The Implications of T+1

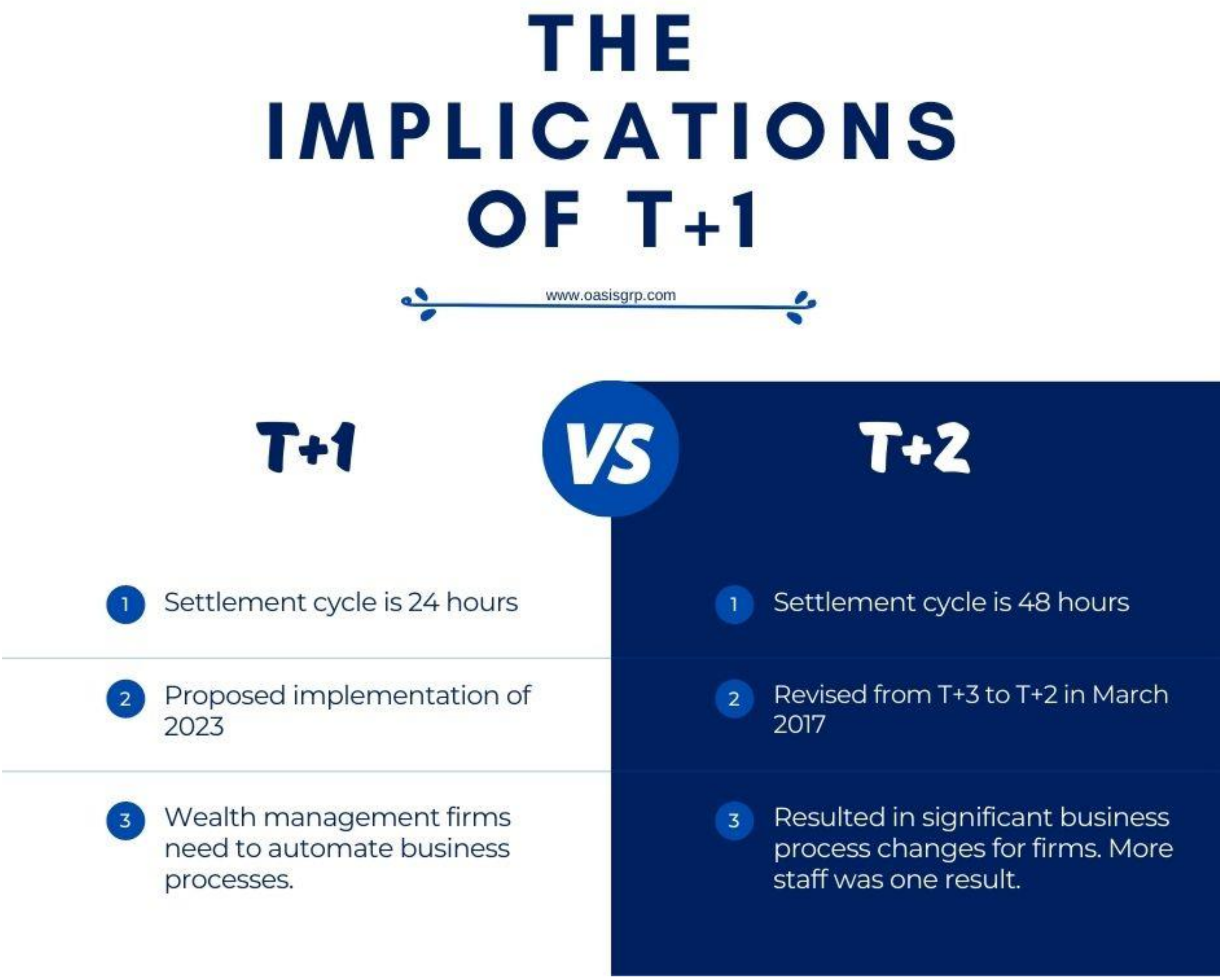
The Securities Industry and Financial Markets Association (SIFMA), the Investment Company Institute (ICI), and The Depository Trust & Clearing Corporation (DTCC) announced in April 2021 that they are collaborating on efforts to accelerate the U.S. securities settlement cycle from two days to one day. The plan proposes to begin the transition to an enhanced settlement model in the second half of 2022 with an official move of the settlement date in 2023.[i] The plan is broadly supported by Securities and Exchange Commission Chairman, Gary Gensler.[ii]

