



Beyond T+1: *What's Next?*

The Continued Impact of Shortened Settlement Cycles

With the US, Canada, Argentina, Peru and Mexico now live with T+1, and India having adopted a voluntary T+0 settlement cycle, some within the industry are now exploring whether settlement times could be squeezed further, either to T+0 instant or potentially even atomic.

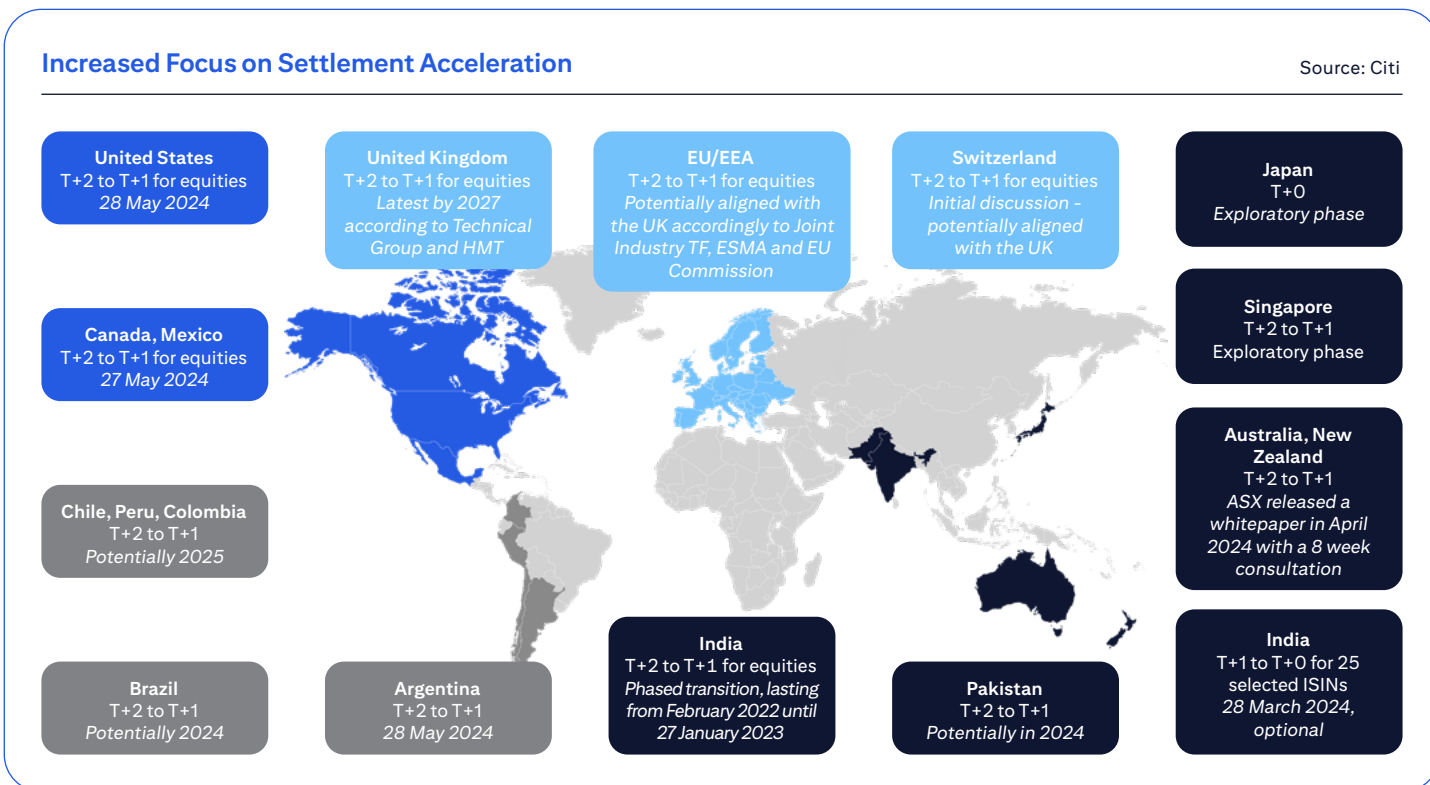
There are several drivers behind this. Firstly, the idea that trades can only settle one or two days after execution is looking increasingly archaic given the digital transformation and rapid advancements in technology. At the same time, there is a growing swell of next generation digital natives who are beginning to invest, and they want their trades to settle in real time, not least because this demographic has become so accustomed to having services delivered to them instantaneously.

As appetite for faster settlements grows, the industry is looking at whether new asset classes – such as Central Bank Digital Currencies (CBDCs) – coupled with distributed ledger technology (DLT) could help facilitate T+0 instant or atomic settlements.

Settlement Cycle	Description
T+0	Settlement occurs on trade date, either end of day, or scheduled minutes and/or hours after a trade
T+0 Instant/ Immediate settlement	Settlement happens immediately or, as soon as possible after a trade
Atomic settlement	Instantaneous exchange of two assets. Trade and settlement are simultaneous and dependent upon one another.

Increased Focus on Settlement Acceleration

Source: Citi



T+1 is only the beginning

Shorter settlement cycles are being introduced at a faster rate than ever before.

