THE
INVESTMENT
ASSOCIATION

T+1 Settlement Overview

Considerations for the buy-side

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About the Investment Association

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Contact
For queries about this document please contact: ***alex.chow@theia.org | +44 7375 257 917***

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The Investment Association (the "Association") has made available to its members this T+1 settlement overview (the "Settlement Overview"). This Settlement Overview has been made available for information purposes only to provide considerations for buy-side investors with regards to the SEC rules to shorten the standard settlement cycle for most broker-dealer transactions in securities.

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2. Background

2.1. Introduction

Since the original paper-based transaction settlement, there has been a continuous and slow move into shorter and more efficient settlement, with a move from T+3 to T+2 in 2014 (UK and the EU) and 2017 (the US). Whilst some jurisdictions, products or bilaterally agreed trades settle on a shorter cycle, T+2 remains the default for many countries globally.

Markets are now looking at the next step in this movement. India has gradually transitioned to T+1, with others looking at making a similar step. This document will primarily look at the implications of the US and Canada's move to T+1 settlement, though many of the issues will be applicable to all markets.

Whilst technically a T+2 settlement cycle provides 3 days in which to instruct and settle a trade, the reality is that the time windows are a lot shorter. Trades may be instructed any time up to market close on the first day (trade date). On the third day (contractual settlement date), many markets rely on overnight batches and the majority of market participants will aim to have trades matched and ready to settle by the opening of the settlement window. Having most settlements occur concurrently and start of day prevents chains of failing security movements across participants and narrows focus on settlement date to a smaller sub-set of failing trades. Therefore today, a good proportion of operational flow for T+2 trades occurs on T+1.

By moving from T+2 settlement to T+1, you remove this window and constrict the operational process to get the trade matched in the market to trade-date, and only after the trade has been filled. AFME estimate that a move from T+2 to T+1 reduces the available post-trade processing time by approximately 83% given this[1].

2.2. Perceived benefits to T+1 settlement

Reduction in risks

The SEC have suggested that a T+1 settlement cycle may result in a reduction of risks to all parties of a trade as at any given time, fewer trades will be "in-flight". The cited risks include:

- **Credit/counterparty risk** – Potential for the market participant's counterparty to a given transaction to default. This may be particularly useful during high volatility market events (e.g. the Russian war)
- **Market risk –** Potential for the value of the security underlying the transaction to change in value.
- **Liquidity risk –** Risk that a participant will be unable to settle a trade due to cash or security liquidity issues (e.g. default on a receipt trade to settle a delivery trade).

[1] www.afme.eu/Portals/0/DispatchFeaturedImages/AFME_Tplus1Settlement_2022_04.pdf

Lower margin requirements

A Central Clearing Counterparty (CCP) imposes a margin requirement on clearing members who are party to a transaction to secure the receipt and delivery of the trade and protect against default of a clearing member. These costs are passed down to clients including asset managers.

It has been estimated that a move from T+2 to T+1 settlement would reduce the volatility component of margin requirement at the US CCP by up to 41%[2] for clearing members and should reduce risks and costs faced by clearing members (broker dealers). The SEC speculate that CCP participants may choose to pass these reduced costs down to their customers.

Margin requirements had been cited as a reason that some clearing members had had to pause allowing clients to trade in certain stocks (e.g. January 2021 trading of Gamestop) during periods of high volatility given margin requirement spikes. T+1 settlement may reduce this pressure.

Modernising capital market and fund infrastructure

A move to T+1 settlement may force the industry to consider dated, batch-driven and manual processes and provides the incentive for change and innovation. For example, it may make funds on a T+4 settlement period consider whether this is an excessively long lifecycle to return proceeds to investors in an environment where cash transactions can be processed in seconds.

A move to T+1 settlement may also force all industries that are party to the securities settlement chain to review processes and infrastructure together, where without the pressure of T+1 it can be difficult for any one market participant or industry to effect change.

Access to proceeds

A T+1 settlement cycle should enable investors to access cash or securities resulting from security transactions one day earlier.

2.3. Potential challenges & unintended consequences of a move to T+1 settlement

Disproportionate impact of the benefits

Whilst the benefits listed above could result in a more efficient market, they will not impact all participants to the chain equally. Whilst large sell-side entities with many trades being cleared will enjoy a large reduction of capital necessary to serve as collateral, it's not clear how these savings will be passed down to the fund and the clients they service.

FX Settlement – Decrease in PvP netting, increase in counterparty risk

As described in the section on FX, a move to T+1 in the US (and potentially in the UK and Europe), limits the amount of trades that can settle through PvP netting through services such as CLSSettlement.