A single day settlement period (known as T+1) has far reaching implications for the individual investor, the market's efficiency, wealth management, and financial technology firms. Some firms may feel that the settlement date is simply market plumbing that will require additional testing to achieve. Many firms have yet to start their planning for the eventual move to T+1. This is a large risk to their business and is likely to result in increased costs to achieve compressed time frames resulting from their delay to act.

The compression of the settlement cycle to 24 hours will create significant challenges for firms that are far beyond the testing that will obviously be required. These challenges will broadly result from several areas that we will examine:

- Assessing your operational preparedness
- Planning for the change
- Updating trading and settlement procedures
- Improving operational processes and efficiencies
- Increasing technology investments to automate manual processes

We will examine the settlement cycle and what it means to wealth management and financial technology firms and how you can prepare your firm for this historic change.



The Settlement Cycle

The transaction date is the date that an investor agrees to buy or sell a security. The settlement date is the date which the buyer of the security pays the seller and takes custody of the security. In the 1920s this was typically the same day as buyers and sellers would exchange cash for securities in person. In this case, the buyer and seller would meet at an exchange and agree to a price. The seller would give the paper stock certificate to the buyer and the buyer would give the seller cash.

The transaction date is when the seller and buyer execute a contract to transfer the ownership of the security. The seller must initiate the transfer of ownership of the security to the buyer against the appropriate payment that both parties agreed during the execution of the contract. The trade is known as "settled" when the ownership of the security is transferred, the payment received, and the buyer becomes the new holder of the security. The settlement cycle is the period between the transaction date and the settlement date.

The Origin of the Settlement Cycle

Every practicing wealth manager; whether in a broker-dealer, registered investment advisor, bank, credit union, or family office; is aware that Congress passed the Securities Act of 1933 after the stock market crash of 1929 and during the Great Depression that followed the crash. The regulation of securities was chiefly governed by state laws, commonly referred to as blue sky laws, prior to the 1933 Act. Congress left the blue-sky securities laws in place when it enacted the 1933 Act and left the Federal Trade Commission to enforce the 1933 Act. The Securities Act of 1933 is an integral part of United States securities regulation and was the first major federal legislation to regulate the offer and sale of securities.

The Securities Exchange Commission was created by the Securities Exchange Act of 1934. The 1934 Act acts as another pillar of United States securities regulation. However, these acts did not regulate the settlement cycle. As a result, the settlement cycle would vary depending on where the transaction took place and by what means it took place.

The transfer of securities ownership was executed manually for over three decades. The seller delivered the stock certificate by post or by hand to the broker who represented the buyer. The buyer would withhold payment for the security until the share was received at their broker. Then the broker would send the payment to the seller.

The practices of handling paper stock certificates and the variable settlement cycle were tested, and failed, in the late-1960s. This was a time in American business where companies built portfolios of unrelated business to bypass antitrust restrictions. This led to a boom on Wall Street with ever increasing trading volumes and a resulting backlog in the back offices of brokerage firms from the sheer volume of stock certificates that were trading hands. Brokerage firms could not keep up with the amount of paper changing hands and this led to the "Paperwork Crisis" of 1968 when trading volumes hit 12 million shares a day.[iii]

This crisis in part led to the developments of the Depository Trust Corporation (DTC) in 1973 and the Securities Acts Amendments of 1975. It was not until the Act of 1975 that the SEC was empowered to establish a national market system and a system for nationwide clearance and settlement of securities transactions.[iv] The system for nationwide clearance and settlement provides guidance on the process to trade securities and defines the actual duration of the settlement cycle.

