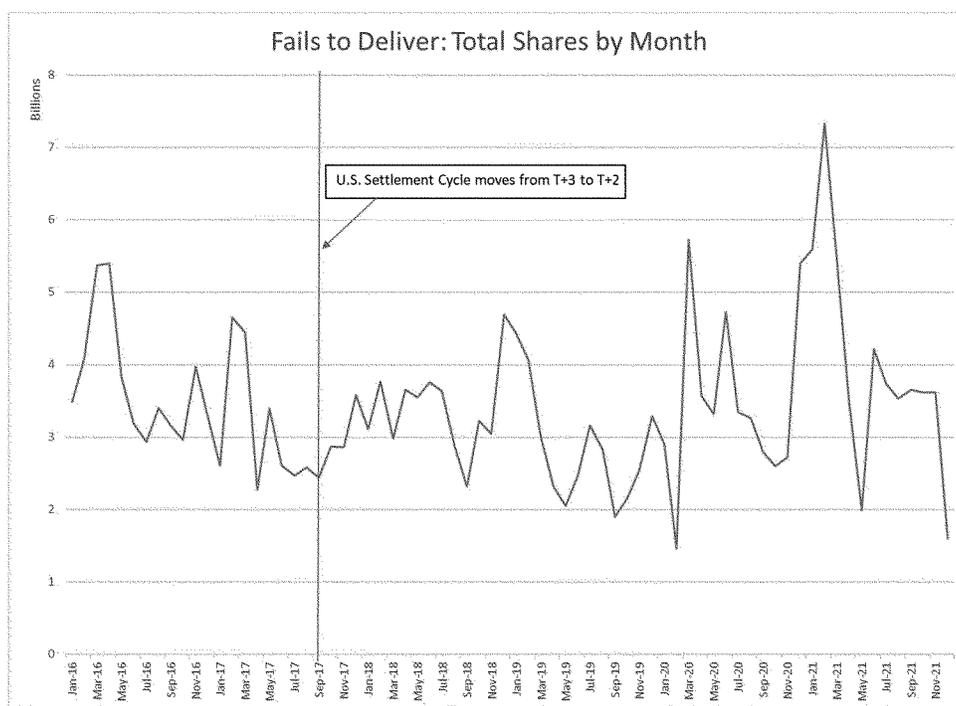


Figure 5. Monthly fails to deliver in shares.

C. Analysis of Benefits, Costs, and Impact on Efficiency, Competition, and Capital Formation

1. Benefits

The proposed amendment and new rules would likely yield benefits associated with the reduction of risk in the settlement cycle. By shortening the settlement cycle, the proposed amendment would reduce both the aggregate market value of all unsettled trades and the amount of time that CCPs or the counterparties to a trade may be subject to market and credit risk from an unsettled trade.³²⁹ First, holding transaction volumes constant, the market value of transactions awaiting settlement at any given point in time under a T+1 settlement cycle will be approximately one half lower than under the current T+2 settlement cycle. Using the risk mitigation framework described in Part V.B.1, based on published statistics from the first quarter of 2021³³⁰ and holding average dollar volumes constant, the aggregate notional value of unsettled transactions at NSCC would fall from nearly \$90 billion to approximately \$45 billion.³³¹

Second, a market participant that experiences counterparty default and enters into a new transaction under a T+2 settlement cycle is exposed to more

market risk than would be the case under a T+1 settlement cycle. As a result, market participants that are exposed to market, credit, and liquidity risks would be exposed to less risk under a T+1 settlement cycle. This reduction in risk may also extend to mutual fund transactions conducted with broker-dealers that currently settle on a T+2 basis.³³² To the extent that these transactions currently give rise to counterparty risk exposures between mutual funds and broker-dealers, these exposures may decrease as a consequence of a shorter settlement cycle. In addition, a shorter standard settlement cycle would reduce liquidity risks that could arise by allowing investors to obtain the proceeds of securities transactions sooner. These risks affect all market participants, are difficult to diversify away, and require resources to manage and mitigate.

CCPs require clearing members to post financial resources in order to secure members' obligations to deliver cash and securities to the CCP. Clearing members in turn impose fees on their customers, e.g., introducing broker-dealers, institutional investors, and

retail investors. The margin requirements required by the CCP are a function of the risk posed to the CCP by the potential default of the clearing member. That risk is a function of several factors including the value of trades submitted for clearing but not yet settled and the volatility of the securities prices that make up those unsettled trades. As these factors are an increasing function of the time to settlement, by reducing settlement from T+2 to T+1, a CCP may require less collateral from its members, and the CCP's members may, in turn, reduce fees that they may pass down to other market participants, including introducing broker-dealers, institutional investors, and retail investors.

Any reduction in clearing broker-dealers' required margin would provide multiple benefits. First, financial resources that are used to mitigate the risks of the clearance and settlement process can be put to alternative uses. Reducing the financial risks associated with the overall clearance and settlement process would reduce the amount of collateral required to mitigate these risks, which would reduce the costs that market participants bear to manage and mitigate these risks and the allocative inefficiencies that may stem

³²⁹ See *supra* Part III.A.2.

³³⁰ See *supra* note 307, at 14.

³³¹ See *id.* at 20.

³³² In today's environment, ETFs and certain closed-end funds clear and settle on a T+2 basis. Open-end funds (*i.e.*, mutual funds) generally settle on a T+1 basis, except for certain retail funds which typically settle on T+2. Thus, the proposed amendment to Rule 15c6-1(a) would require ETFs, closed-end funds, and mutual funds settling on a T+2 basis to revise their settlement timeframes.

from risk management practices.³³³ Second, assets that are valuable because they are particularly suited to meeting financial resource obligations may be better allocated to market participants that hold these assets for their fundamental risk and return characteristics. This improvement in allocative efficiency may improve capital formation.

A portion of the savings from less costly risk management under a T+1 standard settlement cycle relative to a T+2 standard settlement cycle may flow through to investors. Investors may be able to profitably redeploy financial resources that were once needed to fund higher clearing fees, for example.

Market participants might also individually benefit through reduced clearing fund deposit requirements. In 2012, the BCG Study estimated that cost reductions related to reduced clearing fund contributions resulting from moving from a T+3 to a T+2 settlement cycle would amount to \$25 million per year.³³⁴ In addition, a shorter settlement cycle might reduce liquidity risk by allowing investors to obtain the proceeds of their securities transactions sooner. Reduced liquidity risk may be a benefit to individual investors, but it may also reduce the volatility of securities markets by reducing liquidity demands in times of adverse market conditions, potentially reducing the correlation between market prices and the risk management practices of market participants.³³⁵

Shortening the settlement cycle may reduce incentives for investors to trade excessively in times of high

volatility.³³⁶ Such incentives exist because investors do not always bear the full cost of settlement risk for their trades. Broker-dealers incur costs in managing settlement risk with CCPs. Broker-dealers can recover the average cost of risk management from their customers. However, if a particular trade has above-average settlement risk, such as when market prices are unusually volatile, it is difficult for broker-dealers to pass along these higher costs to their customers because fees typically depend on factors other than those such as market volatility that impact settlement risk. In extreme cases broker-dealers may prevent a customer from trading.³³⁷ Shortening the settlement cycle reduces the cost of risk management and should reduce any such incentives to trade more than they otherwise would if they bore the full cost of settlement risk for their trades.

The benefits of harmonized settlement cycles may also accrue to mutual funds. As described above,³³⁸ transactions in mutual fund shares typically settle on a T+1 basis even when transactions in their portfolio securities settle on a T+2 basis. As a result, there is a one-day mismatch between when these funds make payments to shareholders that redeem shares and when they receive cash proceeds for portfolio securities they sell. This mismatch represents a source of liquidity risk for mutual funds. Shortening the settlement cycle by one day will mitigate the liquidity risk due to this mismatch. As a result, mutual funds that settle on a T+1 basis may be able to reduce the size of cash reserves or the size of back up credit facilities that some currently use to manage liquidity risk from the mismatch in settlement cycles. Further, mutual funds may be able to invest incoming cash more quickly when funds have net subscriptions, because the settlement time for the purchase of fund shares will be aligned with the settlement time for portfolio investments, thus allowing funds to maximize their exposure to their defined investment strategies.

The Commission preliminarily believes that these benefits are unlikely to be substantially mitigated by the exceptions to Rule 15c6-1(a) discussed

in Part III.A. Market participants that rely on Rule 15c6-1(b) in order to transact in limited partnership interests that are not listed on an exchange or for which quotations are not disseminated through an automated quotation system of a registered securities association would likely continue to rely on the exception if the Commission adopts the proposed amendment to Rule 15c6-1(a). There may be transactions covered by Rule 15c6-1(b) that in the past did not make use of this exception because they settled within two business days, but that may require use of this exception under the proposed amendment to paragraph (a) of the rule because they require more than one business day to settle. However, these markets are opaque and the Commission does not have data on transactions in these categories that currently settle within two days but that might make use of this exception under the proposed amendment to Rule 15c6-1(a). In addition, pursuant to Rule 15c6-1(b), the Commission has granted an exemption from Rule 15c6-1 for securities that do not have facilities for transfer or delivery in the U.S.³³⁹ Market participants relying on this exemption are unlikely to be impacted by a shortening of the standard settlement cycle to T+1.

Finally, the extent to which different types of market participants would experience any benefits that stem from the proposed amendment to Rule 15c6-1(a) may depend on their market power. As discussed above,³⁴⁰ the clearance and settlement system involves a number of intermediaries that provide a range of services between the ultimate buyer and seller of a security. Those market participants that have a greater ability to negotiate with customers or service providers may be able to retain a larger portion of the operational cost savings from a shorter settlement cycle than others, as they may be able to use their market power to avoid passing along the cost savings to their clients.

The Commission also proposes to delete Rule 15c6-1(c) that establishes a T+4 settlement cycle for firm commitment offerings for securities that are priced after 4:30 p.m. ET, unless otherwise expressly agreed to by the parties at the time of the transaction.³⁴¹ As discussed above, paragraph (c) is rarely used in the current T+2 settlement environment, but the IWG expects a T+1 standard settlement cycle would increase reliance on paragraph

³³³ See *supra* Part V.B (further discussing financial resources collected to mitigate and manage financial risks).

³³⁴ See BCG Study, *supra* note 22, at 10. According to SIFMA, average daily trading volume in U.S. equities grew from \$253.1B in 2011 to \$564.7B in 2021, an increase of 123%. See CBOE Exchange, Inc., and SIFMA, *US Equities and Related Statistics* (Jan. 3, 2022), <https://www.sifma.org/resources/research/us-equity-and-related-securities-statistics/us-equities-and-related-statistics-sifma/>. Price volatility, as measured by the standard deviation of the price, is concave in time, which means that as a period of time increases, volatility will increase, but at a decreasing rate. This suggests that the reduction in price volatility from moving from T+2 settlement to T+1 settlement is larger than the reduction in price volatility from moving from T+3 settlement to T+2 settlement. These two facts suggest that the estimated reduction in clearing fund contributions would be more than \$25 million per year.

³³⁵ See Peter F. Christoffersen & Francis X. Diebold, *How Relevant is Volatility Forecasting for Financial Risk Management?*, 82 *Rev. Econ. & Stat.* 12 (2000), http://www.mitpressjournals.org/doi/abs/10.1162/003465300558597#.V6xeL_nR-JA. The paper shows that volatility can be predicted in the short run, and concludes that short run forecastable volatility would be useful for risk management practices.

³³⁶ See Sam Schulhofer-Wohl, *Externalities in securities clearing and settlement: Should securities CCPs clear trades for everyone?* (Fed. Res. Bank Chi. Working Paper No. 2021-02, 2021).

³³⁷ This occurred in January 2021 following heightened interest in certain "meme" stocks. See *supra* Part II.A; see also Staff Report on Equity and Options Market Structure Conditions in Early 2021, at 31-35 (Oct. 14, 2021), <https://www.sec.gov/files/staff-report-equity-options-market-structure-conditions-early-2021.pdf>.

³³⁸ See *supra* note 332; see also *supra* Part V.B.3.

³³⁹ See *supra* note 90 and accompanying text.

³⁴⁰ See *supra* Part II.B.

³⁴¹ See *supra* Part III.A.3.

(c).³⁴² The Commission preliminarily believes that establishing T+1 as the standard settlement cycle for these firm commitment offerings, and thereby aligning the settlement cycle with the standard settlement cycle for securities generally, would reduce exposures of underwriters, dealers, and investors to credit and market risk, and better ensure that the primary issuance of securities is available to settle secondary market trading in such securities. The Commission believes that harmonizing the settlement cycle for such firm commitment offerings with secondary market trading, to the greatest extent possible, limits the potential for operational risk. Further, should there be a need to settle beyond T+1, perhaps because of complex documentation requirements of certain types of offerings, the parties to the transaction can agree to a longer settlement period pursuant to paragraph (d) when they enter the transaction.

In addition to the amendment to Rule 15c6-1(a) and proposed deletion of Rule 15c6-1(c), the Commission proposes three additional rules applicable, respectively, to broker-dealers, investment advisers, and CMSPs to improve the efficiency of managing the processing of institutional trades under the shortened timeframes that would be available in a T+1 environment. First, the Commission proposes new Rule 15c6-2 to require that a broker-dealer enter into contracts with institutional customers that can achieve the allocation, confirmation, and affirmation of a securities transaction no later than the end of trade date.³⁴³

The Commission preliminarily believes that implementing a T+1 standard settlement cycle, as well as any potential further shortening beyond T+1, will necessitate significant increases in same-day affirmation rates because timely affirmations will be critical to achieving timely settlement. In this way, the Commission also preliminarily believes that proposed Rule 15c6-2 should facilitate timely settlement as a general matter because it will accelerate the transmission and affirmation of trade data to trade date, improving the accuracy and efficiency of institutional trade processing and reducing the potential for settlement failures. The Commission further anticipates that proposed Rule 15c6-2 would likely encourage further development of automated and standardized practices among market participants more generally, particularly

those that continue to rely on manual processes to achieve settlement.

Although same-day affirmation is considered a best practice for institutional trade processing, adoption is not universal across market participants or even across all trades entered by a given participant. Market participants continue to use hundreds of “local” matching platforms, and rely on inconsistent SSI data independently maintained by broker-dealers, investment managers, custodians, sub-custodians, and agents on separate databases. As discussed in Part II.B, processing institutional trades requires managing the back and forth involved with transmitting and reconciling trade information among the parties, functionally matching and re-matching with the counterparties to the trade, as well as custodians and agents, to facilitate settlement. It also requires market participants to engage in allocation processes, such as allocation-level cancellations and corrections, some of which are still processed manually.³⁴⁴ This collection of redundant, often manual steps and the use of uncoordinated (*i.e.*, not standardized) databases can lead to delays, exceptions processing, settlement fails, wasted resources, and economic losses. The total industry headcount employed in managing today’s pre-settlement and settlement fails management process is in the thousands, and additional costs and risks resulting from the inability to settle efficiently are significant.³⁴⁵ The Commission believes that proposed Rule 15c6-2 should increase the percentage of trades that achieve an affirmed confirmation on trade date and should help facilitate an orderly transition to T+1. Proposed Rule 15c6-2 would also improve the efficiency of the settlement cycle by incentivizing market participants to commit to operational and technological upgrades that facilitate same-day affirmation to eliminate, among other things, manual operations, while also reducing operational risk and promoting readiness for shortening the settlement cycle.

