



**DTCC RECOMMENDS SHORTENING  
THE U.S. TRADE SETTLEMENT CYCLE** April 2014



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# DTCC Recommends Shortening the U.S. Trade Settlement Cycle

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The Depository Trust & Clearing Corporation ([DTCC](#)) recommends shortening the U.S. trade settlement cycle for equities, municipal and corporate bonds, and unit investment trusts (UITs) from T+3 (trade date plus three days) to T+2 (trade date plus two days) and will work with the industry to establish an implementation timeline. Once achieved, DTCC recommends a pause and further assessment of industry readiness and appetite for a future move to T+1. After considerable industry input and discussion, along with in-depth due diligence that included risk and cost-benefit studies, DTCC concluded that a move to T+2 would reduce industry risk. DTCC continues to work with market participants, industry organizations and regulators to refine and move this initiative forward.

Shortening the settlement cycle mitigates operational and systemic risk by reducing counterparty exposure, procyclicality and liquidity risk from both a clearing agency and member perspective. It also frees up capital for DTCC member broker-dealers. DTCC's recommendation is based, in part, on the following feedback from due diligence conducted over the last 18 months that includes: (1) results from risk studies that measure exposure and the National Securities Clearing Corporation's (NSCC) liquidity need; (2) outcomes of a cost-benefit analysis performed by the Boston Consulting Group (BCG); (3) input from industry associations<sup>1</sup> and (4) one-on-one interviews with more than 50 firms across the industry, which helped define behavioral and system changes required to shorten the settlement cycle. In the first half of 2014, expressions of support for a move to T+2, in a timeframe acceptable to the industry, were received from various industry groups, including the Investment Company Institute (ICI), the Association of Global Custodians (AGC), the Association of Institutional INVESTORS (AII) and the Securities Industry and Financial Markets Association (SIFMA).

## Background

Thirteen years ago, the industry was examining a move to a T+1 settlement cycle. The initiative was abandoned as a result of competing priorities. There have been significant improvements since that time that make this a timely opportunity to shorten the settlement cycle.

In early 2012, DTCC socialized a paper entitled "[Proposal to Launch a New Cost-Benefit Analysis on Shortening the Settlement Cycle](#)" with regulators and SIFMA. The paper highlighted the risk mitigants and provided a status update on the ten building blocks necessary

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<sup>1</sup> DTCC held focus groups and discussions with the membership of the following industry associations: PRC, the Securities Industry and Financial Markets Association (SIFMA) Operations and Technology Steering Committee, SIFMA Corporate Actions Committee, SIFMA Securities Lending Division, SIFMA Prime Broker Committee, Asset Managers Forum, the Investment Company Institute (ICI), Association of Global Custodians (AGC), Association of Institutional INVESTORS (AII), the Managed Funds Association, Risk Management Association, Bond Dealers of America, Securities Transfer Association and FED Buy-Side General Counsel Committee.

to reach a T+1 settlement cycle, as defined in 2000<sup>2</sup>. As a result, BCG was retained in the spring of 2012 to conduct a [cost-benefit study](#) that examined the opportunities and challenges attendant to moving to T+2 or T+1<sup>3</sup>. BCG estimated an industry cost of approximately \$550 million to shorten the settlement cycle to T+2 and that such a move could be achieved within three years absent the existence of other significant and/or conflicting demands on the industry resources.

### Benefits of Shortening the Settlement Cycle

The rationale behind DTCC’s recommendation to shorten the settlement cycle includes reducing the following: counterparty risk exposure, procyclicality, NSCC’s liquidity need, and overall operational and industry risk. Shortening the settlement cycle also allows DTCC member firms to optimize their capital. The defined enablers<sup>4</sup> improve efficiency and reduce operational risk. Here is a brief summary explaining the key benefits realized from a shortened settlement cycle.