The History of the Settlement Cycle

The SEC initially established a settlement cycle of five days (T+5) to allow for the delivery of the security and the subsequent delivery of the payment to settle the trade. This protected the buyer and seller from fluctuating prices during the settlement cycle. This settlement cycle remained in place for nearly two decades. The settlement cycle was revised in 1993 from five business days to three business days (T+3). It was revised again in March 2017 from three business days to two business days (T+2) where it remains today.

The Depository Trust & Clearing Corporation (DTCC) announced in February that they are collaborating on efforts to accelerate the U.S. securities settlement cycle from two days to one day (T+1) within two years.[v] This was followed by an announcement in April that the Securities Industry and Financial Markets Association (SIFMA), the Investment Company Institute (ICI), and The Depository Trust & Clearing Corporation (DTCC) are collaborating on efforts to accelerate the settlement cycle. While these announcements are significant; SIFMA, ICI, and DTCC will need to engage with multiple stakeholders and their members to bring the initiative to fruition.

One of the most important stakeholders is the regulatory body associated with the settlement cycle, the SEC. SEC Chairman Gary Gensler discussed the topic before the House Committee on Financial Services in May.[vi] Chairman Gensler's testimony included the following:

> "I believe shortening the standard settlement cycle could reduce costs and risks in our markets. I've directed the SEC staff to put together a draft proposal for the Commission's review on this topic."[vii]

This is significant as Chairman Gensler has committed SEC staff to draft a proposal.

History Repeating Itself

The two-business day settlement cycle has only been in place for four years and yet the leading organizations in the infrastructure of our capital markets system and the SEC are calling for the change to the single business day settlement cycle. Market conditions like the Paperwork Crisis are prompting this call to change.

March 2020 saw one of the most dramatic stock market crashes in history. The Dow Jones Industrial Average (DJIA) dropped by roughly 26% in four trading days. The market crash was in response to world governments reactions to the novel coronavirus (COVID-19) outbreak. DTCC set a new single day record on Tuesday, March 12 when it processed over 363 million equity transactions.[viii] The transaction volume was more than 15% higher than the 315 million transactions processed at the height of the financial crisis in October 2008.[ix]

The March 2020 market volatility prompted DTCC to launch an internal study to reduce the settlement cycle time. The market experienced similar conditions in January when the rapidly changing prices, high volatility, and significant trading volume of a handful of securities cause larger-than-usual central margin calls on broker-dealers. We must examine the steps that occur after a trade is made to understand the importance of these market conditions and the resulting margin calls.

After The Trade Is Made

After the trade is made within the securities market, the buying and selling brokers notify a subsidiary of the DTCC called the National Securities Clearing Corporation (NSCC) that the trade was made. NSCC updates the account of the trading parties and arranges for the transfer of the money and securities between the two brokers. NSCC guarantees that the trade is made even if one of the parties cannot meet their obligations.[x] This guarantee is made because NSCC has collateral in the form of **margin** held with NSCC.

NSCC uses margin to guarantee the trades of a participating firm. The margin requirement is calculated in part by a Value-at-Risk (VaR) calculation. The Value-at-Risk is one of the most widely known measurements for risk assessment and risk management and the results of that calculation are used in part to determine the amount of money in margin that must be deposited with NSCC to satisfy their margin requirements.

The next step in the process is known as "**netting**". NSCC tallies up all the trades for each exchange member at the end of each trading day. It calculates the net difference based on the balance of trades from that day. For example, a firm who sells 12,000 shares of Apple and bought 10,000 shares of Apple has a net of 2,000 shares of Apple. The firm must only deliver 2,000 shares of Apple and the clearing company then matches the firm with another firm or firms who bought 2,000 shares.