Second, the Commission proposes to amend the recordkeeping obligations of investment advisers to ensure that they are properly documenting their related allocations and affirmations, as well as the confirmations they receive from their broker-dealers.³⁴⁶ The proposed amendment to Rule 204-2 would require advisers to time and date stamp

records of any allocation and each affirmation. The Commission believes that the timing of communicating allocations to the broker or dealer is a critical pre-requisite to ensure that confirmations can be issued in a timely manner, and affirmation is the final step necessary for an adviser to acknowledge agreement on the terms of the trade or alert the broker or dealer of a discrepancy. The Commission believes the proposed recordkeeping requirements would help advisers to establish that they have met their obligations to achieve a matched trade.

Finally, the Commission proposes a requirement for CMSPs to establish, implement, maintain, and enforce written policies and procedures designed to facilitate straight-through processing.³⁴⁷ Under the rule, a CMSP facilitates straight-through processing when its policies and procedures enable its users to minimize, to the greatest extent that is technologically practicable, the need for manual input of trade details or manual intervention to resolve errors and exceptions that can prevent settlement of the trade.³⁴⁸

The Commission believes that increasing the efficiency of using a CMSP can reduce costs and risks associated with processing institutional trades and improve the efficiency of the National C&S System. CMSPs have become increasingly connected to a wide variety of market participants in the U.S.,³⁴⁹ increasing the need to reduce risks and inefficiencies that may result from use of a CMSPs’ systems. Because the proposed rule would preclude reliance on service offerings at CMSPs that rely on manual processing, the Commission preliminarily believes the proposed rule will better position CMSPs to provide services that not only reduce risk generally but also help facilitate an orderly transition to a T+1 standard settlement cycle, as well as potential further shortening of the settlement cycle in the future. The proposed requirement would support the benefits derived from a shortening of the settlement cycle and would mitigate any subsequent potential increase in fails due to the reduced time to remediate any errors in trades.

Proposed Rule 17Ad-27 also would require a CMSP to submit every twelve months to the Commission a report that describes the following: (i) The CMSP’s current policies and procedures for facilitating straight-through processing;

³⁴⁷ See *supra* Part III.D; see also *supra* Part III.D.1 (further discussing the term “straight-through processing”).

³⁴⁸ See *supra* note 347.

³⁴⁹ See *supra* note 185.

³⁴² T+1 Report, *supra* note 18, at 33–35.

³⁴³ See *supra* Part III.B.1.

³⁴⁴ See *supra* note 168.

³⁴⁵ See DTCC Modernizing Paper, *supra* note 59.

³⁴⁶ See *supra* Part III.C.

(ii) its progress in facilitating straight-through processing during the twelve month period covered by the report; and (iii) the steps the CMSP intends to take to facilitate and promote straight-through processing during the twelve month period that follows the period covered by the report.³⁵⁰ The proposed requirement would also inform the Commission and the public, particularly the direct and indirect users of the CMSP, as to the progress being made each year to advance implementation of straight-through processing with respect to the allocation, confirmation, affirmation, and matching of institutional trades, the communication of messages among the parties to the transactions, and the availability of service offerings that reduce or eliminate the need for manual processing.

Proposed Rule 17Ad-27 would require the CMSP to file the report on EDGAR using Inline XBRL, a structured (machine-readable) data language. Requiring a centralized filing location and a machine-readable data language for the reports would facilitate access, retrieval, analysis, and comparison of the disclosed straight-through processing information across different CMSPs and time periods by the Commission and the public, thus potentially augmenting the informational benefits of the report requirement.

2. Costs

The Commission preliminarily believes that compliance with a T+1 standard settlement cycle would involve initial fixed costs to update systems and processes.³⁵¹ The Commission does not have all of the data necessary to form its own firm-level estimates of the costs of updates to systems and processes, as the types of data needed to form these estimates are difficult or impossible for the Commission to collect. However, the Commission has used inputs provided by industry studies discussed in this release to quantify these costs to the extent possible in Part V.C.5. In addition, the Commission encourages commenters to provide any information

or data on the costs to market participants of the proposed rule.

The operational cost burdens associated with the proposed amendment to Rule 15c6-1(a) for different market participants might vary depending on each market participant's degree of direct or indirect inter-connectivity to the clearance and settlement process, regardless of size. For example, market participants that internally manage more of their own post-trade processes would directly incur more of the upfront operational costs associated with the proposed amendment to Rule 15c6-1(a), because they would be required to directly undertake more of the upgrades and testing necessary for a T+1 standard settlement cycle. As mentioned in Part II.B, other market participants might outsource the clearance and settlement of their transactions to third-party providers of back-office services. The exposures to the operational costs associated with shortening the standard settlement cycle would be indirect to the extent that third-party service providers pass through the costs of infrastructure upgrades to their customers. The degree to which customers bear operational costs depends on their bargaining position relative to third-party providers. Large customers with market power may be able to avoid internalizing these costs, while small customers in a weaker negotiation position relative to service providers may bear the bulk of these costs.

Further, changes to initial and ongoing operational costs may make some self-clearing market participants alter their decision to continue internally managing the clearance and settlement of their transactions. Entities that currently internally manage their clearance and settlement activity may prefer to restructure their businesses to rely instead on third-party providers of clearance and settlement services that may be able to amortize the initial fixed cost of upgrade across a much larger volume of transaction activity.

In addition, the shortening of the settlement cycle may increase the need for some market participants engaging in cross-border and cross-asset transactions to hedge risks stemming from mismatched settlement cycles, resulting in additional costs. For example, under the proposed T+1 settlement cycle, a market participant selling a security in European equity markets to fund a purchase of securities in U.S. markets would face a one day lag between settlement in Europe and settlement in the U.S. The market participant could choose between

bearing an additional day of market risk in the U.S. trading markets by delaying the purchase by a day, or funding the purchase of U.S. shares with short-term borrowing. Additionally, because the FX market has a T+2 settlement cycle,³⁵² the market participant would also be faced with a choice between bearing an additional day of currency risk due to the need to sell Euros as part of the transaction, or to incur the cost related to hedging away this risk in the forward or futures market.

The way that different market participants would likely bear costs as a result of the proposed amendment to Rule 15c6-1(a) may also vary based on their business structure. For example, a shorter standard settlement cycle will require payment for securities that settle regular-way by T+1 rather than T+2. Generally, regardless of current funding arrangements between investors and broker-dealers, removing one business day between execution and settlement would mean that broker-dealers could choose between requiring investors to fund the purchase of securities one business day earlier while extending the same level of credit they do under T+2 settlement, or providing an additional business day of funding to investors. In other words, broker-dealers could pass through some of the costs of a shorter standard settlement cycle by imposing the same shorter cycle on investors, or they could pass these costs on to investors by raising transactions fees to compensate for the additional business day of funding the broker-dealer may choose to provide. The extent to which these costs get passed through to customers may depend on, among other things, the market power of the broker-dealer. If a broker-dealer does not face significant competition, its market power may enable it to recover the entire initial investment cost from its customers. On the other hand, a broker-dealer that faces perfect competition for its customers may be unable to pass along any of these costs to its customers.³⁵³

However, broker-dealers that predominantly serve retail investors may experience the burden of an earlier payment requirement differently from broker-dealers with more institutional

³⁵⁰ See *supra* Part III.D.2.

³⁵¹ Industry sources have suggested some updates to systems and processes might yield operational cost savings after the initial update. *E.g.*, "While there may be . . . up-front implementation costs to transition the industry to T+1, the industry foresees long-term cost reduction for market participants, and by extension, costs borne by end investors, given the benefits of moving to T+1 settlement." T+1 Report, *supra* note 18, at 9; see *infra* Part V.C.5.a) for industry estimates of the costs and benefits of the proposed amendment to Rule 15c6-1(a).

³⁵² See, e.g., CME Rulebook, Ch. 13, § 1302 ("Spot FX Transaction" means a currency purchase and sale that is bilaterally settled by the counterparties via an actual delivery of the relevant currencies within two Business Days.), <https://www.cmegroup.com/rulebook/CME/>. U.S. and Canadian dollar spot FX transactions settle on the next business day. *Id.* Ch. 13, Appendix.

³⁵³ See *supra* Part V.C.1 for additional discussion regarding the impact of broker-dealer market power. See *infra* Part V.C.5.b)(3) for quantitative estimates of the costs to broker-dealers.

clients or large custodian banks because of the way retail investors fund their accounts. Retail investors may find it difficult to accelerate payments associated with their transactions, which may cause broker-dealers who are unwilling to extend additional credit to retail investors to instead require that these investors pre-fund their transactions.³⁵⁴ These broker-dealers may also experience costs unrelated to funding choices. For instance, retail investors may require additional or different services such as education regarding the impact of the shorter standard settlement cycle.

Finally, a shorter settlement cycle may result in higher costs associated with liquidating a defaulting member's position, as a shorter horizon may result in larger price impacts, particularly for less liquid assets. For example, when a clearing member defaults, NSCC is obligated to fulfill its trade guarantee with the defaulting member's counterparty. One way it accomplishes this is by liquidating assets from clearing fund contributions from clearing members. However, liquidating assets in shorter periods of time can have larger adverse impacts on the prices of the assets. Shortening the standard settlement cycle from two business days to one business day could reduce the amount of time that NSCC would have to liquidate its assets, which may exacerbate the price impact of liquidation.

3. Economic Implications Through Other Commission Rules

As noted in Part III.E, the proposed amendment to Rule 15c6-1(a), by shortening the standard settlement cycle, could have an ancillary impact on the means by which market participants comply with existing regulatory obligations that relate to the settlement timeframe. The Commission also provided illustrative examples of specific Commission rules that include such requirements or are otherwise are keyed-off settlement date, including Regulation SHO,³⁵⁵ and certain provisions included in the Commission's financial responsibility rules.^{356 357}

³⁵⁴ See *infra* Part V.C.5.b(3) for additional discussion regarding retail investors and their broker-dealers.

³⁵⁵ 17 CFR 242.200 *et seq.*

³⁵⁶ See *supra* Part III.E.2.

³⁵⁷ The Commission is also soliciting comment on the impact of shortening the settlement cycle on compliance with Rule 10b-10 under the Exchange Act and broker-dealer obligations with regard to prospectus delivery. See *supra* Parts III.E.3 and III.E.4. However, based on current practices and comments received by the Commission to the T+2 proposing release, the Commission preliminarily

believes shortening the settlement cycle to T+1 will not impact compliance with these rules. *Id.*

Financial markets and regulatory requirements have evolved significantly since the Commission adopted Rule 15c6-1 in 1993. Market participants have responded to these developments in diverse ways, including implementing a variety of systems and processes, some of which may be unique to specific market participants and their businesses, and some of which may be integrated throughout business operations of certain market participants. Because of the broad variety of ways in which market participants currently satisfy regulatory obligations pursuant to Commission rules, in most circumstances it is difficult to identify those practices that market participants would need to change in order to meet these other obligations. Under these circumstances, and without additional information, the Commission is unable to provide an estimate of the ancillary economic impact that the proposed amendment to Rule 15c6-1(a) would have on how market participants comply with other Commission rules. The Commission invites commenters to provide quantitative and qualitative information about these potential economic effects.

In certain cases, based on information about current market practices, the Commission preliminarily believes that the proposed amendment to Rule 15c6-1(a) would be unlikely to change the means by which market participants comply with existing regulatory requirements. In these cases, the Commission believes that market participants would not incur significant increased costs of compliance from such regulatory requirements from shortening the settlement cycle to T+1.

In other cases, however, the proposed amendment may incrementally increase the costs associated with complying with other Commission rules where such rules potentially require broker-dealers to engage in purchases of securities. Two examples of these types of rules are Regulation SHO and the Commission's financial responsibility rules. In most instances, Regulation SHO governs the timeframe in which a "participant" of a registered clearing agency must close out a fail to deliver position by purchasing or borrowing securities.³⁵⁸ Similarly, some of the Commission's financial responsibility rules relate to actions or notifications that reference the settlement date of a transaction. For example, Exchange Act Rule 15c3-3(m)³⁵⁹ uses the settlement

believes shortening the settlement cycle to T+1 will not impact compliance with these rules. *Id.*

³⁵⁸ See *supra* Part III.E.1.

³⁵⁹ 17 CFR 240.15c3-3(m).

date to prescribe the timeframe in which a broker-dealer must complete certain sell orders on behalf of customers. As noted above, the term "settlement date" is also incorporated into paragraph (c)(9) of Rule 15c3-1,³⁶⁰ which explains what it means to "promptly transmit" funds and "promptly deliver" securities within the meaning of paragraphs (a)(2)(i) and (a)(2)(v) of Rule 15c3-1. As explained above, the concepts of promptly transmitting funds and promptly delivering securities are incorporated in other provisions of the financial responsibility rules.³⁶¹ Under the proposed amendment to Rule 15c6-1(a), the timeframes included in these rules will be one business day closer to the trade date.

The Commission preliminarily believes that shortening these timeframes would not materially affect the costs that broker-dealers would likely incur to meet their Regulation SHO obligations and obligations under the Commission's financial responsibility rules. Nevertheless, the Commission acknowledges that a shorter settlement cycle could affect the processes by which broker-dealers manage the likelihood of incurring these obligations. For example, broker-dealers may currently have in place inventory management systems that help them avoid failing to deliver securities by T+2. Broker-dealers would likely incur costs in order to update these systems to support a shorter settlement cycle.

In cases where market participants will need to adjust the way in which they comply with other Commission rules, the magnitude of the costs associated with these adjustments is difficult to quantify. As noted above, market participants employ a wide variety of strategies to meet regulatory obligations. For example, broker-dealers may ensure that they have securities available to meet their obligations by using inventory management systems or they may choose instead to borrow securities. An estimate of costs is further complicated by the possibility that market participants could change their compliance strategies in response to a shorter standard settlement cycle.

As with the T+2 transition, the Commission anticipates that the proposed transition to T+1 would again require changes to SRO rules and changes to the operations or market participants subject to those rules to achieve consistency with a T+1 standard settlement cycle. Certain SRO

³⁶⁰ 17 CFR 240.15c3-1(c)(9).

³⁶¹ See, e.g., 17 CFR 240.15c3-1(a)(2)(i), (a)(2)(v); 17 CFR 240.15c3-3(k)(1)(iii), (k)(2)(i), (k)(2)(ii); 17 CFR 240.17a-5(e)(1)(A); 17 CFR 240.17a-13(a)(3).

rules reference existing Rule 15c6-1 or currently define “regular way” settlement as occurring on T+2 and, as such, may need to be amended in connection with shortening the standard settlement cycle to T+1. Certain timeframes or deadlines in SRO rules also may refer to the settlement date, either expressly or indirectly. In such cases, the SROs may need to amend these rules in connection with shortening the settlement cycle to T+1.³⁶²

The Commission invites commenters to provide quantitative and qualitative information about the impact of the proposed amendment to Rule 15c6-1(a) on the costs associated with compliance with other Commission rules.

4. Effect on Efficiency, Competition, and Capital Formation

Market participants may incur initial costs for the investments necessary to comply with a shorter standard settlement cycle.³⁶³ However, these costs would likely differ across market participants and these differences may exacerbate coordination problems. First, per-transaction operational costs clearing members incur in connection with the clearing services they provide may be higher for members that clear fewer transactions than such costs are for members that clear a higher volume of transactions. Thus, the extent to which many of the upgrades necessary for a T+1 standard settlement cycle are optimal for a member to adopt unilaterally may depend, in part, on the transaction volume cleared by such member. For example, certain upgrades necessary for a T+1 standard settlement cycle may result in economies of scale, where large clearing members are able to comply with the proposed amendment to Rule 15c6-1(a) at a lower per-transaction cost than smaller members. As a result, larger members might take a short time to recover their initial costs for upgrades; smaller members with lower transaction volumes might take longer to recover their initial cost outlays and might be more reluctant to make the upgrades in the absence of the proposed amendment. These differences in cost per transaction may be mitigated through the use of third-party service providers.

