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Operational

**Where Do We Go From Here?
Preparing for Shortened Settlement
Cycles Beyond T+2**

Steven Halliwell, Michael Martinen,
Julia Simmons

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Where Do We Go From Here? Preparing for Shortened Settlement Cycles Beyond T+2

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In 2017, the U.S. and Canada will be breaking their 20-year T+3 settlement cycle in what will be the greatest reform since 1995's migration from T+5 to T+3. The move to T+2 settlement is intended to harmonize with global markets already on a T+2 settlement cycle, reduce risk and exposure, enhance market liquidity, and increase efficiencies. Both countries will be moving approximately 100 products in scope across equities, corporate and municipal bonds, and unit investment trusts (UIT) to a T+2 settlement in the third quarter of 2017. These products combined account for approximately U.S.\$950 billion in daily clearing.¹ To prepare for T+2, the Depository Trust & Clearing Corporation (DTCC) is planning to conduct industry testing in Q1-2017 ahead of the proposed go-live date of September 5, 2017.

BACKGROUND ON T+2

In response to the trending global migration to T+2, DTCC commissioned a study in 2012 to investigate the cost, benefits, and challenges of the U.S. and Canada migrating from a T+3 settlement cycle to T+2. Their findings confirmed the benefits of increased operational efficiencies and reduced risk (see Table 1).

Following these findings, an Industry Steering Committee (ISC) and Industry Working Group (IWG), along with Sub-Working Groups (SWGs), were set up to determine the feasibility, impacts, and benefits of shortening the settlement cycle to T+2. SWGs consisted of over 400 industry experts from U.S. financial service organizations, and were tasked with providing guidance and oversight in the migration by determining the required changes to

various business processes. A subsequent whitepaper published by the ISC in June 2015 provided a timeline leading up to Q3-2017 go-live, complete with milestones and high level requirements for trade processing, asset servicing, documentation, and regulatory guidance for the industry players on target for migration.

With a reduced settlement window comes a number of material changes to the settlement process that may pose technological and operational challenges. Firms will need to accelerate a number of activities, such as liquidity management, FX processing, and margin call calculations while also reducing the time allowed to settle transactions. This will ultimately impact buy-side

¹ Average daily volumes taken from DTCC's 2014 annual report

<u>Increased efficiencies</u>	<u>Enhanced liquidity</u>	<u>Reduced risk and exposure</u>	<u>Global harmonization</u>
<p>Cost savings related to reduced funding requirements and more efficient capital utilization</p> <ul style="list-style-type: none"> • Improvements to STP via new investments in technology • Transition to institutional same day trade matching • Cost savings related to reduced funding requirements and more efficient capital utilization 	<p>Reduced liquidity needs for NSCC and Lower CCP margin requirement, reduced procyclicality, and CCP liquidity need</p> <ul style="list-style-type: none"> • Satisfying client demand for shortened settlement cycles (i.e., large purchases, tax implications for retail clients) • Decrease in pro-cyclicality during periods of high market stress and volatility • Reduction in liquidity needs for NSCC and increase in capital availability for member firms • Decline in potential systemic impact of stressed market events due to lower CCP margin requirement and liquidity, and reduced pro-cyclicality 	<p>Reduction in operational risk and operational incidents, and improvement in operational controls. Decline in counterparty risk and exposure</p> <ul style="list-style-type: none"> • Reduction in operational risk and operational incidents, and improvement in operational controls • Decline in buy-side counterparty exposure • Reduction in broker-to-broker counterparty risk • Reduced retail investor risk for a potential broker-dealer failure (pre-settlement of trade) 	<p>Alignment of settlement cycles across geographies</p> <ul style="list-style-type: none"> • Settlement cycle consistency across geographies

Table 1 – Benefits of T+2 Migration

and sell-side firms, custodians, utilities, and vendor providers. Additionally, the required technology changes and their operational impact may be underestimated by firms, while legacy infrastructure may struggle to meet the revised needs and timeframes. Firms’ bandwidth for financial and operational resources may become strained in the face of ongoing parallel initiatives related to capital planning and stress testing enhancements, data quality, data lineage, and associated analytics and reporting, as well as new mandates or emphasis related to consumer protection and cyber security.

In order to be successful in the T+2 migration and its planned milestones by Q3-2017, all impacted firms will ideally have performed an impact assessment of their current processes vis-à-vis the proposed processes in order to identify the areas that will require investments, and will have developed size and scope estimates for the effort required to support T+2. In parallel, firms should be building out an appropriate change management and communication

program to initiate and implement successful change both internally and with trading counterparties to ultimately ensure readiness. A key part of this program is a detailed testing strategy to coordinate and execute testing with internal systems, customers, and industry infrastructures and utilities.

Significant effort and investment will be required from the various member firms to comply with the Q3-2017 implementation deadline, and maintaining a forward-looking perspective on shortened settlement cycles will expedite a firm’s competitiveness in the race toward straight-through-processing (STP) and market efficiency.

STEPS TO IMPLEMENTATION DATE – Q3-2017

The transformation to a shortened settlement cycle will have a significant impact on firms across all stages of the trade lifecycle.

Prepared firms will have already assessed the level of impact and developed a testing strategy to reduce operational risk, as well as committed to the suggested timeline to decrease the likelihood of falling behind the scheduled milestones ahead of the implementation date.