Netting consolidates the amounts due from and owed to a firm across all the different securities it has traded to a single net debit or a net credit. The netting process reduces the total amount of cash and securities that must transfer between firms. NSCC nets down trades throughout the day to continue to reduce the amount of cash and securities that must transfer. NSCC estimates that netting reduces the value of payments that need to be exchanged by an average of 98-99% daily.

Netting, Margin, and the Settlement Cycle

Throughout the day, NSCC nets down trades in each participant's portfolio to calculate and assess margin requirements using the VaR calculation.[xi] The NSCC sends a letter to each of around 100 brokerage firms who clear with NSCC at 7 a.m. Eastern time each trading morning that outlines the margin requirements for that firm that day. Those margin requirements are a direct result of the netting from the trades the following day. This daily margin requirement also includes any margin from the day before because of the settlement period of transaction day plus 2 days. An increase in the exposure of a firm will result in a margin call to collect additional margin from the firm.

The highly publicized trading restrictions in late January 2021 was a direct result of this margin practice. The unprecedented trading volume and meteoric rise in share prices of GameStop and AMC raised concerns that NSCC would be left with a significant exposure to guarantee trades should the stock prices of either company fall precipitously. This caused NSCC to issue much larger margin requirements to several brokerage firms that had significant volume in these stocks. DTCC estimated that the margin requirements increased by 30% from $26 billion to $33.5 billion during the trading frenzy.[xii]

The brokerage firms satisfied their margin requirements and many of the firms instituted risk management policies to reduce their exposure in the market.

Charles Schwab and TD Ameritrade satisfied their margin requirements and put restrictions in place to stop investors from trading these shares on margin. In other words, they could not initiate these trades with money borrowed from Schwab and TD.[xiii] Wells Fargo stopped its advisors from recommending that clients buy GameStop and AMC.[xiv]

Robinhood received a margin letter from NSCC asking the firm to post $3 billion to satisfy their margin requirement.[xv] Robinhood estimated that the margin requirement was a ten-fold increase over their typical margin requirements.[xvi] Without the cash on hand to cover the margin requirement, Robinhood raised $1.4 billion and posted that collateral and had a call with NSCC. The results of that call were that limiting stock sales in some of the most volatile securities could count towards reducing the $3 billion margin collateral requirement.

Robinhood's massive margin requirement was a direct result of the T+2 settlement period as many of their open trades carried over from the prior trading day given the volume of trades in GameStop and AMC. Reducing trading in some of the most volatile securities enabled the firm to net and settle trades in those securities that were trailing from the day before because of T+2.

Reasons to Change the Settlement Cycle

Our markets have evolved since the implementation of zero commission trading and have given rise to a new group of retail investors who can quickly and efficiently trade securities using mobile trading applications. This trend precipitated the market issues in January and brought the issues of the two-day settlement period into stark relief.

The joint announcement from SIFMA, ICI, and DTCC in February and the accompanying white paper titled *Advancing Together: Leading the Industry to Accelerated Settlement* reflects that these associations have been considering the issue of the two-day settlement period for some time. The comments by SEC Chairman Gary Gensler in several congressional hearings that broadly support reducing the settlement period and his commitment of SEC resources to draft a proposal to shorten the settlement period all point to proposed legislation in early 2022 to enact the change.

Impacts of Settlement Period Changes

The reduction of the settlement period will have significant advantages to the market and all its participants, including:

- **Lower counterparty risk because the transfer of funds and securities is faster.**
- **Reduced margin requirements for brokerage firms.**
- **Faster access to funds for investors.**
- **Capital optimization for brokerage firms who do not need to tie up capital with margin requirements.**

Overall, these changes will lead to increased market efficiency and greater flows of capital in the market. However, reducing the settlement period from two business days to one business day will have significant impacts on the middle and back office of wealth management firms.

Bank and credit unions who reconcile post trade data between their books and records and their brokerage partners will have a much shorter timeframe to reconcile daily post trade data feeds. Many of the breaks in this reconciliation process are researched manually by their back-office teams. These teams simply will not have the time in a 24-hour settlement period to research trade failures. This will cause the automation of these and other processes.