In addition, the Commission acknowledges that the upgrades necessary to implement a shorter standard settlement cycle may produce

indirect economic effects. We analyze some of these indirect effects, such as the impact on competition and third-party service providers, in the following section.

A shorter settlement cycle might improve the efficiency of the clearance and settlement process through several channels. First, the Commission preliminarily believes that the primary effect that a shorter settlement cycle would have on the efficiency of the settlement process would be a reduction in the credit, market, and liquidity risks that broker-dealers, CCPs, and other market participants are subject to during the standard settlement cycle.³⁶⁴ A shorter standard settlement cycle will generally reduce the volume of unsettled transactions that could potentially pose settlement risk to counterparties. Shortening the period between trade execution and settlement would enable trades to be settled with less aggregate risk to counterparties or the CCP. A shorter standard settlement cycle may also decrease liquidity risk by enabling market participants to access the proceeds of their transactions sooner, which may reduce the cost market participants incur to handle idiosyncratic liquidity shocks (*i.e.*, liquidity shocks that are uncorrelated with the market). That is, because the time interval between a purchase/sale of securities and payment is reduced by one business day, market participants with immediate payment obligations that they could cover by selling securities would be required to obtain short-term funding for one less day.³⁶⁵ As a result of reduced cost associated with covering their liquidity needs, market participants may, under particular circumstances, be able to shift assets that would otherwise be held as liquid collateral towards more productive uses, improving allocative efficiency.³⁶⁶

Second, a shorter standard settlement cycle may increase price efficiency through its effect on credit risk exposures between financial intermediaries and their customers. In particular, a prior study noted that certain intermediaries that transact on behalf of investors, such as broker-dealers, may be exposed to the risk that their customers default on payment obligations when the price of purchased securities declines during the settlement cycle.³⁶⁷ As a result of the option to

default on payment obligations, customers’ payoffs from securities purchases resemble European call options and, from a theoretical standpoint, can be valued as such. Notably, the value of European call options increases in the time to expiration³⁶⁸ suggesting that the value of call options held by customers who purchase securities is increasing in the length of the settlement cycle. In order to compensate itself for the call option that it writes, an intermediary may include the cost of these call options as part of its transaction fee and this cost may become a component of bid-ask spreads for securities transactions. By reducing the value of customers’ option to default by reducing the option’s time to maturity, a shorter standard settlement cycle may reduce transaction costs in U.S. securities markets. In addition, to the extent that any benefit buyers receive from deferring payment during the settlement cycle is incorporated in securities returns,³⁶⁹ the proposed amendment to Rule 15c6-1(a) may reduce the extent to which such returns deviate from returns consistent with changes in fundamentals.

As discussed in more detail above, the Commission preliminarily believes that the proposed amendment to Rule 15c6-1(a) would likely require market participants to incur costs related to infrastructure upgrades and would likely yield benefits to market participants, largely in the form of reduced financial risks related to settlement. As a result, the Commission preliminarily believes that the proposed amendment to Rule 15c6-1(a) could affect competition in a number of different, and potentially offsetting, ways.

The prospective reduction in financial risks related to shortening the standard settlement cycle may represent a reduction in barriers to entry for certain market participants.³⁷⁰ Reductions in the financial resources required to cover an NSCC member’s clearing fund requirements that result from a shorter standard settlement cycle could encourage financial firms that currently clear transactions through NSCC clearing members to become clearing members themselves.

³⁶⁸ All other things equal, an option with a longer time to maturity is more likely to be in the money given that the variance of the underlying security’s price at the exercise date is higher.

³⁶⁹ See *supra* Part V.B.2.

³⁷⁰ See *supra* Part V.C.1 for a discussion of the reduction in credit, market, and liquidity risks to which NSCC would be subject as a result of a shortening of the settlement cycle and the subsequent reduction financial resources dedicated to mitigating those risks.

³⁶² The T+1 Report similarly indicates that SROs will likely need to update their rules to facilitate a transition to a T+1 standard settlement cycle. T+1 Report, *supra* note 18, at 35.

³⁶³ See *supra* Part V.C.2.

³⁶⁴ Reduction of these risks should result in the reduction of margin requirements and other risk management activity that requires resources that could be put to another use.

³⁶⁵ See *supra* Part V.B.2.

³⁶⁶ See *supra* Part V.A.

³⁶⁷ See Madhavan et al., *supra* note 296.

Their entry into the market could promote competition among NSCC clearing members. Furthermore, if a reduction in settlement risks results in lower transaction costs for the reasons discussed above, market participants that were, on the margin, discouraged from supplying liquidity to securities markets due to these costs could choose to enter the market for liquidity suppliers, increasing competition.

At the same time, the Commission acknowledges that the process improvements required to enable a shorter standard settlement cycle could adversely affect competition. Among clearing members, where such process improvements might be necessary to comply with the shorter standard settlement cycle required under the proposed amendment to Rule 15c6–1(a), the cost associated with compliance might increase barriers to entry, because new firms would incur higher fixed costs associated with a shorter standard settlement cycle if they wish to enter the market. Clearing members might choose to comply by upgrading their systems and processes or may choose instead to exit the market for clearing services. The exit of clearing members could have negative consequences for competition among clearing members. Clearing activity tends to be concentrated among larger broker-dealers.³⁷¹ Clearing member exit could result in further concentration and additional market power for those clearing members that remain.

Alternatively, some current clearing members may choose to comply in part by outsourcing their operational needs to third-party service providers. Use of third-party service providers may represent a reasonable response to the operational costs associated with the proposed amendment to Rule 15c6–1(a). To the extent that third-party service providers are able to spread the fixed costs of compliance across a larger volume of transactions than their clients, the Commission preliminarily believes that the use of third-party service providers might impose a smaller compliance cost on clearing members than if these firms directly bore the costs of compliance. The Commission preliminarily believes that this impact may stretch beyond just clearing members. The use of third-party service providers may mitigate the extent to which the proposed amendment to Rule 15c6–1(a) raises barriers to entry for broker-dealers. Because these barriers to entry may have adverse effects on competition between clearing members, we preliminarily

believe that the use of third-party service providers may mitigate the adverse effects of the proposed amendment to Rule 15c6–1(a) on competition between broker-dealers.

Existing market power may also affect the distribution of competitive impacts stemming from the proposed amendment to Rule 15c6–1(a) across different types of market participants. While, as noted above, reductions in the credit, market, and liquidity risks that broker-dealers, CCPs, and other market participants are subject to during the standard settlement cycle could promote competition among clearing members and liquidity suppliers, these groups may benefit to differing degrees, depending on the extent to which they are able to capture the benefits of a shortened standard settlement cycle.

Finally, a shorter standard settlement cycle might also improve the capital efficiency of the clearance and settlement process, which would promote capital formation in U.S. securities markets and in the financial system generally.³⁷² A shorter standard settlement cycle would reduce the amount of time that collateral must be held for a given trade, thus freeing the collateral to be used elsewhere earlier. For a given quantity of trading activity, collateral would also be committed to clearing fund deposits for a shorter period of time. The greater collateral efficiency promoted by a shorter settlement cycle might also indirectly promote capital formation for market participants in the financial system in general. Specifically, the improved capital efficiency that would result from a shorter standard settlement cycle would enable a given amount of collateral to support a larger amount of financial activity.

5. Quantification of Direct and Indirect Effects of a T+1 Settlement Cycle

In previous years, several industry groups have released estimates for compliance costs associated with a shorter standard settlement cycle, including the SIA, the ISC, and BCG.³⁷³ Although all of these studies examined prior shortenings of the settlement cycle including from T+5 to T+3 and from T+3 to T+2, in the absence of a current study examining shortening from the current T+2 to T+1 they serve as a useful rough initial estimate of the costs involved in a settlement cycle shortening. The most recent of these, the

³⁷² See *supra* Part V.A for more discussion regarding capital formation and efficiency.

³⁷³ See SIA Business Case Report, *supra* note 21; see also ISG White Paper, *supra* note 26; BCG Study, *supra* note 22. The SIA has since merged with other groups to form SIFMA.

BCG Study performed a cost-benefit analysis of a T+2 standard settlement cycle. Below is a summary of the cost estimates in the BCG Study and in the following subsections, an evaluation of these estimates as part of the discussion of the potential direct and indirect compliance costs related to the proposed amendment to Rule 15c6–1(a). In addition, the Commission encourages commenters to provide additional information to help quantify the economic effects that we are currently unable to quantify due to data limitations.

(a) Industry Estimates of Costs and Benefits

The BCG Study concluded that the transition to a T+2 settlement cycle would cost approximately \$550 million in incremental initial investments across industry constituent groups,³⁷⁴ which would result in annual operating savings of \$170 million and \$25 million in annual return on reinvested capital from clearing fund reductions.³⁷⁵

The BCG Study also estimated that the average level of required investments per firm could range from \$1 to 5 million, with large institutional broker-dealers incurring the largest amount of investments on a per-firm basis, and buy side firms at the lower end of the spectrum.³⁷⁶ The investment costs for “other” entities, including DTCC, DTCC ITP Matching (US) LLC (f/k/a Omgeo Matching (US) LLC), service bureaus, RICs and non-self-clearing broker-dealers totaled \$70 million for the entire group. Within this \$70 million, DTCC and Omgeo were estimated to have a compliance investment cost of \$10 million each. The study’s authors estimated that institutional broker-dealers would have operational cost savings of approximately 5%, retail broker-dealers of 2% to 4%, buy-side firms of 2% and custodial banks of 10% to 15% for an industry total operational cost savings of approximately \$170MM per year.³⁷⁷

The BCG Study also estimated the annual clearing fund reductions resulting from reductions in clearing firms’ clearing funds requirements to be

³⁷⁴ The BCG Study generally refers to “institutional broker-dealers,” “retail broker-dealers,” “buy side” firms, and “custodian banks,” without defining these particular groups. The Commission uses these terms when referring to estimates provided by the BCG Study but notes that its own definitions of various affected parties may differ from those in the BCG Study.

³⁷⁵ See BCG Study, *supra* note 22, at 9–10.

³⁷⁶ *Id.* at 30–31.

³⁷⁷ See *id.* at 41.

³⁷¹ See *supra* Part V.B.2.

\$25 million per year.³⁷⁸ The study estimated this by considering the reduction in clearing fund requirements and multiplied it by the average Federal Funds target rate for the 10-year period up until 2008 (3.5%). The BCG Study also estimated the value of the risk reduction in buy side exposure to the sell side. The implied savings were estimated to be \$200 million per year, but these values were not included in the overall cost-benefit calculations.

Several factors limit the usefulness of the BCG Study's estimates of potential costs and benefits of the proposed amendment to Rule 15c6-1(a). First, a further shortening of the settlement cycle to T+1 may require investments in new technology and processes that were not necessary under the previous shortening to T+2. Second, technological improvements, such as the increased use of computers and automation in post-trade processes, that have been made since 2012, when the report was first published, may have reduced the cost of the upgrades necessary to comply with a shorter settlement cycle. This may, in turn, reduce the costs associated with the proposed amendment,³⁷⁹ as a larger portion of market participants may have already adopted many processes that would reduce the cost of a transition to a shorter settlement cycle. In addition, the BCG Study considered as a part of its cost estimates operational cost savings as a result of improvements to operational efficiency.

Lastly, the BCG Study was premised on survey responses by a subset of market participants that may be affected by the rule. Surveys were sent to 270 market participants and 70 responses were received, including 20 institutional broker-dealers, prime brokers and correspondent clearers; 12 retail broker-dealers; 17 buy side firms; 14 RIAs; and seven custodian banks. Given the low response rate, as well as the uncertainty regarding the sample of market participants that was asked to complete the survey, the Commission cannot conclude that the cost estimates in the BCG Study are representative of the costs of all market participants.³⁸⁰

(b) Estimates of Costs

The proposed amendment to Rule 15c6-1(a) would generate direct and

indirect costs for market participants, who may need to modify and/or replace multiple systems and processes to comply with a T+1 standard settlement cycle. As noted above, the T+2 Playbook included a timeline with milestones and dependencies necessary for a transition to a T+2 settlement cycle, as well as activities that market participants should consider in preparation for the transition and the Commission preliminarily believes that this provides an initial guide to those that would be necessary for a transition to T+1. The Commission preliminarily believes that the majority of activities for migration to a T+1 settlement cycle would stem from behavior modification of market participants and systems testing, and thus the majority of the costs of migration would be from labor.³⁸¹ These modifications would include a compression of the settlement timeline, as well as an increase in the fees that brokers may impose on their customers for trade failures. Although the T+2 Playbook did not include any direct estimates of the compliance costs for a T+2 settlement cycle, the Commission utilizes the timeline in the T+2 Playbook for specific actions necessary to migrate to a T+2 settlement cycle to directly estimate the inputs needed for migration, and form preliminary compliance cost estimates for the shortening to T+2 and uses these as an estimate for the shortening to T+1.

In addition, the T+2 Playbook, the ISC White Paper, and the BCG Study identified several categories of actions that market participants might need to take to comply with a T+2 settlement cycle and likely also with a T+1 settlement cycle—processing, asset servicing, and documentation.³⁸² While the following cost estimates for these remedial activities span industry-wide requirements for a migration to a T+1 settlement cycle, the Commission does not anticipate each market participant directly undertaking all of these activities for several reasons. First, some market participants work with third-party service providers to facilitate certain functions that may be impacted by a shorter standard settlement cycle, such as trade processing and asset servicing, and thus may only bear the costs of the requirements through fees paid to those service providers. Second, certain costs might only fall on specific categories of entities. For example, the costs of updating the CNS and ID Net system would only directly fall on NSCC, DTC, and members/participants of those clearing agencies. Finally, some

market participants may already have the processes and systems in place to accommodate a T+1 standard settlement cycle or would be able to adjust to a T+1 settlement cycle without incurring significant costs. For example, some market participants may already have the systems and processes in place to meet the requirements for same-day trade affirmation and matching consistent with the requirements in proposed Rule 15c6-2.³⁸³ These market participants may thus bear a significantly lower cost to update their trade affirmation systems/processes to settle on a T+1 standard settlement cycle.³⁸⁴

The following section examines several categories of market participants and estimate the compliance costs for each category. The Commission's estimate of the number and type of personnel that may be required is based on the scope of activities for a given category of market participant necessary for the market participant to migrate to a T+1 settlement cycle, the market participant's role within the clearance and settlement process, and the amount of testing required to minimize undue disruptions.³⁸⁵ Hourly salaries for personnel are from SIFMA's Management and Professional Earnings in the Securities Industry 2013.³⁸⁶ These estimates use the timeline from the T+2 Playbook to determine the length of time personnel would work on the activities necessary to support a T+1 settlement cycle. The timeline provides an indirect method to estimate the inputs necessary to migrate to a T+1 settlement cycle, rather than relying directly on survey response estimates. The Commission acknowledges many entities are already undertaking activities to support a migration to a T+1 settlement cycle in anticipation of

³⁸³ See BCG Study, *supra* note 22, at 23.

³⁸⁴ The BCG Study, as it is based on survey responses from market participants, does reflect the heterogeneity of compliance costs for market participants.

³⁸⁵ For example, FMUs that play a critical role in the clearance and settlement infrastructure would require more testing associated with a T+1 standard settlement cycle than institutional investors.

