As the industry prepares for the move to T+1 in the U.S. and Canada, I wonder whether there are lessons to be learned from other markets that already have shorter settlement cycles?

Delayed settlement models, whereby the period between trade execution and settlement is typically T+2, allow for several post-trade processes to take place: primarily the matching of allocations (often between asset manager and brokers) and the instruction of settlement down the buy- and sell-side value chain. Shortening the settlement delay means reducing counterparty risk and therefore margin requirements.

Naturally, efforts to shorten the settlement cycle appear logical and have resulted in a gradual compression over the years. I remember when the U.K. equities cycle moved from T+5 to T+3. The rationale, advantages and challenges remain broadly the same now. However, some may still argue that moving to T+1 offers limited net benefits considering associated risks.

But there is something missing from the current debate that I have noticed. Other global markets have already transitioned to T+1 (e.g., India) and beyond. T+0 settlement is the standard for mainland China, one of the world’s largest equity markets, accessed by asset managers, brokers, and custodians the world over through the Hong Kong Stock Connect program, typically.

The question then does not seem so much to be “Is T+1 a step forward?” but rather “Does T+1 go far enough?” I believe it is worth understanding how international investors and intermediaries have coped with shorter settlement cycle and the resulting impacts to operations, risk management and market structure. It is likely that there are parallels and lessons in the way that international firms have managed T+0 in Stock Connect and how they can navigate the inherent challenges and opportunities of moving to T+1 in the U.S. and Canada.
Tactical responses to T+0

Because T+0 is already in place, organizations have living, breathing examples to draw on in managing change. Developing a strategy for coping operationally is critical but remember that quick fixes are not long-term solutions. Over time, I have seen various strategies emerge that can be useful reference points:

Single-sided settlement

The industry still largely manages allocations after trade confirmation. Matching of allocations therefore needs to be compressed so that matching is achieved quickly and allows settlement instructions to be sent on T. But, in shortened cycles, this can leave little time to deal with exceptions, especially if your counterparty’s operations are in another time zone. To address this, the practice of “single-sided settlement” has become commonplace in the Stock Connect Market. This workaround is an agreement from the asset manager passed down to the local custodian (with appropriate indemnities) giving authority to match the broker acknowledgement at the CSD regardless of whether settlement instructions originating from the asset manager match; this ensures no failed settlements, and any issues can be resolved after the fact. While it is not exactly good practice, it has been widely adopted.

Segregated accounts and pre-trade checking

Another feature of the Stock Connect Market is the option for segregated accounts at the CSD level. These accounts offer better asset protection but add to the administrative burden and complexity of operating in this market, which in turn contributes to settlement risk when the communication of SSIs goes awry.

This is also a “no fail” market, meaning failure to deliver to the broker, and then the onward delivery to the CCP, can incur hefty buy-in fines. A process of pre-trade checking at the exchange level is therefore performed on each sell trade. This ensures that the selling party is not able to sell on any one day more than the amount of stock in their account at the start of that day.

Integrated models

Another way of mitigating settlement failure risk is for asset managers to use an “integrated model” that incentivizes trade processing to stay within a single firm. This has the advantage of broker, clearer and local custodian being under one roof, providing full control over end-to-end trade processing. Asset managers using this model can leverage banking credit lines to fund their trades and have minimal settlement risk between the broker and custodian.

However, this approach comes with the disadvantage of locking asset managers into a smaller broker panel and encountering friction with regulatory requirements around best execution. These models are enticing in their simplicity but risk concentrating flows and stifling competition and innovation. Thus, integrated models are most often preferable as a tactical fix until more sophisticated models can be developed.

Broker warehousing

For some firms, the headache of dealing with T+0 settlement has simply been outsourced to their broker. Instead of trying to complete the end-of-day allocation process, FX, and other post trade activities in a compressed timeframe, they simply ask their broker to sit on their net purchases for another day—i.e., the broker funds net purchases and the movement from broker to local custodian happens on T+1. I imagine that a financing charge is applied when operating in this way.
Short-term strategies

Given the move to shorter settlement cycles is a global trend, now is a suitable time to think more holistically about our marketplace structures and whether there needs to be a reinvention of multiparty, post-trade processes.

Yet the reinvention of entrenched capital market processes does not happen overnight and certainly not in time for the imminent change to T+1. So, before we look at reinventing our markets, I think it is worthwhile to look at steps to take in the short term that lay the groundwork and help organizations acclimate to shortened cycles.

Systems and processes improvements

With shorter cycles, there is less time to deal with exceptions, which can increase risk. Time is of the essence, as is resourcing. One problem that many firms run up against is the proliferation of manual processes that take up time and divert resources from core risk management to menial tasks.