Retail client funding processes rely today on ACH transfers or check deposits into client accounts. The check clearance time frame may increase the risk to wealth management firms who want to enable their clients to trade or may require clients to have fully funded accounts before being allowed to trade.

Securities based lending revenue for wealth management firms will reduce since clients may not need lending options to capitalize on market opportunities.

Recommendations to Prepare for the Settlement Cycle Change

Wealth management firms should take notice of the proposed settlement period changes to review their internal settlement and reconciliation processes and cycles. Any manual processes around their client onboarding, account funding, trade operations processes, settlement processes, and trade failure management should be reviewed to ensure that there are no implications associated with the new settlement period. Any impacted processes should undergo a thorough review cycle and have a cross functional team who can propose a new process.

Firms should review their timeframes for trade matching, securities lending, and account funding to determine how these timeframes and the associated processes should change. Examining your firm's account funding process, communication, and timeframes is an excellent opportunity to set expectations with your clients well in advance of the settlement period change.

Reviewing your technology stack to determine how well your technology investment can support the reduced settlement period and cycle is critical. Automated trading and technology solutions can significantly reduce the number of trade reconciliation issues that your back office needs to examine and further support the reduced settlement cycle. Firms without automated trading and rebalancing solutions should take this opportunity to review new technologies and determine how they can help your firm.

Manual or file-based integrations may not support the reduced settlement cycle timeframes. Examining the integrations between your systems now can alert your leadership team early to changes that are required. This enables your firm to find the right partner to implement any integration changes with enough time to adequately test the enhanced integrations. This will lead to a higher probability of your project succeeding and reduce the costs of your project.

The settlement period change is not a matter of if it happens, but rather when it happens. Firms that take the time to review their operations now will have the advantage of implementing and testing new solutions well in advance of the settlement period changes. Firms that adopt a wait and see approach to the settlement period change will incur higher costs in the form of additional staffing, more expensive technology projects, and stress filled implementation timeframes.

[i] https://www.dtcc.com/news/2021/february/24/dtcc-proposes-approach-to-shortening-us-settlement-cycle-to-t1-within-two-years

[ii] https://financialservices.house.gov/uploadedfiles/hhrg-117-ba00-wstate-genslerg-20210506.pdf

[iii] https://www.businessinsider.com/wall-street-paperwork-crisis-in-1960s-2015-10

[iv] https://www.govtrack.us/congress/bills/94/s249/summary

[v] https://www.dtcc.com/news/2021/february/24/dtcc-proposes-approach-to-shortening-us-settlement-cycle-to-t1-within-two-years

[vi] https://financialservices.house.gov/uploadedfiles/hhrg-117-ba00-wstate-genslerg-20210506.pdf

[vii] https://financialservices.house.gov/uploadedfiles/hhrg-117-ba00-wstate-genslerg-20210506.pdf

[viii] “Advancing Together: Leading the Industry to Accelerated Settlement”

[ix] “Advancing Together: Leading the Industry to Accelerated Settlement”

[x] https://www.dtcc.com/dtcc-connection/articles/2021/august/24/clearing-up-the-settlement-process

[xi] https://www.dtcc.com/dtcc-connection/articles/2021/january/12/how-margin-calls-help-protect-the-industry

[xii] https://www.wsj.com/articles/robinhood-raises-1-billion-to-meet-surging-cash-demands-11611928504

[xiii] https://www.nytimes.com/2021/01/27/business/gamestop-td-ameritrade-robinhood.html

[xiv] https://www.cnn.com/business/live-news/stock-market-news-012721/index.html

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[xv] https://fortune.com/2021/02/02/robinhood-gamestop-restricted-trading-meme-stocks-gme-amc-vlad-tenev-nscc/

[xvi] https://blog.robinhood.com/news/2021/1/29/what-happened-this-week