³⁸⁶ To monetize the internal costs, the Commission staff used data from SIFMA publications, modified by Commission staff to account for an 1800 hour work-year and multiplied by 5.35 (professionals) or 2.93 (office) to account for bonuses, firm size, employee benefits and overhead. See SIFMA, Management and Professional Earnings in the Security Industry—2013 (Oct. 7, 2013), <https://www.sifma.org/resources/research/management-and-professional-earnings-in-the-securities-industry-2013/>; SIFMA, Office Salaries in the Securities Industry—2013 (Oct. 7, 2013), <https://www.sifma.org/resources/research/office-salaries-in-the-securities-industry/>. These figures have been adjusted for inflation using data published by the Bureau of Labor Statistics.

³⁷⁸ See *supra* note 334 for a discussion of the impact of increases in daily trading volume since the time of the BCG study on this estimate.

³⁷⁹ See *supra* Part V.A. While market participants may have already made investments consistent with implementing a shorter settlement cycle, the fact that these investments have not resulted in a shorter settlement cycle is consistent with the existence of coordination problems among market participants.

³⁸⁰ See BCG Study, *supra* note 22, at 15.

³⁸¹ See *id.*

³⁸² See T+2 Playbook, *supra* note 27, at 11.

the proposed amendment. However, to the extent that the costs of these activities have already been incurred, the Commission considers these costs sunk, and they are not included in the analysis below.

(1) FMUs—CCPs and CSDs

CNS, NSCC/DTC's ID Net service, and other systems would require adjustment to support a T+1 standard settlement cycle. According to the T+2 Playbook and the ISC White Paper, regulation-dependent planning, implementation, testing, and migration activities associated with the transition to a T+2 settlement cycle could last up to five quarters.³⁸⁷ The Commission preliminarily believes that these activities would impose a one-time compliance cost of \$12.6 million³⁸⁸ for DTC and NSCC each. After this initial compliance cost, the Commission preliminarily expects that both DTCC and NSCC would incur minimal ongoing costs from the transition to a T+1 standard settlement cycle, because the Commission believes that the majority of costs would stem from pre-migration activities, such as implementation, updates to systems and processes, and testing.

(2) Matching/ETC Providers—Exempt Clearing Agencies

Matching/ETC Providers may need to adapt their trade processing systems to comply with a T+1 settlement cycle. This may include actions such as updating reference data, configuring trade match systems, and configuring trade affirmation systems to affirm trades on T+0. Matching/ETC Providers would also need to conduct testing and assess post-migration activities. The Commission preliminarily estimates that these activities would impose a one-time compliance cost of up to \$12.6 million³⁸⁹ for each Matching/ETC Provider. However, the Commission acknowledges that some ETC providers may have a higher cost burden than

others based on the volume of transactions that they process. The Commission expects that ETC providers would incur minimal ongoing costs after the initial transition to a T+1 settlement cycle because the Commission preliminarily believes that the majority of the costs of migration to a T+1 settlement cycle entail behavioral changes of market participants and pre-migration testing.

(3) Market Participants—Investors, Broker-Dealers, Investment Advisers, and Bank Custodians

The overall compliance costs that a market participant incurs would depend on the extent to which it is directly involved in functions related to clearance and settlement including trade confirmation/affirmation, asset servicing, and other activities. For example, retail investors may bear few (if any) direct costs in a transition to a T+1 standard settlement cycle, because their respective broker-dealer handles the back-office functions of each transaction. However, as is discussed below, this does not imply that retail investors would not face indirect costs from the transition, such as those passed through from broker-dealers or banks.

Institutional investors may need to configure systems and update reference data, which may also include updates to trade funding and processing mechanisms, to operate in a T+1 environment. The Commission preliminarily estimates that this would require an initial expenditure of \$2.67 million per entity.³⁹⁰ However, these costs may vary depending on the extent to which a particular institutional investor has already automated its processes. The Commission preliminarily expects institutional investors would incur minimal ongoing direct compliance costs after the initial transition to a T+1 standard settlement cycle.

Broker-dealers that serve institutional investors would not only need to configure their trading systems and update reference data, but may also need to update trade confirmation/affirmation systems, documentation, cashing and asset servicing functions, depending on the roles they assume with respect to their clients. The Commission preliminarily estimates

that, on average, each of these broker-dealers would incur an initial compliance cost of \$5.44 million.³⁹¹ The Commission preliminarily expects that these broker-dealers would incur minimal ongoing direct compliance costs after the initial transition to a T+1 standard settlement cycle.

Broker-dealers that serve retail customers may also need to spend significant resources to educate their clients about the shorter settlement cycle. The Commission preliminarily estimates that these broker-dealers would incur an initial compliance cost of \$9.91 million each.³⁹² However, unlike previously mentioned market participants, the Commission expects that broker-dealers that serve retail investors may face significant one-time compliance costs after the initial transition to T+1. Retail investors may require additional education and customer service, which may impose costs on their broker-dealers. The Commission preliminarily believes that a reasonable upper bound for the costs associated with this requirement is \$30,000 per broker-dealer.³⁹³ Assuming all clearing and introducing broker-dealers must educate retail customers, the upper bound for the costs of retail investor education would be approximately \$40.6 million.³⁹⁴

Custodian banks would need to update their asset servicing functions to comply with a shorter settlement cycle. The Commission preliminarily estimates that custodian banks would incur an initial compliance cost of \$1.34

³⁹¹ The estimate is based on the T+2 Playbook timeline, which estimates regulation-dependent implementation activity for trade systems, reference data, documentation, asset servicing, and testing to last four quarters. We assume 5 operations specialists (at \$149 per hour), 5 programmers (at \$295 per hour), and 1 senior operations manager (at \$397 per hour), working 40 hours per week. $(5 \times \$149 + 5 \times \$295 + 1 \times \$345) \times 4 \times 13 \times 40 = \$4,721,600$.

³⁹² The estimate is based on the T+2 Playbook timeline, which estimates regulation-dependent implementation activity for trade systems, reference data, documentation, asset servicing, customer education and testing to last five quarters. We assume 5 operations specialists (at \$149 per hour), 5 programmers (at \$295 per hour), 5 trainers (at \$239 per hour) and 1 senior operations manager (at \$397 per hour), working 40 hours per week. $(5 \times \$149 + 5 \times \$295 + 5 \times \$239 + 1 \times \$397) \times 5 \times 13 \times 40 = \$9,914,000$.

³⁹³ This estimate is based on the assumption that a broker-dealer chooses to educate customers using a 10-minute video that takes at most \$3,000 per minute to produce. See Crowdfunding, Exchange Act Release No. 76324 (Oct. 30, 2015), 80 FR 71388, 71529 & n.1683 (Nov. 16, 2015).

³⁹⁴ Calculated as \$30,000 per broker-dealer \times (156 broker-dealers reporting as self-clearing + 1,126 broker-dealers reporting as introducing but not self-clearing + 71 broker-dealers reporting as introducing and self-clearing) = \$40,590,000.

³⁸⁷ See T+2 Playbook, *supra* note 27, at 11.

³⁸⁸ The estimate is based on the T+2 Playbook timeline, which estimates regulation-dependent implementation activity, industry testing, and migration lasting five quarters. The Commission assumes 10 operations specialists (at \$149 per hour), 10 programmers (at \$295 per hour), and 1 senior operations manager (at \$397/hour), working 40 hours per week. $(10 \times \$149 + 10 \times \$295 + 1 \times \$397) \times 5 \times 13 \times 40 = \$12,575,000$.

³⁸⁹ The estimate is based on the T+2 Playbook timeline, which estimates regulation-dependent implementation activity for trade systems, matching, affirmation, testing, and post-migration testing lasting five quarters. The Commission assumes 10 operations specialists (at \$149 per hour), 10 programmers (at \$295 per hour), and 1 senior operations manager (at \$397/hour), working 40 hours per week. $(10 \times \$149 + 10 \times \$295 + 1 \times \$397) \times 5 \times 13 \times 40 = \$12,575,000$.

³⁹⁰ The estimate is based on the T+2 Playbook timeline, which estimates regulation-dependent implementation activity for trade systems, reference data, and testing activity to last four quarters. We assume 2 operations specialists (at \$149 per hour), 2 programmers (at \$295 per hour), and 1 senior operations manager (at \$397 per hour), working 40 hours per week. $(2 \times \$149 + 2 \times \$195 + 1 \times \$397) \times 4 \times 13 \times 40 = \$2,673,400$.

million,³⁹⁵ and expects custodian banks to incur minimal ongoing compliance costs after the initial transition because the Commission preliminarily believes that most of the costs would stem from pre-migration updates and testing.

The proposed amendment to Rule 204–2 would require investment advisers to maintain records of allocations (if any), confirmations or affirmations if the adviser is a party to a contract under that rule. Based on Form ADV filings as of December 2020, approximately 13,804 advisers registered with the Commission are required to maintain copies of certain books and records relating to their advisory business.³⁹⁶ The Commission further estimates that 2,521 registered advisers required to maintain copies of certain books and records relating to their advisory business would not be required to make and keep the proposed required records because they do not have any institutional advisory clients.³⁹⁷ Therefore, the remaining 11,283 of these advisers would be subject to the related proposed amendment to Rule 204–2 under the Advisers Act, would enter a contract with a broker or dealer under proposed Rule 15c6–2 and therefore be subject to the related proposed recordkeeping amendment.

As discussed above, based on staff experience, the Commission believes that many advisers already have recordkeeping processes in place to retain records of confirmations received, and allocations and affirmations sent to brokers or dealers. The Commission believes these are customary and usual business practices for many advisers, but that some small and mid-size advisers do not currently retain these records. Further, the Commission believes that the vast majority of these books and records are kept in electronic fashion with an ability to capture a date and time stamp, such as in a trade order management or other recordkeeping system, through system logs of file transfers, email archiving or as part of DTC's Institutional Trade Processing services, but that some advisers maintain paper records (e.g., confirmations) and/or communicate allocations by telephone. In addition, as noted in Section III.C, above, we believe

³⁹⁵ The estimate is based on the T+2 Playbook timeline, which estimates regulation-dependent implementation activity for asset servicing and testing to last two quarters. We assume 2 operations specialists (at \$149 per hour), 2 programmers (at \$295 per hour), and 1 senior operations manager (at \$397 per hour), working 40 hours per week. $(2 \times \$149 + 2 \times \$295 + 1 \times \$397) \times 2 \times 13 \times 40 = \$1,336,700$.

³⁹⁶ See *infra* note 424.

³⁹⁷ See *id.*

that up to 70% of institutional trades are affirmed by custodians, and therefore advisers may not retain or have access to the affirmations these custodians sent to brokers or dealers.³⁹⁸

For those advisers maintaining date and time stamped electronic records already, we estimate no incremental compliance costs. We estimate that the proposed amendments to rule 204–2 would result in an initial one-time compliance cost of approximately \$30,500 for the small and mid-size advisers³⁹⁹ that we estimate do not currently maintain these records, which we amortize over three years for an estimated annual cost of approximately \$10,167.⁴⁰⁰ In addition, we believe that only a small number of advisers, or 1% of advisers that have institutional clients, do not send allocations or affirmations electronically to brokers or dealers (e.g., they communicate them by telephone).⁴⁰¹ We estimate that these advisers will incur initial one-time costs of approximately \$16,000 updating their

³⁹⁸ See DTCC ITP Forum Remarks, *supra* note 58.

³⁹⁹ For purposes of the Paperwork Reduction Act, *infra* section VI, we estimated the number of small and mid-sized advisers based on Form ADV Items 2.A.(2) (for mid-sized advisers) and 12 (for small advisers).

⁴⁰⁰ The estimate assumes that the proposed amendments to Rule 204–2 would result in an initial increase in the collection of information burden estimate by 2 hours for the small and medium size advisers that have institutional clients that we estimate do not currently maintain these records. We estimate this number of advisers to be approximately 50% of small and medium sized registered investment advisers that have institutional clients, or approximately 220 small and medium size advisers. See *infra* Table 1 (Summary of burden estimates for the proposed amendment to Rule 204–2) note 4. The estimated 2 hours per adviser would be an initial burden to update procedures and instruct personnel to retain these records in the advisers' electronic recordkeeping systems, including any confirmations that they may receive in paper format and do not currently retain. We believe that these advisers already have recordkeeping systems to accommodate these records, which would include, at a minimum, spreadsheet formats and email retention systems. As with our estimates relating to the previous amendments to Advisers Act Rule 204–2, the Commission expects that performance of these functions would most likely be allocated between compliance clerks and general clerks, with compliance clerks performing 17% of the function and general clerks performing 83% of the function. We assume 20 minutes of a compliance clerk (at \$76 per hour) and 100 minutes of a general clerk (at \$68 per hour). $(1/3 \times 76 + 5/3 \times 68) \times 220 = \$30,507$.

⁴⁰¹ We estimate that currently registered large advisers that do not currently maintain electronic records, would be part of the estimated 1% of advisers that would incur 2 hours each to comply with the proposed amendment as described above. For new large advisers, we estimate that there would be no incremental cost associated with this proposed amendment, as we believe these advisers would implement electronic systems as part of their initial compliance with Rule 204–2, and that these electronic systems would have an ability to capture a date and time stamp.

policies and procedures and training their personnel to send these communications through their existing electronic systems, which we amortize over three years for an estimated annual cost of approximately \$5,333.⁴⁰²

In addition, we estimate that 70% of institutional trades are affirmed by custodians, and therefore advisers may not retain or have access to the affirmations these custodians sent to brokers or dealers. Because we do not know the number of advisers that correlate to these trades, we estimate for purposes of this collection of information that 70% of advisers with institutional clients make institutional trades that are affirmed by custodians. Therefore, we estimate that these advisers would incur initial one-time costs of approximately \$1,095,000 to direct their institutional clients' custodians to copy the adviser on any affirmations sent through email, or for the adviser to use its systems to issue affirmations, which we amortize over three years for an estimated annual cost of approximately \$365,500.⁴⁰³

Proposed Rule 17Ad–27 would require a CMSP to establish, implement, maintain, and enforce written policies and procedures. Based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rules 17Ad–22(d)(8) and 17Ad–22(e)(2),⁴⁰⁴ the Commission preliminarily estimates that respondent CMSPs would incur an aggregate one-time cost of approximately \$27,000.⁴⁰⁵

The proposed rule would also require ongoing documentation activities with respect to the annual report required to be submitted to the Commission. Based on the similar reporting requirements and the corresponding burden estimates

⁴⁰² We estimate 1% of 11,283 or 113 advisers do not send allocations or affirmations electronically. We assume, for each adviser, 20 minutes for a compliance clerk (at \$76 per hour) and 100 minutes of a general clerk (at \$68 per hour). $(1/3 \times 76 + 5/3 \times 68) \times 113 = \$15,669$.

⁴⁰³ We estimate 70% of 11,283 or 7,898 advisers affirm trades through custodians. We assume, for each advisor, 20 minutes for a compliance clerk (at \$76 per hour) and 100 minutes of a general clerk (at \$68 per hour). $(1/3 \times 76 + 5/3 \times 68) \times 7,898 = \$1,095,189$.

⁴⁰⁴ See Clearing Agency Standards, Exchange Act Release No. 68080 (Oct. 22, 2012), 77 FR 66219, 66260 (Nov. 2, 2012) ("Clearing Agency Standards Adopting Release"); Standards for Covered Clearing Agencies, Exchange Act Release No. 78961 (Sept. 28, 2016), 81 FR 70786, 70891–92 (Oct. 13, 2016) ("CCA Standards Adopting Release").