In the US, T+3 lasted for 23 years (1994 – 2017) and T+2 was around for another seven years after that (2017-2024), and many other regions have seen a similar trend. However, the move from T+1 to T+0 is likely to happen at some point this decade. India, for example, has already launched a voluntary T+0 settlement cycle, having only just phased in T+1 in 2023. The advantages of T+0 are similar to a T+1 move, insofar as it reduces settlement duration risk and counterparty credit exposure, thereby allowing for margin savings and liquidity optimisation to be realised.

The next stage after T+0/T+0 instant is atomic settlement. This is when the trade and settlement happen immediately and are dependent upon each other. In other words, a trade cannot be executed if there are insufficient assets to settle, so partial settlements or failed settlements will become a thing of the past. While this could potentially result in significant settlement efficiencies, risk reduction and liquidity benefits, it may also add complications. For example, being left unable to lock in a trade price if settlement resources (money and securities) are not immediately available to settle.

Getting to T+0 and atomic settlement

Achieving atomic settlement will require the industry to completely overhaul its current operating model.

To facilitate the move towards T+0 and atomic settlements, there will need to be an industry-wide shift away from legacy technologies towards digital assets and DLT, in addition to broader operating model changes.

There are several ways to achieve atomic settlement on a DLT-based network. One option would be for an intermediary to settle an asset against commercial bank off-chain money. Alternatively, an intermediary could settle wholesale securities against tokenised private money on-chain, but this might lead to counterparty risk on the money leg of the transaction, as participants may be exposed to tokenised money issuers. Some may prefer for CBDCs to be leveraged in settlements, as the counterparty risk would be to a Central Bank.

Additionally, as DLTs are 'always on', they can support a move towards a more global, continuous processing model, which may result in an extension of the operating day. This could eventually make it possible for people to trade and settle transactions around the clock.

Change is happening

Some digital financial market infrastructures (FMIs) are supporting atomic settlement across digital asset classes.

Take Switzerland, for example, where the SIX Digital Exchange (SDX), a DLT-based FMI owned by the SIX Swiss Exchange, are conducting a pilot with the Swiss National Bank using wholesale CBDCs (w-CBDCs) issued by the Swiss National Bank (SNB) to settle digital securities transactions atomically.

In March 2024, the cities of Lugano and St Gallen each raised CHF 100 million via a digital bond, which was issued and settled on SDX using an SNB-issued w-CBDC.¹ Meanwhile in Asia, BondbloX Bond Exchange (BBX), a fractional bond exchange in Singapore, also enables atomic settlement of fractionalised bond instruments.

This innovation is partly being driven by regulators who are keen to improve and expedite the settlement process. The Monetary Authority of Singapore (MAS), for instance, is working on a pilot programme whereby it will use a CBDC to support instant payments across domestic banks.² In the UK, the Financial Conduct Authority (FCA) and Bank of England (BOE) are looking to encourage the development of digital FMIs, having launched a Digital Securities Sandbox (DSS), which will allow firms to trial emerging technologies – such as DLT or digital assets – to support the issuance, trading and settlement of securities³. And finally, the European Central Bank (ECB) is coordinating trials and experiments with three CBDC solutions (by Banca d'Italia, Banque de France and Bundesbank) for the use of a digital euro in wholesale payments and securities settlements⁴.

This comes not long after the EU launched its own DLT Pilot Regime, which created a sandbox aimed at supporting the development of DLT-based multilateral trading facilities and settlement systems⁵.

The road ahead

Creating a new digital infrastructure from scratch and then connecting it to legacy systems is not going to happen overnight.

There are a number of barriers facing the industry. One significant challenge is that there is a lack of regulatory clarity and standardisation around DLT and digital assets. Without harmonisation, there is a risk that markets may fragment into a vast byzantine network of different settlement cycles and technology systems, potentially upending some of the progress which has been made over the years towards achieving better efficiency, integration and interoperability. While DLT has been leveraged in a number of use cases involving funds and fixed income instruments, questions remain about its ability to handle high volume markets, such as equities.

Whereas T+2 and T+1 allow for securities transactions to be netted, this is not possible in T+0 or atomic settlement environment, which may be an obstacle for market participants. The ability to settle traditional securities atomically is unlikely to become a reality until the industry addresses these challenges.



Taking settlement to the next level and beyond

As the dust settles from May's T+1 implementation, the industry is already looking to build on the progress made. While T+1 required financial firms to automate some of their post-trade processes, the transition to T+0 instant or atomic will require more significant technology and operating model changes. A period of "co-existence" of accelerated settlements for traditional assets and instantaneous/atomic settlements for digital assets is likely to last for years.

To prepare for the future, financial firms should think tactically about the investments they may need to make to ensure their post-trade systems are ready for and adaptable to these changes. It is also vital that they collaborate with a trusted partner, who can provide access into financial networks and expertise during this global evolution.

¹ Markets Media – March 13, 2024 – [Swiss digital bonds settled with wholesale CBDC](#)

² <https://www.mas.gov.sg/news/media-releases/2023/mas-lays-foundation-for-safe-and-innovative-use-of-digital-money-in-singapore>

³ Bank of England – April 3, 2024 – Digital Securities Sandbox joint Bank of England and FCA consultation paper

⁴ European Central Bank – April 3, 2024 – Participants chosen to explore new technologies to settle wholesale transactions in central bank money

⁵ European Securities and Markets Authority – DLT Pilot Regime

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