- **Decline in Buy-Side Counterparty Exposure** – BCG analyzed the potential loss exposure the buy-side carries if a broker-dealer defaults. Scenarios were developed which capture broker-dealers’ risk of default consistent with probabilities implied by their credit ratings. These scenarios include assumptions on volume and volatilities for a “stress scenario” loss and a “major failure scenario.”<sup>5</sup> The results are shown below.<sup>6</sup>

DECLINE IN BUY-SIDE COUNTERPARTY EXPOSURE					
Settlement Cycle	T+3	T+2		T+1	
Stress Scenario	\$300MM	\$190MM	-35%	\$80MM	-70%
Major Failure Scenario	\$2,600MM	\$1,600MM	-40%	\$600MM	-75%

*MM (Millions)*

- **Decline in Broker-to-Broker Counterparty Risk as Measured by NSCC’s Clearing Fund** – Broker-to-broker transactions are guaranteed to settle by DTCC’s subsidiary, NSCC. As a central counterparty (CCP), NSCC becomes the buyer to every seller and the seller to every buyer. In order to provide this guarantee, NSCC collects margin (clearing fund) to cover potential loss from a liquidation of a defaulting broker’s open portfolio. The clearing fund NSCC collects represents the market risk NSCC carries for liquidating the portfolio. NSCC measured the reduction in the amount of Clearing Fund it would collect in a normal

<sup>2</sup> In 2000, the Securities Industry Association (SIA), the predecessor to today’s SIFMA, published a business case on shortening the settlement cycle to T+1, with the goal of reducing risk and improving industry processing efficiency.

<sup>3</sup> The BCG paper entitled, “[Cost benefit analysis of shortening the settlement cycle](#)” published in October 2012

<sup>4</sup> Working with the industry, BCG defined enablers/building blocks that should be implemented to achieve a shortened settlement cycle.

<sup>5</sup> BCG estimated the default likelihood in a T+3, T+2 and T+1 scenario. The “stress scenario” may happen yearly, while the “major failure scenario” may take place once every ten years. BCG estimated the default likelihood in a T+3, T+2 and T+1 scenario.

<sup>6</sup> From the BCG paper entitled, “[Cost benefit analysis of shortening the settlement cycle](#)” published in October 2012.

environment and in a stress environment<sup>7</sup> for T+3 versus T+2 which was -15% and -24%, respectively. The results are captured in the chart below<sup>8</sup>:

REDUCTION IN NSCC CLEARING FUND REQUIREMENT					
Settlement Cycle	T+3	T+2		T+1	
Average Period (10/2010 - 8/2011)	\$4B	\$3.4B	-15%	\$3B	-25%
High Volatility Period (8/2011)	\$7.3B	\$5.5B	-24%	\$4.6B	-37%

*B (Billions)*

- Procyclicality** – During high stress/high volatility periods, buy-side counterparty exposure and NSCC’s Clearing Fund requirement both increase considerably. A reduction in procyclicality can be observed in both of the examples above. The Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) define procyclicality as “changes in risk management practices that are positively correlated with market, business or credit cycle fluctuations and that may cause or exacerbate financial instability.” CPSS IOSCO principle 3.6.10 states to “the extent practicable and prudent, a CCP should adopt forward looking and relatively stable and conservative margin requirements that are specifically designed to limit the need for destabilizing procyclical changes.”
- Liquidity** – NSCC, as a CCP, is expected to have enough liquidity on hand to close-out its largest firm/family<sup>9</sup> A study conducted from April 2011 to September 2011 revealed that moving to a shortened settlement cycle would reduce NSCC’s average liquidity needs by 20% and 50% in a T+2 and T+1 scenario, respectively. This means, if the settlement cycle were shortened, NSCC would require fewer committed resources for liquidity which would reduce costs and potentially free up capital for member firms.
- Overall Operational and Systemic Risk Implications** - Reducing the three-day settlement cycle would reduce exposure between the parties to a trade, between the trading parties to the clearinghouse, and for the clearinghouse itself, hence lessening industry risk. The failure or distress of a significant market player can lead to widespread market instability. All things being equal, a significantly lower CCP margin requirement, reduced

<sup>7</sup> Normal environment period measured was October 2010 through August 2011. The stress environment included August 2011.