⁴⁰⁵ There are currently three CMSPs and the Commission anticipates that one additional entity may seek to become a CMSP in the next three years. The aggregate cost was estimated as follows: (Assistant General Counsel at \$602/hour \times 8 hours = \$4,816) + (Compliance Attorney at \$334/hour \times 6 hours = \$2,004) = \$6,820 \times 4 CMSPs equals \$27,280.

previously made by the Commission for Rule 17Ad-22(e)(23),⁴⁰⁶ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad-27 would impose an aggregate annual cost of this ongoing burden of approximately \$44,000.⁴⁰⁷

(4) Indirect Costs

In estimating these implementation costs, the Commission notes that market participants who bear the direct costs of the actions they undertake to comply with the amendment to Rule 15c6-1 may pass these costs on to their customers. For example, retail and institutional investors might not directly bear the cost of all of the necessary upgrades for a T+1 settlement cycle, but might indirectly bear these costs as their broker-dealers might increase their fees to amortize the costs of updates among their customers. The Commission is unable to quantify the overall magnitude of the indirect costs that retail and institutional investors may bear, because such costs would depend on the market power of each broker-dealer, and each broker-dealer's willingness to pass on the costs of migration to a T+1 standard settlement cycle to its customers. However, the Commission preliminarily believes that in situations where broker-dealers have little or no competition, broker-dealers may pass on as much as 100% of their initial costs to their customers. As discussed above, this could be as high as the full amount of the estimated \$5.44 million for broker-dealers that serve institutional investors, and \$9.91 million for broker-dealers that serve

⁴⁰⁶ See CCA Standards Adopting Release, *supra* note 404, at 70899.

⁴⁰⁷ This figure was calculated as follows: [(Compliance Attorney at \$397/hour × 24 hours = \$9,528) + (Computer Operations Manager at \$480/hour × 10 hours = \$4,800) = \$14,328 × 4 CMSPs = \$57,312]. In addition, we estimate that the Inline XBRL requirement would require respondent CMSPs to spend \$900 each year to license and renew Inline XBRL compliance software and/or services, and incur 1 internal burden hour to apply and review Inline XBRL tags for the three disclosure requirements on the report, resulting in a total annual aggregate cost of \$5,188 [(Compliance Attorney at \$397/hour × 1 hour = \$397) + \$900 in external costs = \$1,297 × 4 CMSPs = \$5,188]. In addition, respondent CMSPs that do not already have access to EDGAR would be required to file a Form ID so as to obtain the access codes that are required to file or submit a document on EDGAR. We anticipate that each respondent would require 0.15 hours to complete the Form ID, and for purposes of the PRA, that 100% of the burden of preparation for Form ID will be carried by each respondent internally. Because two respondent CMSPs already have access to EDGAR, we anticipate that proposed amendments would result in a one-time nominal increase of 0.30 burden hours for Form ID, which would not meaningfully add to, and would effectively be encompassed by, the existing burden estimates associated with these reports.

retail investors. However, in situations where broker-dealers face heavy competition for customers, they may bear the full costs of the initial investment, and avoid passing on any portion of these costs to their customers.

As noted in Part V.B.4, the ability of market participants to pass implementation costs on to customers likely depends on their relative bargaining power. For example, CCPs, like many other utilities, exhibit many of the characteristics of natural monopolies and, as a result, may have market power, particularly relative to broker-dealers who submit trades for clearing. This means that CCPs may be able to share implementation costs they directly face related to shortening the settlement cycle with broker-dealers through higher clearing fees. Conversely, to the extent that institutional investors have market power relative to broker-dealers, broker-dealers may not be in a position to impose indirect costs on them.

(5) Industry-Wide Costs

To estimate the aggregate, industry-wide cost of a transition to a T+1 standard settlement cycle, the Commission takes its own per-entity estimates and multiplies them by our estimate of the respective number of entities. The Commission preliminarily estimates that there are 1,229 buy-side firms, 156 self-clearing broker-dealers, and 49 custodian banks.⁴⁰⁸ Additionally, while there are three Matching/ETC Providers, the Commission believes that only one of these is currently providing services in the U.S. We estimate there are 1,282 broker-dealers that would incur investor education costs. One way to establish a total industry initial compliance cost estimate would be to multiply each estimated per-entity cost by the respective number of entities and sum these values, which would result in an estimate of \$4.97 billion.⁴⁰⁹ The Commission, however, preliminarily

⁴⁰⁸ The estimate for the number of buy-side firms is based on the Commission's 13(f) holdings information filers with over \$1 billion in assets under management, as of December 31, 2020. The estimate for the number of broker-dealers is based on FINRA FOCUS Reports of firms reporting as self-clearing. See *supra* note 312 and accompanying text. The estimate for the number of custodian banks is based on the number of "settling banks" listed in DTC's Member Directories, available at <http://www.dtcc.com/client-center/dtc-directories>.

⁴⁰⁹ Calculated as 156 broker-dealers (self-clearing) × \$9,914,000 + 1,282 broker-dealers (self-clearing and introducing) × \$30,000 + 49 custodian banks × \$1,337,000 + 1,229 buy-side firms × \$2,673,000 + 1 Matching/ETC Providers × \$12,575,000 + 2 FMUs × \$12,575,000 + (IA costs of 30,500 + 16,000 + 1,095,000) + (CMSP initial costs of \$26,000) = \$ 4,974,556,500.

believes that this estimate is likely to overstate the true initial cost of transition to a T+1 settlement cycle for a number of reasons. First, our per-entity estimates do not account for the heterogeneity in market participant size, which may have a significant impact on the costs that market participants face. While the BCG Study included both estimates of the number of entities in different size categories as well as estimates of costs that an entity in each size category is likely to incur, it did not provide sufficient underlying information to allow the Commission to estimate the relationship between participant size and compliance cost and thus we cannot produce comparable estimates. The Commission solicits comment on the extent to which market participants believe that the compliance costs for proposed Rule 15c6-1(a) would scale with market participant size.

Second, investments by third-party service providers may mean that many of the estimated compliance costs for market participants are duplicated. The BCG Study suggests that "leverage" from service providers may yield a savings of \$194 million, reducing aggregate costs by approximately 29%.⁴¹⁰ The Commission seeks further comment on the extent to which the efficiencies generated by the investments of service providers might reduce the compliance costs of market participants. Taking into account potential cost reductions due to repurposing existing systems and using service providers as described above, the Commission preliminarily believes that \$3.5 billion represents a reasonable range for the total industry initial compliance costs.⁴¹¹

In addition to these initial costs, a transition to a shorter settlement cycle may also result in certain ongoing industry-wide costs. Though the Commission preliminarily believes that a move to a shorter settlement cycle would generally bring with it a reduced reliance on manual processing, a shorter settlement cycle may also exacerbate remaining operational risk. This is because a shorter settlement cycle would provide market participants with less time to resolve errors. For example, if there is an entry error in the trade match details sent by either counterparty for a trade, both counterparties would have one extra day to resolve the error under the baseline than in a T+1 environment. For these errors, a shorter settlement cycle

⁴¹⁰ See BCG Study, *supra* note 22, at 79.

⁴¹¹ The lower bound of this range is calculated as (\$4.97 billion × (1 - 0.29)) = \$3.5 billion.

may increase the probability that the error ultimately results in a settlement fail. However, the Commission preliminarily believes that a large variety of operational errors are possible in the clearance and settlement process and some of these errors are likely to be infrequent, the Commission is unable to quantify the impact that a shorter settlement cycle may have on the ongoing industry-wide costs stemming from a potential increase in operational risk.

D. Reasonable Alternatives

1. Amend 15c6-1(c) to T+2

The Commission is proposing to delete Rule 15c6-1(c) that establishes a T+4 settlement cycle for firm commitment offerings for securities that are priced after 4:30 p.m. ET, unless otherwise expressly agreed to by the parties at the time of the transaction.⁴¹² The Commission has considered amending Rule 15c6-1(c) to shorten the settlement cycle for firm commitment offerings to T+2.

The T+1 Report stated that paragraph (c) is rarely used in the current T+2 settlement environment.⁴¹³ The Commission adopted paragraph (c) of Rule 15c6-1 in 1995, two years after Rule 15c6-1 was originally adopted.⁴¹⁴ At the time, the rule included a limited exemption from the requirements under paragraph (a) of the rule for the sale for cash pursuant to a firm commitment offering registered under the Securities Act.⁴¹⁵ The exemption for firm commitment offerings was added in response to public comments stating that new issue securities could not settle on T+3 because prospectuses could not be printed prior to the trade date (the date on which the securities are priced).⁴¹⁶

As discussed further in Part III.E.4, Rule 172 has implemented an “access equals delivery” model that permits, with certain exceptions, final prospectus delivery obligations to be satisfied by the filing of a final prospectus with the Commission, rather than delivery of the prospectus to purchasers. As a result of these changes, broker-dealers generally do not require

time to print and deliver prospectus—a point originally cited by many commenters in support of adopting paragraph (c).⁴¹⁷

Although rarely used in the current T+2 settlement environment, the IWG expects a T+1 standard settlement cycle would increase reliance on paragraph (c).⁴¹⁸ The T+1 Report further stated that the IWG recommends retaining paragraph (c) but amending it to establish a standard settlement cycle of T+2 for firm commitment offerings.⁴¹⁹ The T+1 Report cites issues with respect to documentation and other operational elements of equity offerings that may delay settlement to T+2 in a T+1 environment. As the Commission is not currently aware of any specific documentation associated with firm commitment offerings that cannot be completed by T+1, the Commission preliminarily believes that the need to complete possibly complex transaction documentation prior to settlement does not justify proposing a T+2 standard settlement cycle for equity offerings.

In addition, establishing T+1 as the standard settlement cycle for these firm commitment offerings, and thereby aligning the settlement cycle with the standard settlement cycle for securities generally, would reduce exposures of underwriters, dealers, and investors to credit and market risk, and better ensure that the primary issuance of securities is available to settle secondary market trading in such securities. The Commission believes that harmonizing the settlement cycle for such firm commitment offerings with secondary market trading, to the greatest extent possible, limits the potential for operational risk. In addition, if paragraph (c) is removed as proposed, paragraph (d) would continue to provide underwriters and the parties to a transaction the ability to agree, in advance of a particular transaction, to a settlement cycle other than the standard set forth in Rule 15c6-1(a).

Therefore, in the Commission’s view, deleting paragraph (c) while retaining paragraph (d) provides sufficient flexibility for market participants to manage the potential need for longer than T+1 settlement on certain firm commitment offerings priced after 4:30 p.m. that may include “complex” documentation because paragraph (d) would continue to permit the underwriters and the parties to a transaction to agree, in advance of entering the transaction, whether T+1 settlement or some other settlement

timeframe is appropriate for the transaction. In addition, the Commission preliminarily believes that having the underwriters and the parties to the transaction agree in advance of entering the transaction whether to deviate from the standard settlement cycle established in paragraph (a) would promote transparency among the parties, in advance of entering the transaction, as to the length of the time that it takes to complete complex documentation with respect to the transaction.

2. Propose 17Ad-27 To Require Certain Outcomes

The Commission is proposing Rule 17Ad-27 to require a CMSP establish, implement, maintain and enforce policies and procedures to facilitate straight-through processing for transactions involving broker-dealers and their customers.⁴²⁰ Proposed Rule 17Ad-27 also would require a CMSP to submit every twelve months to the Commission a report that describes the following: (i) The CMSP’s current policies and procedures for facilitating straight-through processing; (ii) its progress in facilitating straight-through processing during the twelve month period covered by the report; and (iii) the steps the CMSP intends to take to facilitate and promote straight-through processing during the twelve month period that follows the period covered by the report.

The Commission has taken a “policies and procedures” approach in developing the proposed rule because it preliminarily believes such an approach will remain effective over time as CMSPs consider and offer new technologies and operations to improve the settlement of institutional trades. The Commission also believes that improving the CMSPs’ systems to facilitate straight-through processing can help market participants consider additional ways to make their own systems more efficient. In addition, a “policies and procedures” approach can help ensure that a CMSP considers in a holistic fashion how the obligations it applies to its users will advance the implementation of methodologies, operational capabilities, systems, or services that support straight-through processing.

The Commission has considered as an alternative to the policies and procedures approach in proposed Rule 17Ad-27, proposing a rule to require CMSPs to achieve certain outcomes that

⁴¹² See *supra* Part III.A.3.

⁴¹³ T+1 Report, *supra* note 18, at 33–35.

⁴¹⁴ See Prospectus Delivery; Securities Transaction Settlement Cycle, Exchange Act Release No. 34–35705 (May 11, 1995), 60 FR 26604 (May 17, 1995) (“1995 Amendments Adopting Release”).

⁴¹⁵ The exemption was limited to sales to an underwriter by an issuer and initial sales by the underwriting syndicate and selling group. Any secondary resales of such securities were to settle on a T+3 settlement cycle. T+3 Adopting Release, *supra* note 9, at 52898.

⁴¹⁶ *Id.*

⁴¹⁷ *Id.* at 32.

⁴¹⁸ T+1 Report, *supra* note 18, at 33–35.

⁴¹⁹ *Id.* at 33.

⁴²⁰ See *supra* Part III.D (discussing the proposed rule); see also *supra* Part III.D.1 (discussing straight-through processing).

would facilitate straight-through processing. For example, the Commission could propose to require that a CMSP do the following: (i) Enable the users of its service to complete the matching, confirmation, or affirmation of the securities transaction as soon as technologically and operationally practicable and no later than the end of the day on which the transaction was effected by the parties to the transaction; or (ii) forward or otherwise submit the transaction for settlement as soon as technologically and operationally practicable, as if using fully automated systems.

The Commission believes that these requirements would achieve certain discrete objectives with respect to straight-through processing and would promote prompt and accurate clearance and settlement. The Commission believes, however, that the proposed approach requires policies and procedures that include a holistic review and framework for considering how systems and processes facilitate straight-through processing and that can adapt over time to changes in technology and operations, both among and beyond the CMSP's systems.

E. Request for Comment

The Commission solicits comment on the potential economic impact of the proposed amendment to Rule 15c6-1(a), the proposed deletion of Rule 15c6-1(c), proposed new Rule 15c6-2, the proposed amendment to Rule 204-2, and proposed new Rule 17Ad-27. In addition, the Commission solicits comment on related issues that may inform the Commission's views regarding the economic impact of the proposed amendment to Rule 15c6-1(a), the proposed deletion of Rule 15c6-1(c), proposed new Rule 15c6-2, the proposed amendment to Rule 204-2, and proposed new Rule 17Ad-27 as well as alternatives to the proposed amendments, deletion, and new rules. The Commission in particular seeks comment on the following:

144. The Commission invites commenters to provide additional data on the time it takes to complete each step within the current clearance and settlement process. What are current constraints or impediments for each step within the clearance and settlement process that would limit the ability to shorten the settlement cycle from T+2 to T+1? Do these constraints or impediments vary by market participant type?

145. The Commission invites commenters to provide additional data on the expected collateral efficiency gains from a T+1 standard settlement

cycle. How would clearing fund deposits change as a result of the proposed amendment? To what extent does this change fully represent the change to the level of risk associated with the settlement cycle for securities transactions?

146. The Commission invites commenters to discuss the impact of a T+1 settlement cycle on broker-dealers and their customers, including custodians who may hold securities on behalf of said customers. What types of adaptations would be necessary to comply with a T+1 settlement cycle, and what are their relative costs and benefits?

147. The Commission invites commenters to provide data regarding the extent to which a broker-dealer engages in "internalization" of a transaction on behalf of a customer. How prevalent are internalization practices? How does the volume of internalization compare to the volume of transactions that are submitted for clearing?⁴²¹

148. The Commission invites commenters to discuss the potential impact of a T+1 standard settlement cycle with respect to cross-border and cross-asset class transactions. Would a T+1 standard settlement cycle make any cross-border or cross-asset transactions more or less costly?

149. The Commission invites commenters to discuss the anticipated market changes, if any, if the proposed amendment to Rule 15c6-1(a) were not adopted. Which activities necessary for compliance with a T+1 standard settlement cycle would occur in the absence of the proposed rule amendment and how quickly would they occur?