In a recent Value Exchange survey regarding readiness for T+1, 30% of respondents stated that their current manual processes were a challenge. A recent Firebrand Research/Torstone Technology research paper estimates that 81% of banks and brokers in the U.S. and Canada are using manual processes or home-grown systems to support some part of their post-trade processes.

There are two divergent ways to approach this challenge:

- **Increased headcount** – more staff on hand means more resources to spread out so manual tasks do not overburden one team or another. However, while adding headcount can help alleviate resource strains, it does not automatically lead to the reduction of manual processes, which is the root issue.

- **Automation** – ideally, firms should seek to eliminate manual processes wherever possible; left unaddressed, manual processes tend to only multiply and embed the problem. Using technology to automate functions can effectively help organizations do more with less time. Typically, this means acquiring a new solution or upgrading from a legacy system to access the necessary tools to condense processes, improve controls, return resources and empower risk management.

Exception management tools

Adoption of exception management tools is an industry trend that I believe has been underreported but which offers a solution that has been increasingly used for securities, derivatives and other assets classes. The use of exception management tools has been enabled by technological changes across the industry (specifically adoption of APIs) and a corresponding openness to data access by authorized third parties and adoption of SaaS.

Tools like AccessFintech and Taskize provide for rapid identification of exceptions and the facilities to quickly resolve these with your counterparty through direct messaging, either via the tool itself or in some cases integration with chat/messaging platforms such as Symphony.

In the future, I believe these tools will play a significant role in middle and back offices, as they become integral to operational processes and start to utilize machine learning and AI to resolve exceptions instead of people. If we believe that industry transformation is years away and exceptions will always exist in any case, then investment in exception management tools is clearly on the agenda.

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1. [https://thevx.io/campaign/operationalising-t1/](https://thevx.io/campaign/operationalising-t1/)
Modernizing initiatives

Let us now turn to the strategic programs that seek to reinvent our current processes. It is conceivable to think that other global markets may soon follow suit and move to T+1, with T+0 ever hovering. Using innovative solutions and modern technologies can help participants and infrastructure manage risk while transforming alongside markets.

Unique Transaction Identifier (UTI)

SWIFT’s introduction of the UTI to securities transactions is an initiative likely to have a significant impact of settlement fails. The UTI is attached to each trade and propagated through the value chain between institutions. Its use aids transparency within the settlement lifecycle and allows participants to track settlements within the process. In turn this allows participants to identify issues and bottlenecks.

SWIFT estimates that UTI introduction could halve the number of pre-settlement exceptions that require investigation with a counterparty. I hope to see increasing adoption of the UTI, and I believe the key to unlocking value lies in adoption by CSDs such that settlement actors throughout the value chain have the end-to-end visibility that is required to manage fails effectively and easily identify weak links.

Distributed Ledger Technology (DLT)

While there is an argument that the pace of DLT adoption among FMIs is quickening, we’ve yet to see a broad uptake. One area of growth, however, is use cases for settlement. One can think about the practical role of DLT in the post-trade context in several different ways (by no means exhaustive):

- Providing a modern technology stack to replace legacy systems that can become restrictive and costly to upgrade.
- An opportunity to enhance structures by bringing transparency and access to market data to all participants in a way that is simultaneous rather than sequential.
- A way of disrupting current structures and reinventing the roles of current players, this may include new business models and/or a degree of disintermediation.

The second option is the most likely to succeed in the long term, but I would go further to suggest that it will not necessarily be DLT but instead “DLT-inspired” solutions that are likely to be adopted to meet future industry challenges, like a possible move to T+0 over time. Market infrastructure use of DLT is always countered by the fact that distribution/processing of data is not required since the FMI is a trusted party. The counterweight to this is that FMIs can use the benefits of DLT (single node if necessary), together with smart contracts, to provide benefits to their marketplaces. In other words, we can bring benefits to multiparty post-trade workflows without the need for a fully distributed topology.

In preparation for DLT-inspired solutions, a more practical move for the sell side may be the shift away from legacy batch processing to real-time systems that facilitate intraday trade processing and T+0 operations. “Just as post-trade FMIs have increasingly moved to real-time processing and risk management, the sell side has an opportunity to future-proof their post-trade operations by moving to real-time event-driven architecture to better manage same day operations for T+1 and indeed T+0,” says Mack Gill, COO of Torstone Technology.

Change requires action

The move to T+1 settlement is pivotal, but it is unlikely to be the last substantial change that market participants and infrastructure will have to deal with. The end game is already in view with T+0, so firms and operators need to take determined action to prepare, modernize and future-proof their operations.

This requires a comprehensive strategy across business, technology and people to ensure the right goals, tools and talent are in place. The right strategy can help support everything from short-term tactics (automation, exception management tools) to long-term solutions and large-scale modernization that improves operations and risk management, while also building in scalability for inevitable change.

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