<sup>8</sup> The study assumes NSCC implemented an accelerated trade guarantee in all scenarios.

<sup>9</sup> SEC Rule 17Ad-22(b)(3) requires a CCP “to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain sufficient financial resources to withstand, at a minimum, a default by the participant to which it has the largest exposure in extreme but plausible market conditions.

procyclicality, and CCP liquidity need should lessen the potential systemic impact of stressed market events.

- **Aligning Settlement Cycles Across Geographies** – Europe is moving to a T+2 settlement cycle in January 2015, with some markets moving by October 6, 2014. Much of Asia is already on a settlement cycle shorter than T+3. Harmonization across regions helps global funds better manage cash flows, thus reducing and simplifying financing needs.
- **Demand for Shortened Settlements** –The majority of the broker-dealers with whom DTCC spoke said they execute shortened settlements on a regular basis at their clients’ request. Investment managers often request shortened settlements for portfolio securities to align the sale of portfolio assets with mutual fund share redemption transactions. Retail clients request shortened settlements to meet the demands of large purchases and tax payments.
- **Impact on End Investor** - According to the Securities Investor Protection Act, trades that have not yet settled are considered house trades or trades owned by the broker-dealer. They do not become client trades until settlement completes. If a broker-dealer goes out of business prior to the settlement of certain trades, these open positions would be liquidated by NSCC to cover the counterparty’s settlement. This means the end investor, be it a retail client or institutional investor, is subject to the risk of a broker-dealer default prior to settlement. By receiving their funds or securities faster and reducing their exposure to the broker-dealers, investors will face reduced risks especially in periods of stress<sup>10</sup>.

### Enablers Required to Reduce Operational Risk and Create Efficiencies

A number of process improvements have already been made in the last 15 years; however there are still improvements that would provide additional operational efficiencies. BCG recommended instituting the following enablers based on industry input:

ENABLERS OF SHORTER CYCLE	T+2 OPERATING MODEL
<p>Compress timeframes / rule changes <i>Requires changes to NSCC/DTC rules and NSCC /DTC client operational systems, as well as regulatory rule changes</i></p>	<p>Core Enabler</p>
<p>Migration to institutional trade date matching <i>Institutional trades must be matched by noon on T+1 with same day affirmation on T+0 as a best practice.</i></p>	<p>Secondary Enabler / Enhancement</p>

<sup>10</sup> As per Regulation T, an end client has two days after the standard settlement cycle to fully pay for its cash purchases. Shortening the settlement cycle will speed up the payment cycle for certain end investors.

<b>Mandated Settlement Matching at the depository</b> <i>Mandated depository match-to-settle to be completed by year-end 2014.</i>	Secondary Enabler / Enhancement
<b>Cross-Industry Standing Settlement Instructions (SSI) solution</b> <i>Omgeo has efforts underway to improve accuracy and coverage of the Omgeo ALERT<sup>SM</sup> SSI database.</i>	Secondary Enabler / Enhancement
<b>Continue to dematerialize physicals</b> <i>Efforts underway to reduce physical certificates but T+2 will require customers and brokers to expedite delivery more rapidly for those remaining.</i>	Secondary Enabler / Enhancement
<b>Extend prospectus "access equals delivery" to all products</b> <i>Near complete for equity and fixed income products. Exchange Traded Funds (ETFs) and mutual funds need to be addressed.</i>	Secondary Enabler / Enhancement
<b>Increase penalties for fails</b> <i>Will be considered by SSC Steering and Working Group committees to encourage good behavior.</i>	Secondary Enabler / Enhancement

## Conclusion & Next Steps

DTCC recommends that the settlement cycle be shortened from T+3 to T+2.

DTCC will continue to partner closely with market participants and industry organizations on the U.S. shortened settlement cycle initiative as a steering committee and working parties are formed, and as decisions are made around approach and timelines.

After T+2 is achieved, DTCC will work with the industry to assess readiness for a further move to T+1.