150. In addition to the prospective impact on costs/burdens, the Commission solicits comments related to the credit, market, liquidity, legal, and operational risks (increase or decrease) associated with shortening the standard settlement cycle to T+1, and in particular, quantification of such risks.

151. Are there types of customers other than institutional customers that would be affected by proposed Rule 15c6-2? If so, please describe what types of customers. Would the rules impose an unanticipated burden on these customers? Please explain.

152. What are the benefits and costs of requiring broker dealers to enter into written agreements with customers engaging in the trade date allocation, confirmation and affirmation process where such agreements require the

process to be completed by the end of the day on trade date?

153. What are the relative burdens of proposed Rule 15c6-2 on the different market participants involved in the allocation, confirmation, and affirmation process, particularly smaller market participants?

VI. Paperwork Reduction Act

Two of the rule proposals, proposed Rule 17Ad-27 and the proposed amendment to Rule 204-2(a), contain "collection of information" requirements within the meaning of the Paperwork Reduction Act of 1995 ("PRA").⁴²² The Commission is submitting the proposed collections of information to the Office of Management and Budget ("OMB") for review in accordance with the PRA. For the proposed amendment to Rule 204-2(a), the title of the information collection is "Rule 204-2 under the Investment Advisers Act of 1940" (OMB control number 3235-0278). For proposed Rule 17Ad-27, the title of the information collection is "Clearing Agency Standards for Operation and Governance" (OMB Control No. 3235-0695). 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 OMB control number.

A. Proposed Amendment to Rule 204-2

Under Section 204 of the Advisers Act, investment advisers registered or required to register with the Commission under Section 203 of the Advisers Act must make and keep for prescribed periods such records (as defined in Section 3(a)(37) of the Exchange Act), furnish copies thereof, and make and disseminate such reports as the Commission, by rule, may prescribe as necessary or appropriate in the public interest or for the protection of investors. Rule 204-2 sets forth the requirements for maintaining and preserving specified books and records. This collection of information is found at 17 CFR 275. 204-2 and is mandatory. The Commission staff uses the collection of information in its regulatory and examination program. Responses to the requirements of the proposed amendment to Rule 204-2 that are provided to the Commission in the context of its regulatory and examination program would be kept confidential subject to the provisions of applicable law.⁴²³

⁴²² See 44 U.S.C. 3501 *et seq.*

⁴²³ See Section 210(b) of the Advisers Act, 15 U.S.C. 80b-10(b).

⁴²¹ See Part II.B.2 (further discussing internalization by broker-dealers).

The proposed amendment to Rule 204-2 would require advisers to maintain records of certain documents described in proposed Rule 15c6-2 if the adviser is a party to a contract under that rule. Rule 15c6-2 specifically identifies “allocations, confirmations or affirmations” as documents that must be completed no later than the end of the day on trade date. The respondents to this collection of information are approximately 13,804 advisers registered with the Commission.⁴²⁴ The Commission further estimates that 2,521 of these registered advisers would not be required to make and keep the proposed required records because they do not have any institutional advisory clients.⁴²⁵ Therefore, the remaining 11,283 of these advisers, or 81.74% of the total registered advisers that are subject to Rule 204-2, would enter a contract with a broker or dealer under proposed Rule 15c6-2 and therefore be subject to the related proposed recordkeeping amendment.

As discussed above, based on staff experience, the Commission believes

that many advisers already have recordkeeping processes in place to retain records of confirmations received, and allocations and affirmations sent to brokers or dealers.⁴²⁶ The Commission believes that while these are customary and usual business practices for many advisers, some small and mid-size advisers do not currently retain these records. Further, the Commission believes that the vast majority of these books and records are kept in electronic fashion in a trade order management or other recordkeeping system, through system logs of file transfers, email archiving or as part of DTC’s Institutional Trade Processing services, but that some advisers maintain paper records (e.g., confirmations) and/or communicate allocations by telephone. In addition, as noted in Section III.C, above, we believe that up to 70% of institutional trades are affirmed by custodians, and therefore advisers may not retain or have access to the affirmations these custodians sent to brokers or dealers.⁴²⁷ Also as noted above, based on staff experience, the

Commission believes that many advisers send allocations and affirmations electronically to brokers or dealers, and therefore these records are already date and time stamped in many instances. Nevertheless, the proposed amendments would explicitly add a new requirement to date and time stamp allocations and affirmations (but not confirmations), and thus increase this collection of information burden. The Commission estimates that the associated increase in burden would be included in our estimate described in the chart below for advisers that we believe do not electronically send allocations and affirmations to their brokers or dealers.

We describe the estimated burdens associated with the proposed recordkeeping amendment below. These estimated changes from the currently approved burden are due to the estimated increase in the internal hour and internal time cost burden that would be due to the proposed amendment, and the increase in the number of registered investment advisers (an increase of 80 advisers).

TABLE 1—SUMMARY OF BURDEN ESTIMATES FOR THE PROPOSED AMENDMENT TO RULE 204-2

Advisers	Initial internal hour burden	Annual internal hour burden ¹	Wage rate ²	Internal time cost per year	Annual external cost burden ³
220 small and mid-size advisers that have institutional clients, that we believe do not currently maintain the proposed records ⁴ .	2 hours per adviser ⁵ .	2 hours, amortized over a 3 year period, for an annual ongoing internal burden of 0.667 hours per year (220 advisers × 0.667 hours each = 146.74 aggregate annual hours).	\$69.36 per hour	0.667 hour × \$69.36 per hour = \$43.60 per adviser per year. \$69.36 × 146.74 aggregate hours = \$10,159.16 aggregate cost per year.	\$0
113 advisers that have institutional clients that staff estimates do not send allocations or affirmations electronically to brokers or dealers (e.g., they communicate them by telephone) ⁶ .	2 hours per adviser ⁷ .	2 hours, amortized over a 3 year period, for an annual ongoing internal burden of 0.667 hours per year (113 advisers × 0.667 hours each = 75.37 aggregate annual hours).	\$69.36 per hour	0.667 hour × \$69.36 per hour = \$43.60 per adviser per year. \$69.36 per hour × 75.37 aggregate hours = \$5,227.67 aggregate cost per year.	0
7,898 advisers with institutional clients that the staff estimates make institutional trades that are affirmed by custodians, and therefore do not maintain the proposed affirmations ⁸ .	2 hours per adviser ⁹ .	2 hours, amortized over a 3 year period, for an annual ongoing internal burden of 0.667 hours per year (7,898 advisers × 0.667 hours each = 5,267.97 aggregate hours).	\$69.36 per hour	0.667 hour × \$69.36 per hour = \$43.60 per adviser per year. \$69.36 per hour × 5,267.97 aggregate hours = \$365,386.40 Aggregate cost per year.	0
Total estimated burden per adviser per year resulting from the proposed amendment.		5,490.08 aggregate hours per year, ¹⁰ or 0.4 blended hours per year per adviser ¹¹ .	\$380,791.95 per year (5,490.08 aggregate hours per year × \$69.36 per hour)		0
Currently approved aggregate burden		2,764,563 aggregate hours per year.		\$175,980,426	0
Estimated revised aggregate burden		2,786,199 hours ¹²		\$193,250,787.60 ¹³	0

Notes:

¹ We believe that the estimated internal hour burdens associated with the proposed amendment would be one-time initial burdens, and we amortize these burdens over three years.

⁴²⁴ Based on data from Form ADV as of December, 2020.

⁴²⁵ Based on data from Form ADV as of December, 2020, this figure represents registered investment

advisers that: (i) Report no clients that are registered investment companies in response to Item 5.D, (ii) do not report any institutional separately managed accounts in Item 5.D., or separately managed account exposures in Section 5.K.(1) of Schedule D,

and (iii) do not advise any reported hedge funds as per Section 7.B.(1) of Schedule D.

⁴²⁶ See *supra* Section III.C.

⁴²⁷ See DTCC ITP Forum Remarks, *supra* note 58.

² As with our estimates relating to the previous amendments to Advisers Act Rule 204–2, the Commission expects that performance of these functions would most likely be allocated between compliance clerks and general clerks, with compliance clerks performing 17% of the function and general clerks performing 83% of the function. Data from SIFMA's Office Salaries in the Securities Industry 2013, modified by Commission staff to account for an 1800-hour work-year and inflation, and multiplied by 2.93 to account for bonuses, firm size, employee benefits and overhead, suggest that costs for these position are \$76 and \$68, respectively. A blended hourly rate is therefore: $(.17 \times \$76) + (.83 \times \$68) = \$69.36$ per hour.

³ Under the currently approved PRA for Rule 204–2, there is no cost burden other than the cost of the hour burden described herein, and we believe that the proposed amendment would not result in any cost burden other than the cost of the hour burden.

⁴ Based on staff experience, we estimate that approximately 50% of small and mid-sized registered investment advisers that have institutional clients, do not currently maintain the proposed records. Based on Form ADV data as of December 2020, we estimate that there are 199 and 241 mid-sized and small entity RIAs, respectively, that would be required to retain the proposed new records, for a total of 440 advisers (these are advisers that report the following on Form ADV Part 1A as of December 2020: (i) Having any clients that are registered investment companies in response to Item 5.D, (ii) having any institutional separately managed accounts in Item 5.D., or separately managed account exposures in Section 5.K.(1) of Schedule D, or (iii) advising any reported hedge funds as per Section 7.B.(1) of Schedule D). The categories of mid-size and small entity advisers are based on responses to the following Items of Form ADV Part 1A: Item 2.a.(2) (mid-size RIA) and Items 5.F. and 12 (small entity). 50% of 440 advisers = 220 advisers.

⁵ We estimate an initial burden of 2 hours per adviser, to update procedures and instruct personnel to retain the proposed required records in the advisers' electronic recordkeeping systems, including any confirmations that they may receive in paper format and do not currently retain. We believe that these advisers already have recordkeeping systems to accommodate these records, which would include, at a minimum, spreadsheet formats and email retention systems which have an ability to capture a date and time stamp. For those advisers maintaining date and time stamped electronic records already, we estimate no incremental compliance costs.

⁶ We believe that only a small number of advisers, or 1% of advisers that have institutional clients, do not send allocations or affirmations electronically to brokers or dealers (e.g., they communicate them by telephone). 1% of 11,283 RIAs with institutional clients = 112.83 advisers (rounded to 113). For new large advisers, we estimate that there would be no incremental cost associated with this proposed amendment, as we believe these advisers would implement electronic systems as part of their initial compliance with Rule 204–2, and that these electronic systems would have an ability to capture a date and time stamp.

⁷ We estimate that these advisers would incur an initial burden of 2 hours of updating their procedures and training their personnel to send these communications through their existing electronic systems (such as, at a minimum, their current spreadsheet formats and current email and electronic retention system to maintain electronic records with date and time stamps). Because these email and electronic retention systems would provide date and time stamps, we estimate there would be no incremental compliance costs in connection with the proposed date and time stamp requirement.

⁸ As noted above, we estimate that 70% of institutional trades are affirmed by custodians, and therefore advisers may not retain or have access to the affirmations these custodians sent to brokers or dealers. We believe that some of these advisers themselves, however, sometimes send affirmations to brokers or dealers. Because we do not know the number of advisers that correlate to these trades, we estimate for purposes of this collection of information that 70% of advisers with institutional clients make institutional trades that are affirmed by custodians. This estimate equals 7,898.1 advisers, rounded to 7,898 advisers (70% of 11,283 RIAs with institutional clients = approximately 7,898 advisers).

⁹ We estimate that the proposed amendments to rule 204–2 would result in an initial increase in the collection of information burden estimate by 2 hours for these advisers, to direct their institutional clients' custodians to electronically copy the adviser on any affirmations sent through email or for the adviser to use its systems to issue affirmations.

¹⁰ $146.74 \text{ hours} + 75.37 \text{ hours} + 5,267.97 \text{ hours} = 5,490.08 \text{ hours}$.

¹¹ $5,490.08 \text{ aggregate hours per year} / 13,804 \text{ total RIAs that are subject to Rule 204–2} = \text{a blended average of } 0.4 \text{ hours per adviser per year}$.

¹² The currently approved collection of information burden is 2,764,563 aggregate hours for 13,724 advisers, or 201.44 hours per adviser. The proposed new collection of information burden would add approximately 0.4 blended hours per adviser per year, for a total estimate of 201.84 blended hours per adviser per year, or 2,786,199 aggregate hours under amended Rule 204–2 for all registered advisers subject to the rule (201.84 blended hours per adviser \times 13,804 RIAs subject to Rule 204–2 = 2,786,199 aggregate burden hours for RIAs).

¹³ $(201.84 \text{ estimated revised burden hours per adviser} \times \$69.36 \text{ per hour}) \times 13,804 \text{ RIAs} = \$193,250,787.60$ revised aggregate annual cost of the hour burden for Rule 204–2.

B. Proposed Rule 17Ad–27

The purpose of the collections under proposed Rule 17Ad–27 is to ensure that CMSPs facilitate the ongoing development of operational and technological improvements associated with the straight-through processing of institutional trades, which may in turn facilitate further shortening of the settlement cycle in the future. The collections are mandatory. To the extent that the Commission receives confidential information pursuant to this collection of information, such information would be kept confidential subject to the provisions of applicable law.⁴²⁸

Respondents under this rule are the three CMSPs to which the Commission has granted an exemption from registration as a clearing agency. The

⁴²⁸ See, e.g., 5 U.S.C. 552 *et seq.* Exemption 4 of the Freedom of Information Act provides an exemption for trade secrets and commercial or financial information obtained from a person and privileged or confidential. See 5 U.S.C. 552(b)(4). Exemption 8 of the Freedom of Information Act provides an exemption for matters that are contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions. See 5 U.S.C. 552(b)(8).

⁴²⁹ See Clearing Agency Standards Adopting Release, *supra* note 404; CCA Standards Adopting Release, *supra* note 404.

⁴³⁰ This figure was calculated as follows: (Assistant General Counsel for 8 hours +

Commission anticipates that one additional entity may seek to become a CMSP in the next three years, and so for purposes of this proposal the Commission has assumed four respondents.

Proposed Rule 17Ad–27 would require a CMSP to establish, implement, maintain, and enforce written policies and procedures. Based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rules 17Ad–22(d)(8) and 17Ad–22(e)(2),⁴²⁹ the Commission estimates that respondent CMSPs would incur an aggregate one-time burden of approximately 56 hours to create new policies and procedures,⁴³⁰ and that the aggregate cost of this one time burden would be \$27,280.⁴³¹

Compliance Attorney for 6 hours) = 14 hours \times 4 respondent CMSPs = 56 hours.

⁴³¹ This figure was calculated as follows: (Assistant General Counsel at \$602/hour \times 8 hours = \$4,816) + (Compliance Attorney at \$334/hour \times 6 hours = \$2,004) = \$6,820 \times 4 CMSPs equals \$27,280.

⁴³² See CCA Standards Adopting Release, *supra* note 404, at 70899.

⁴³³ This figure was calculated as follows: (Compliance Attorney for 25 hours + Computer Operations Manager for 10 hours) = 34 hours \times 4 respondent CMSPs = 136 hours. As discussed previously, *supra* note 407, the Commission estimates that the Inline XBRL requirement would require respondent CMSPs to incur one additional ongoing burden hour to apply and review Inline XBRL tags, as follows: (Compliance Attorney for 1

Proposed Rule 17Ad–27 would impose ongoing burdens on a respondent CMSP as follows: (i) Ongoing monitoring and compliance activities with respect to the written policies and procedures required by the proposed rule; and (ii) ongoing documentation activities with respect to the required annual report. Based on the similar reporting requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad–22(e)(23),⁴³² the Commission estimates that the ongoing activities required by proposed Rule 17Ad–27 would impose an aggregate annual burden on respondent CMSPs of 140 hours,⁴³³ and an aggregate cost of \$58,900.⁴³⁴ The total industry cost is estimated to be \$84,592.⁴³⁵

hour) \times 4 CMSPs = 4 hours. Taken together, the total ongoing burden is 140 hours (136 hours + 4 hours = 140 hours).