Market participants should aim to complete internal builds by Q3-2016 and internal testing by Q1-2017. Industry-wide testing with DTCC for market participants will commence in early 2017 to meet the go-live date of September 5, 2017.

With the current industry-wide uncertainty around the specific requirements for readiness, many market participants are placing added emphasis on the testing phase. To adequately prepare for this increased focus on internal and industry-facing testing, it is critical for each organization to produce a comprehensive testing strategy and determine an effective approach for testing facilitation and execution.

“WHERE DO WE GO FROM HERE? CHAOS OR COMMUNITY?” IMPLEMENTATION AND BEYOND...

Borrowing the title of the last written work penned by Nobel Peace Prize Laureate and social justice advocate Martin Luther King Jr., firms looking ahead may ask whether they should prepare for an even shorter settlement cycle as a path to a truly ideal state. The concept of STP, following the move to T+2 at the end of 2017, is a realistic possibility.

In 2013, DTCC commissioned an analysis on the potential for shortening the settlement cycle. As part of this analysis, they partnered with SIFMA (Securities Industry & Financial Markets Association) to determine the feasibility of both T+2 and T+1. Based on the cost/benefit analysis, T+1 was deemed impractical. At U.S.\$550 mln, the investment necessary for T+2 was estimated to be a third of the cost of implementing changes to accommodate a shorter settlement of T+1 (U.S.\$1.8 bln).²

T+1 is dependent on robust real time processing and STP to be successful, but current institutional dependencies on batch processing and legacy systems pose an obstacle. In addition, due to time zone differences, foreign investors (especially those in the Asia Pacific region) would have unreasonably limited time to remediate any issues prior to the settlement date, posing a radical disruption to the market. The burden of these obstacles cannot be underestimated in considering a firm's path to a shortened settlement cycle. However, the steps firms are taking to migrate to a T+2 settlement cycle will set them up for success towards even more efficient settlement processes. New investments in technology will help firms improve operational efficiencies toward STP. Earlier matching will provide the advantage of identifying and reconciling problem trades earlier on in the settlement process. This will ultimately result in reduced funding

requirements and more efficient capital utilization.

The decision to move to a T+2 as opposed to an even shorter settlement cycle was made prior to the advent of the advanced distributed ledger insight we now have today. This is a concept now being seriously addressed in the markets. DTCC's commitment to use Repurchase Agreements as a proof of concept and the exploration of Australian and Japanese stock exchanges in developing blockchain operational architecture demonstrate how current distributed ledger concepts are being applied with the intent of improving operational efficiencies in the markets.

Much of the decision to move to a shortened settlement cycle was motivated by the intent of increasing processing speeds while reducing settlement risk, and the concept of a distributed ledger accomplishes this while freeing up even more counterparty capital that would normally be reserved for trade settlement. Providing a clear picture of counterparty assets and liabilities via a shared network free from extraneous human processes may lead the path to a safer market less dependent on centralized clearing agents burdened with risk and responsibilities that can delay the settlement process, while also leading the way to more of an agency model that the Dodd Frank regulations are promoting.

However, for the industry to convert to STP and transparent markets through a centralized distributed ledger, mass market acceptance and participation is key. Digitally transforming financial instruments into computer programs known as “smart contracts” with encrypted contract terms is a key component of automated settlement. While this would reduce costs by centralizing or even removing operational processes, it would also require industry agreement on acceptable standards and how to sync these standard contracts securely across industry infrastructure. Successful

industry adoption of this technology will be challenging given the size of the trading and clearing market. From an individual perspective, the way that impacted firms establish program management to coordinate internally and with the DTCC in industry testing will establish a path to success in managing future changes to even shorter settlement cycles.

Some of the required changes needed to accommodate same-day settlement that will challenge institutions may be more achievable as part of the “intermediary” move to T+2. As a first step, firms can conduct a thorough analysis on the process behavior supporting T+1 settlement as it already exists today for certain products (such as options, a selection of mutual funds, and some fixed income products). Conversely, developing shortened settlement cycle procedures using a prototype of asset classes that have low cleared volume may be a good starting point as there is little cleared infrastructure in place and, therefore, more opportunities to create a foundation from scratch. For these product types (or any products) to move closer to T+0, effort must be especially focused around the FX market and stock loan (to facilitate automation in securities recall and processing of corporate actions), real time netting of positions, and faster guarantees from clearing houses.

Once T+2 is implemented, these changes will be considered small milestones that set the stage for an additional shortening of the settlement cycle in sync with the advances towards STP. This will also align with the generational shift in management, where the millennial generation, accustomed to fast technology advances, will have more influence on decisions and controls.

² http://www.dtcc.com/-/media/Files/Downloads/WhitePapers/CBA_BCG_Shortening_the_Settlement_Cycle_October2012.pdf

CONCLUSION

As industry participants strive towards the requirements for T+2 readiness and beyond, the need to strategically assess current and future plans for settlement efficiently is paramount. Increased pressure on operating costs and the recent commoditization of core functions within banking operations has only accelerated the discussion topic “Where do we go from here?” Mindful preparation for shortened settlement that aligns with the industry inclination toward STP can distinguish an impacted institution from competitors, and set it up for success beyond the T+2 implementation timeline.

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