⁴³⁴ This figure was calculated as follows: [(Compliance Attorney at \$397/hour \times 24 hours = \$9,528) + (Computer Operations Manager at \$480/hour \times 10 hours = \$4,800)] = \$14,328 \times 4 CMSPs = \$57,312. The Commission also estimates the costs associated with the one burden hour associated with applying and review Inline XBRL tags as follows: (Compliance Attorney at \$397/hour \times 1 hour = \$397) \times 4 CMSPs = \$1,588. Taken together, the total amount is \$58,900 (\$57,312 + \$1,588 = \$58,900).

⁴³⁵ This figure was calculated as follows: \$27,280 (industry one-time burden) + \$58,900 (industry ongoing burden) = \$84,592.

TABLE 2—SUMMARY OF BURDEN ESTIMATES FOR PROPOSED RULE 17AD-27

Name of information collection	Type of burden	Number of respondents	Initial burden per entity (hours)	Ongoing burden per entity (hours)	Total annual burden per entity (hours)	Total industry burden (hours)
17Ad-27	Recordkeeping	4	56	35	91	364

C. Request for Comment

Pursuant to 44 U.S.C. 3506(c)(2)(B), the Commission solicits comments to:

154. Evaluate whether the proposed collections of information are necessary for the proper performance of the Commission’s functions, including whether the information shall have practical utility;

155. Evaluate the accuracy of the Commission’s estimates of the burdens of the proposed collections of information;

156. Determine whether there are ways to enhance the quality, utility, and clarity of the information to be collected;

157. Evaluate whether there are ways to minimize the burden of collection of information on those who are to respond, including through the use of automated collection techniques or other forms of information technology; and

158. Evaluate whether the proposed rules and rule amendments would have any effects on any other collection of information not previously identified in this section.

Persons submitting comments on the collection of information requirements should direct them to the Office of Management and Budget, Attention: Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Washington, DC 20503, and should also send a copy of their comments to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090, with reference to File Number S7-[]-22. Requests for materials submitted to OMB by the Commission with regard to this collection of information should be in writing, with reference to File Number S7-[]-22 and be submitted to the Securities and Exchange Commission, Office of FOIA/PA Services, 100 F Street NE, Washington, DC 20549-2736. As OMB is required to make a decision concerning the collection of information between 30 and 60 days after publication, a comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication.

VII. Small Business Regulatory Enforcement Fairness Act

Under the Small Business Regulatory Enforcement Fairness Act of 1996,⁴³⁶ a rule is “major” if it has resulted, or is likely to result in: An annual effect on the economy of \$100 million or more; a major increase in costs or prices for consumers or individual industries; or significant adverse effects on competition, investment, or innovation. The Commission requests comment on whether the proposed rules and rule amendments would be a “major” rule for purposes of the Small Business Regulatory Enforcement Fairness Act. In addition, the Commission solicits comment and empirical data on: The potential effect on the U.S. economy on annual basis; any potential increase in costs or prices for consumers or individual industries; and any potential effect on competition, investment, or innovation.

VIII. Regulatory Flexibility Act

The Regulatory Flexibility Act (“RFA”) requires the Commission, in promulgating rules, to consider the impact of those rules on small entities.⁴³⁷ Section 603(a) of the Administrative Procedure Act,⁴³⁸ as amended by the RFA, generally requires the Commission to undertake a regulatory flexibility analysis of all proposed rules to determine the impact of such rulemaking on “small entities.”⁴³⁹ Section 605(b) of the RFA states that this requirement shall not apply to any proposed rule which, if adopted, would not have a significant economic impact on a substantial number of small entities.⁴⁴⁰ The Commission has prepared the following initial regulatory flexibility analysis in accordance with Section 603(a) of the RFA.

⁴³⁶ Public Law 104-121, Title II, 110 Stat. 857 (1996).

⁴³⁷ See 5 U.S.C. 601 *et seq.*

⁴³⁸ 5 U.S.C. 603(a).

⁴³⁹ Section 601(b) of the RFA permits agencies to formulate their own definitions of “small entities.” See 5 U.S.C. 601(b). The Commission has adopted definitions for the term “small entity” for the purposes of rulemaking in accordance with the RFA. These definitions, as relevant to this rulemaking, are set forth in 17 CFR 240.0-10.

⁴⁴⁰ See 5 U.S.C. 605(b).

A. Proposed Rules and Amendments for Rules 15c6-1, 15c6-2, and 204-2

1. Reasons for, and Objectives of, the Proposed Actions

The Commission is proposing to amend Exchange Act Rule 15c6-1 to shorten the standard settlement cycle for securities transactions (other than those excluded by the rule) from T+2 to T+1. The Commission believes that the proposed amendments to Rule 15c6-1 to shorten the standard settlement cycle from two days to one day would offer market participants benefits by reducing exposure to credit, market, and liquidity risk, as well as related reductions to overall systemic risk.

The Commission is also proposing new Exchange Act Rule 15c6-2 to prohibit broker-dealers from entering into contracts with their institutional customers unless those contracts require that the parties complete allocations, confirmations, and affirmations by the end of the trade date. The Commission believes that new Rule 15c6-2 would help facilitate settlement of these institutional trades in a T+1 or shorter standard settlement cycle by promoting the timely transmission of trade data necessary to achieve settlement. Furthermore, the Commission believes that proposed Rule 15c6-2 would foster continued improvements in institutional trade processing, which should in turn also further improve accuracy and efficiency, reduce fails, and in turn, collectively reduce operational risk.

The Commission is proposing a related amendment to investment adviser recordkeeping rule under the Advisers Act designed to ensure that advisers that are parties to contracts under proposed Rule 15c6-2 retain records of confirmations received, and of the allocations and affirmations sent to a broker or dealer, with a date and time stamp that indicates when the allocation or affirmation was sent to the broker or dealer.

2. Legal Basis

The Commission proposes amendments to Rule 15c6-1 and new Rule 15c6-2 pursuant to authority set forth in the Exchange Act, particularly

Sections 15(c)(6),⁴⁴¹ 17A,⁴⁴² and 23(a).⁴⁴³ The Commission proposes an amendment to Rule 204–2 pursuant to authority set forth in Sections 204 and 211 of the Advisers Act.⁴⁴⁴

3. Small Entities Subject to the Proposed Rule and Proposed Rule Amendments

Paragraph (c) of Exchange Act Rule 0–10 provides that, for purposes of Commission rulemaking in accordance with the provisions of the RFA, when used with reference to a broker or dealer, the Commission has defined the term “small entity” to mean a broker or dealer: (1) With total capital (net worth plus subordinated liabilities) of less than \$500,000 on the date in the prior fiscal year as of which its audited financial statements were prepared pursuant to Rule 17a–5(d) under the Exchange Act,⁴⁴⁵ or if not required to file such statements, a broker-dealer with total capital (net worth plus subordinated liabilities) of less than \$500,000 on the last business day of the preceding fiscal year (or in the time that it has been in business, if shorter); and (2) is not affiliated with any person (other than a natural person) that is not a small business or small organization.⁴⁴⁶

Under Commission rules, for the purposes of the Advisers Act and the Regulatory Flexibility Act, an investment adviser generally is a small entity if it: (i) Has assets under management having a total value of less than \$25 million; (ii) did not have total assets of \$5 million or more on the last day of the most recent fiscal year; and (iii) does not control, is not controlled by, and is not under common control with another investment adviser that has assets under management of \$25 million or more, or any person (other than a natural person) that had total assets of \$5 million or more on the last day of its most recent fiscal year.⁴⁴⁷

The proposed amendments to Rule 15c6–1 would prohibit broker-dealers, including those that are small entities, from effecting or entering into a contract for the purchase or sale of a security (other than an exempted security, government security, municipal security, commercial paper, bankers’ acceptances, or commercial bills) that provides for payment of funds and delivery of securities no later than the first business day after the date of the

contract unless otherwise expressly agreed to by the parties at the time of the transaction. Proposed Rule 15c6–2 would prohibit broker-dealers, where the broker-dealer has agreed with its customer to engage in an allocation, confirmation, or affirmation process, from effecting or entering into a contract for the purchase or sale of a security (other than an exempted security, a government security, a municipal security, commercial paper, bankers’ acceptances, or commercial bills) on behalf of a customer unless such broker or dealer has entered into a written agreement with the customer that requires the allocation, confirmation, affirmation, or any combination thereof, be completed no later than the end of the day on trade date in such form as may be necessary to achieve settlement in compliance with Rule 15c6–1(a). Based on FOCUS Report data, the Commission estimates that, as of June 30, 2021, approximately 1,439 of broker-dealers might be deemed small entities for purposes of this analysis.

The proposed amendment to Rule 204–2 would require that advisers that are parties to contracts under proposed Rule 15c6–2 retain records of confirmations received, and of the allocations and affirmations sent to a broker or dealer, with a date and time stamp for each allocation (as applicable) and each affirmation that indicates when the allocation or affirmation was sent to the broker or dealer. As discussed in Part VI above, the Commission estimates that based on IARD data as of December 30, 2020, approximately 11,283 investment advisers would be subject to the proposed amendment to rule 204–2 under the Advisers Act. Our proposed amendment would not affect most investment advisers that are small entities (“small advisers”) because they are generally registered with one or more state securities authorities and not with the Commission. Under Section 203A of the Advisers Act, most small advisers are prohibited from registering with the Commission and are regulated by state regulators.⁴⁴⁸ Based on IARD data, the Commission estimates that as of December 2020, approximately 431 advisers registered with the Commission are small entities under the Regulatory Flexibility Act.⁴⁴⁹ Of these, the Commission anticipates that 199, or 46% of small advisers registered with the Commission, would be subject to the

proposed amendment under the Advisers Act.⁴⁵⁰

4. Projected Reporting, Recordkeeping, and Other Compliance Requirements

The proposed amendments to Rule 15c6–1 would not impose any new reporting or recordkeeping requirements on broker-dealers that are small entities. However, the proposed amendments to Rule 15c6–1 may impact certain broker-dealers, including those that are small entities, to the extent that broker-dealers may need to make changes to their business operations and incur certain costs in order to operate in a T+1 environment.

For example, conversion to a T+1 standard settlement cycle may require broker-dealers, including those that are small entities, to make changes to their business practices, as well as to their computer systems, and/or to deploy new technology solutions. Implementation of these changes may require broker-dealers to incur new or increased costs, which may vary based on the business model of individual broker-dealers as well as other factors.

Additionally, conversion to a T+1 standard settlement cycle may also result in an increase in costs to certain broker-dealers who finance the purchase of customer securities until the broker-dealer receives payment from its customers. To pay for securities purchases, many customers liquidate other securities or money fund balances held for them by their broker-dealers in consolidated accounts such as cash management accounts. However, some broker-dealers may elect to finance the purchase of customer securities until the broker-dealer receives payment from its customers for those customers that do not choose to liquidate other securities or have a sufficient money fund balance prior to trade execution to pay for securities purchases. Broker-dealers that elect to finance the purchase of customer securities may incur an increase in costs in a T+1 environment resulting from settlement occurring one day earlier unless the broker-dealer can expedite customer payments.

Proposed Rule 15c6–2 would not impose any new reporting or recordkeeping requirements on broker-dealers that are small entities. However,

⁴⁵⁰ Based on data from Form ADV as of December 2020, this figure represents registered investment advisers that: (i) Report clients that are registered investment companies in response to Item 5.D, (ii) report any institutional separately managed accounts in Item 5.D., or have particular separately managed account exposures in Section 5.K.(1) of Schedule D, or (iii) advise reported hedge funds as per Section 7.B.(1) of Schedule D.

⁴⁴¹ 15 U.S.C. 78o(c)(6).

⁴⁴² 15 U.S.C. 78q–1.

⁴⁴³ 15 U.S.C. 78w(a).

⁴⁴⁴ 15 U.S.C. 80b–4 and 80b–11.

⁴⁴⁵ 17 CFR 240.17a–5(c).

⁴⁴⁶ 17 CFR 240.0–10(d).

⁴⁴⁷ See 17 CFR 275.0–7.

⁴⁴⁸ 15 U.S.C. 80b–3a.

⁴⁴⁹ Based on responses from registered investment adviser to Items 5.F. and 12 of Form ADV.

the proposed rule may impact certain broker-dealers, including those that are small entities, to the extent that broker-dealers may need to make changes to their business operations and incur certain costs in order to achieve trade date completion of institutional trade allocations, confirmations, and affirmations. For example, completion of allocations, confirmations, and affirmations on trade date may require broker-dealers, including those that are small entities, to make changes to their business practices, as well as to their computer systems, and/or to deploy new technology solutions.

Implementation of these changes may require broker-dealers to incur new or increased costs, which may vary based on the business model of individual broker-dealers as well as other factors.

The proposed amendment to Rule 204–2 imposes certain reporting and compliance requirements on certain investment advisers, including those that are small entities. It would require them to retain records of each confirmation received, and any allocation and each affirmation sent given to a broker or dealer, with a date and time stamp for each allocation (if applicable) and affirmation that indicates when the allocation or affirmation was sent to the broker or dealer. The reasons for and objectives of, the proposed amendment to the books and records rule are discussed in more detail in Part III.C. These requirements as well as the costs and burdens on investment advisers, including those that are small entities, are discussed in Parts V and VI and below. As discussed above, there are approximately 431 small advisers, and approximately 199 small advisers would be subject to amendments to the books and records rule. As discussed in Part VI.A, the proposed amendments to Rule 204–2 under the Advisers Act would increase the annual burden by approximately 0.4 blended hours per adviser per year, or an increased burden of 172.4 blended hours in the aggregate for small advisers.⁴⁵¹ The Commission therefore believes the annual monetized aggregate cost to small advisers associated with our proposed amendments would be approximately \$11,957.66.⁴⁵²

5. Duplicative, Overlapping, or Conflicting Federal Rules

The Commission believes that no federal rules duplicate, overlap or

conflict with the proposed amendments to Rule 15c6–1, proposed Rule 15c6–2, or the proposed amendment to Rule 204–2.

6. Significant Alternatives

The RFA requires that the Commission include in its regulatory flexibility analysis a description of any significant alternatives to the proposed rule which would accomplish the stated objectives of applicable statutes and which would minimize any significant economic impact of the proposed rule on small entities.⁴⁵³ Pursuant to Section 3(a) of the RFA, the Commission's initial regulatory flexibility analysis must consider certain types of alternatives, including: (a) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (b) the clarification, consolidation, or simplification of the compliance and reporting requirements under the rule for small entities; (c) the use of performance rather than design standards; and (d) an exemption from coverage of the rule, or any part thereof, for such small entities.⁴⁵⁴

The Commission considered alternatives to the proposed amendments to Rule 15c6–1 that would accomplish the stated objectives of the amendment without disproportionately burdening broker-dealers that are small entities, including: Differing compliance requirements or timetables; clarifying, consolidating or simplifying the compliance requirements; using performance rather than design standards; or providing an exemption for certain or all broker-dealers that are small entities. The purpose of Rule 15c6–1 is to establish a standard settlement cycle for broker-dealer transactions. Alternatives, such as different compliance requirements or timetables, or exemptions, for Rule 15c6–1, or any part thereof, for small entities would prevent the establishment of a standard settlement cycle and create substantial confusion over when transactions will settle. Allowing small entities to settle at a time later than T+1 could create a two-tiered market in which order flow for small entities would not coincide with that of other firms operating on a T+1 settlement cycle. Additionally, the Commission believes that establishing a single timetable (*i.e.*, compliance date) for all broker-dealers, including small entities, to comply with the amendment is necessary to ensure that the transition

to a T+1 standard settlement cycle takes place in an orderly manner that minimizes undue disruptions in the securities markets. In particular, because broker-dealers do not always know the identity of their counterparty when they enter a transaction, providing broker-dealers that are small entities with an exemption from the standard settlement cycle would likely create substantial confusion over when a transaction will settle. With respect to using performance rather than design standards, the Commission used performance standards to the extent appropriate under the statute. For example, broker-dealers have the flexibility to settle transactions under a standard settlement cycle shorter than T+1. For firm commitment offerings, small entities do retain the option under paragraph (d) to agree with their counterparty in advance of the transaction to use a settlement cycle other than T+1. In addition, under the proposed rule amendment, broker-dealers retain flexibility to tailor their contracts, systems and processes to choose how to comply with the rule most effectively. In Part V.C.5.b)(3), the Commission preliminarily estimates the costs likely to be incurred by broker-dealers to implement a T+1 standard settlement cycle.

The Commission also considered alternatives to proposed Rule 15c6–2 that would accomplish the stated objectives of the new rule without disproportionately burdening broker-dealers that are small entities, including: Differing compliance requirements or timetables; clarifying, consolidating or simplifying the compliance requirements; using performance rather than design standards; or providing an exemption for certain or all broker-dealers that are small entities. The purpose of proposed Rule 15c6–2 is to achieve trade date completion of institutional trade allocations, confirmations, and affirmations to facilitate a T+1 standard settlement cycle. Alternatives, such as different compliance requirements or timetables, or exemptions, for Rule 15c6–2, or any part thereof, for small entities would undermine the purpose of establishing a standard settlement cycle. For example, allowing small entities to complete the allocation, confirmation, and affirmation processes at a time later than trade date could create a two-tiered market that could work to the detriment of small entities whose post-trade processing would not coincide with that of other firms operating on a T+1 settlement cycle. Additionally, the Commission believes

⁴⁵¹ 0.4 hour × 431 small advisers = 172.4 blended hours in the aggregate for small advisers.

⁴⁵² 172.4 blended hours × \$69.36 per hour = \$11,957.66. See Part VI.A for a discussion of the monetized cost of the hour burden per adviser.

⁴⁵³ 5 U.S.C. 603(c).

⁴⁵⁴ *Id.*

that establishing a single timetable (*i.e.*, compliance date) for all broker-dealers, including small entities, to comply with the new rule is necessary to ensure that the transition to a T+1 standard settlement cycle takes place in an orderly manner that minimizes undue disruptions in the securities markets. With respect to using performance rather than design standards, the Commission used performance standards to the extent appropriate under the statute. Under the proposed rule, broker-dealers have the flexibility to tailor their systems and processes, and generally to choose how, to comply with the new rule.

The Commission considered alternatives to the proposed amendment to Rule 204–2 that would accomplish the stated objectives of the amendment without disproportionately burdening investment advisers that are small entities, including: Differing compliance or reporting requirements or timetables that take into account the resources available to small entities; clarifying, consolidating or simplifying the compliance and reporting requirements; using performance rather than design standards; or providing an exemption from coverage of all or part of the proposed rule for investment advisers that are small entities. Regarding the first and fourth alternatives, the Commission believes that establishing different compliance or reporting requirements or timetables for small advisers, or exempting small advisers from the proposed rule, or any part thereof, would be inappropriate under these circumstances. Because the protections of the Advisers Act are intended to apply equally to clients of both large and small firms, it would be inconsistent with the purposes of the Advisers Act to specify differences for small entities under the proposed amendment to Rule 204–2. While it is the staff's experience that some small and mid-size advisers do not currently retain these records—whereas most larger advisers already retain them—the Commission believes that the initial burden on small advisers of retaining the proposed records would not be large.⁴⁵⁵ As discussed above, the Commission believes these advisers would need to update their policies and procedures and instruct personnel to retain these records in their electronic recordkeeping systems, including any confirmations that they may have retained in paper format. However, because the Commission believes these advisers already have recordkeeping systems to accommodate these records

(which would include, at a minimum, existing spreadsheet formats and email retention systems), the Commission does not believe the two hour additional burden of complying with this proposed amendment would warrant establishing a different timetable for compliance for small advisers. In addition, as discussed above, our staff would use the information that advisers would maintain to help prepare for examinations of investment advisers and verify that an adviser has completed the steps necessary to complete settlement in a timely manner in accordance with proposed rule 15c6–1(a). Establishing different conditions for large and small advisers would negate these benefits. Regarding the second alternative, we believe the current proposal is clear and that further clarification, consolidation, or simplification of the compliance requirements is not necessary. Our proposal states the types of communications—confirmations, any allocations, and affirmations—that advisers must retain in their records, and that allocations (if applicable) and affirmations must be date and time stamped. We believe that by proposing to clearly list these types of communications as required records, advisers will not need to parse whether, and if so which, current requirement under Rule 204–2 captures these post-trade communications. Further, the proposed requirement to date and time stamp the allocations (if applicable) and affirmations sent to a broker or dealer is clear and consistent with many advisers' current practices of date and time stamping these records, as discussed in Part VI.A, above.⁴⁵⁶ Regarding the third alternative, the proposed amendment to Rule 204–2 is narrowly tailored to correspond to the proposed rules and rule amendments under the Exchange Act, and using performance rather than design standards would be inconsistent with our statutory mandate to protect investors, as advisers must maintain books and records in a uniform and quantifiable manner that it is useful to our regulatory and examination program.

7. Request for Comment

The Commission encourages written comments on matters discussed in the initial RFA. In particular, the Commission seeks comment on the

⁴⁵⁶ As noted above, however, we estimate that 50% of small and mid-sized advisers that have institutional clients do not currently maintain these records, and 1% of advisers that have institutional clients, do not send allocations or affirmations electronically to brokers or dealers.

number of small entities that would be affected by the proposed amendments to Rule 15c6–1, proposed Rule 15c6–2, and the proposed amendment to Rule 204–2, and whether the effect(s) on small entities would be economically significant. Commenters are asked to describe the nature of any effect(s) the proposed amendments to Rule 15c6–1, proposed Rule 15c6–2, and the proposed amendment to Rule 204–2 may have on small entities, and to provide empirical data to support their views.

B. Proposed Rule 17Ad–27

Proposed Rule 17Ad–27 would apply to clearing agencies that are CMSPs. For the purposes of Commission rulemaking, a small entity includes, when used with reference to a clearing agency, a clearing agency that (i) compared, cleared, and settled less than \$500 million in securities transactions during the preceding fiscal year, (ii) had less than \$200 million of funds and securities in its custody or control at all times during the preceding fiscal year (or at any time that it has been in business, if shorter), and (iii) is not affiliated with any person (other than a natural person) that is not a small business or small organization.⁴⁵⁷

Based on the Commission's existing information about the CMSPs that would be subject to Rule 17Ad–27, the Commission believes that all such CMSPs would not fall within the definition of a small entity described above.⁴⁵⁸ While other CMSPs may emerge and seek to register as clearing agencies or obtain exemptions from registration as a clearing agency with the Commission, the Commission does not believe that any such entities would be "small entities" as defined in 17 CFR 240.0–10(d). Accordingly, the Commission believes that any such CMSP would exceed the thresholds for "small entities" set forth in 17 CFR 240.0–10.

For the reasons described above, the Commission preliminarily believes that proposed Rule 17Ad–27 would not have a significant economic impact on a substantial number of small entities and requests comment on this analysis.

⁴⁵⁷ See 17 CFR 240.0–10(d).

⁴⁵⁸ DTCC ITP Matching is a subsidiary of DTCC, and in 2020, DTCC processed \$2.329 quadrillion in financial transactions. DTCC, 2020 Annual Report. As of December 1, 2021, SS&C Technologies Holdings, Inc. (NASDAQ: SSNC) had a market capitalization of \$19.35 billion. Bloomberg STP LLC is a wholly-owned by Bloomberg L.P., a global business and financial information and news company.

⁴⁵⁵ See *supra* Part III.C.

Statutory Authority and Text of the Proposed Rules and Rule Amendments

The Commission is proposing amendments to Rule 15c6–1, new Rule 15c6–2, and new Rule 17Ad–27 under the Commission’s rulemaking authority set forth in Sections 15(c)(6), 17A and 23(a) of the Exchange Act [15 U.S.C. 78o(c)(6), 78q–1, and 78w(a) respectively]. The Commission is proposing amendments to Rule 204–2 under the Advisers Act under the authority set forth in Sections 204 and 211 of the Advisers Act [15 U.S.C. 80b–4 and 80b–11].

List of Subjects in 17 CFR Parts 232, 240, and 275

Reporting and recordkeeping requirements, Securities.

Text of Amendment

For the reasons stated in the preamble, the Securities and Exchange Commission proposes to amend 17 CFR parts 232, 240, and 275 as set forth below:

PART 232—REGULATION S–T—GENERAL RULES AND REGULATIONS FOR ELECTRONIC FILINGS

■ 1. The authority citation for part 232 continues to read as follows:

Authority: 15 U.S.C. 77c, 77f, 77g, 77h, 77j, 77s(a), 77z–3, 77sss(a), 78c(b), 78l, 78m, 78n, 78o(d), 78w(a), 78ll, 80a–6(c), 80a–8, 80a–29, 80a–30, 80a–37, 7201 *et seq.*; and 18 U.S.C. 1350, unless otherwise noted.

* * * * *

■ 2. Amend § 232.101 by adding paragraph (xxii) to read as follows:

§ 232.101 Mandated electronic submissions and exceptions.

(a) * * *

(1) * * *

(xxii) Reports filed pursuant to Rule 17Ad–27 (§ 240.17Ad–27) under the Exchange Act.

■ 3. Add § 232.409 to read as follows:

§ 232.409 Straight-through processing report interactive data.

The straight-through processing report required by Rule 17Ad–27 (§ 240.17Ad–27) under the Exchange Act must be submitted in Inline XBRL in accordance with the EDGAR Filer Manual.

PART 240—GENERAL RULES AND REGULATIONS, SECURITIES EXCHANGE ACT OF 1934

■ 4. The authority citation for part 240 continues to read as follows:

Authority: 15 U.S.C. 77c, 77d, 77g, 77j, 77s, 77z–2, 77z–3, 77eee, 77ggg, 77nnn, 77sss, 77ttt, 78c, 78c–3, 78c–5, 78d, 78e, 78f, 78g, 78i, 78j, 78j–1, 78k, 78k–1, 78l, 78m,

78n, 78n–1, 78o, 78o–4, 78o–10, 78p, 78q, 78q–1, 78s, 78u–5, 78w, 78x, 78ll, 78mm, 80a–20, 80a–23, 80a–29, 80a–37, 80b–3, 80b–4, 80b–11, and 7201 *et seq.*, and 8302; 7 U.S.C. 2(c)(2)(E); 12 U.S.C. 5221(e)(3); 18 U.S.C. 1350; Pub. L. 111–203, 939A, 124 Stat. 1376 (2010); and Pub. L. 112–106, sec. 503 and 602, 126 Stat. 326 (2012), unless otherwise noted.

* * * * *

■ 5. Amend § 240.15c6–1 by reserving paragraph (c) and revising paragraphs (a), (b), and (d) to read as follows:

§ 240.15c6–1 Settlement cycle.

(a) Except as provided in paragraphs (b) and (d) of this section, a broker or dealer shall not effect or enter into a contract for the purchase or sale of a security (other than an exempted security, a government security, a municipal security, commercial paper, bankers’ acceptances, or commercial bills) that provides for payment of funds and delivery of securities later than the first business day after the date of the contract unless otherwise expressly agreed to by the parties at the time of the transaction.

(b) Paragraph (a) of this section shall not apply to contracts:

(1) For the purchase or sale of limited partnership interests that are not listed on an exchange or for which quotations are not disseminated through an automated quotation system of a registered securities association;

(2) For the purchase or sale of securities that the Commission may from time to time, taking into account then existing market practices, exempt by order from the requirements of paragraph (a) of this section, either unconditionally or on specified terms and conditions, if the Commission determines that such exemption is consistent with the public interest and the protection of investors.

(c) Reserved.

(d) For purposes of paragraph (a) of this section, the parties to a contract shall be deemed to have expressly agreed to an alternate date for payment of funds and delivery of securities at the time of the transaction for a contract for the sale for cash of securities pursuant to a firm commitment offering if the managing underwriter and the issuer have agreed to such date for all securities sold pursuant to such offering and the parties to the contract have not expressly agreed to another date for payment of funds and delivery of securities at the time of the transaction.

■ 6. Add § 240.15c6–2 to read as follows:

§ 240.15c6–2 Same-day allocation, confirmation, and affirmation.

For contracts where parties have agreed to engage in an allocation, confirmation, or affirmation process, no broker or dealer shall effect or enter into a contract for the purchase or sale of a security (other than an exempted security, a government security, a municipal security, commercial paper, bankers’ acceptances, or commercial bills) on behalf of a customer unless such broker or dealer has entered into a written agreement with the customer that requires the allocation, confirmation, affirmation, or any combination thereof, be completed as soon as technologically practicable and no later than the end of the day on trade date in such form as may be necessary to achieve settlement in compliance with paragraph (a) of § 240.15c6–1.

■ 7. Add § 240.17Ad–27 to read as follows:

§ 240.17Ad–27 Straight-through processing by central matching service providers.

A clearing agency that provides a central matching service for transactions involving broker-dealers and their customers must establish, implement, maintain, and enforce policies and procedures that facilitate straight-through processing. Such clearing agency also must submit to the Commission every twelve months a report that describes the following:

(a) Its current policies and procedures for facilitating straight-through processing;

(b) Its progress in facilitating straight-through processing during the twelve-month period covered by the report; and

(c) The steps it intends to take to facilitate straight-through processing during the twelve-month period that follows the period covered by the report.

The report must be filed electronically on EDGAR and must be provided as interactive data as required by § 232.409 of this chapter (Rule 409 of Regulation S–T) in accordance with the EDGAR Filer Manual.

PART 275—RULES AND REGULATIONS, INVESTMENT ADVISERS ACT OF 1940

■ 8. The authority citation for part 275 continues to read as follows:

Authority: 15 U.S.C. 80b–2(a)(11)(G), 80b–2(a)(11)(H), 80b–2(a)(17), 80b–3, 80b–4, 80b–4a, 80b–6(4), 80b–6a, and 80b–11, unless otherwise noted.

* * * * *

Section 275.204–2 is also issued under 15 U.S.C. 80b–6.

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■ 9. Amend § 275.204–2 by revising paragraph (a)(7)(iii) to read as follows:

§ 275.204–2 Books and records to be maintained by investment advisers.

(a) * * *

(7) * * *

(iii) The placing or execution of any order to purchase or sell any security; and if the adviser is a party to a contract

under rule § 240.15c6–2, each confirmation received, and any allocation and each affirmation sent, with a date and time stamp for each allocation (if applicable) and affirmation that indicates when the allocation or affirmation was sent to the broker or dealer.

* * * * *

By the Commission.

Dated: February 9, 2022.

Vanessa A. Countryman,
Secretary.

[FR Doc. 2022–03143 Filed 2–23–22; 8:45 am]

BILLING CODE 8011–01–P