The CLSSettlement deadline for next-day settlement is 6PM EST, with custodians adding their own 1-2 hour deadline for the buy-side to send instructions (4-5PM EST). Given the FX is instructed off

[2] https://www.dtcc.com/ust1/faqs

confirmed trades and the US equities market closes at 4PM, this leaves very little, and in some cases zero, time for an FX transaction to be instructed, agreed and sent to settle via CLS Settlement.

Whilst EMEA firms are looking at amended FX practices, a move to T+1 securities settlement will mean a greater amount of bilateral gross settlement of FX transactions, which increases counterparty risk and can increase operational costs for firms.

A shift of "business as usual" operational processes to settlement date

Previous moves to shortening the settlement cycle have generally retained the days prior to settlement date for operational processes. This includes securities lending recalls, margin substitution for securities as collateral, FX and cash management and trade matching, with all processes lined up for start of day settlement on settlement date and any issues on settlement date managed as exceptions.

A move to T+1 will force some of the "business as usual" operational processes into settlement date at the expense of settlement rates in the short term. Today, many markets see the bulk of settlement occurring at the start of day or "overnight" prior to settlement date. Relying on a process to settle a trade on settlement date will not just impact that trade, but may further impact a chain of settlement reliant on the settling of the trade.

Cost of change and implementation

Any wholesale change to operational processes can require a large change management team as they look to review and amend impacted areas, look at any changes to contractual agreements with counterparts and service providers to re-paper if necessary and potentially change their operating and business models.

This may include one-off costs such as adjusting documents ahead of a change to a fund settlement cycles, or may include ongoing costs such as the increased difficulty in instructing FX or in managing a mixed basket of products within an ETF.

Cost to the investor

As outlined above and discussed in the rest of this paper, a shortening of the settlement cycle can create challenges for all stakeholders of the settlement chain in looking to adjust.

Whilst all firms in the chain are incentivised to remain competitive and ensure minimum disruption to clients, there may be additional costs imposed on the investor. This may manifest through wider spreads when trading certain products such as ETFs, through fund performance or otherwise.

2.4. T+1 across the US, UK and Europe

The Americas

The US - The SEC approved a move to T+1 settlement to occur on the 28th May 2024[3].

[3] https://www.sec.gov/news/press-release/2023-29

Canada – Prior to the go-live date, Canada indicated that it would match the US's plan and timeline to move to T+1 settlement. Given the US chose a weekend where bank holidays do not align, Canada has indicated that they intend to go-live one day earlier[4]

Mexico – Following the US and Canada announcements, Mexico initiated a conversation on a move to T+1 settlement, and has committed to a 27th May go-live[5].

US and Canada go-live dates

<table>
<tr><th>Date</th><th>2024</th><th>Fri 24/5</th><th>Sat 25/5</th><th>Sun 26/5</th><th>Mon 27/5</th><th>Tues 28/5</th><th>Wed 29/5</th></tr>
<tr><td rowspan="2">US market</td><td>Pre-conversion T+2 flow</td><td>Last T+2 trade date</td><td rowspan="2" colspan="2">Weekend - Market closed</td><td rowspan="2">Memorial day - US market closed</td><td></td><td>Last T+2 settlement date</td></tr>
<tr><td>Post-conversion T+1 flow</td><td></td><td>Conversion day - First trade date</td><td>Double settlement date</td></tr>
<tr><td rowspan="2">Canadian & Mexican market</td><td>Pre-conversion T+2 flow</td><td>Last T+2 trade date</td><td rowspan="2" colspan="2">Weekend - Market closed</td><td></td><td>Last T+2 settlement date</td><td></td></tr>
<tr><td>Post-conversion T+1 flow</td><td></td><td>Conversion day - First trade date</td><td>Double settlement date</td><td>T+1 settlement standard</td></tr>
</table>

The UK

As part of the Edinburgh reforms announced on the 9th December, the Government launched an Accelerated Settlement Taskforce to examine shortening the settlement cycle in the UK. The Taskforce's terms of reference and objectives6 include the exploration of an accelerated settlement cycle (e.g. T+1), whether an eventual move to T+0 settlement has implications on a move to T+1 and recommendations to be made to policymakers on potential changes and their timelines.

The IA had previously engaged with HMT on T+1 and will be participating in the Taskforce. The taskforce will look to publish a full report with recommendations by December 2024, with an interim public report on the Taskforce's initial findings due by December 2023 (though this timeline may be expedited).

The taskforce has since indicated that they intend to expedite this report to be published by the end of 2023 instead.

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[4] https://ccma-acmc.ca/en/wp-content/uploads/CCMA-Announces-Canadian-T1-Start-Date-March-14-2023.pdf
[5] https://www.contraparte-central.com.mx/wb3/wb/CCV/archivos_publicos/_vtp/CCV/118d_2023/_rid/151/_mto/3/CCV_y_AMIB_T1_Anuncio_Ingle769s_Version_FInal.pdf?repfop=view&reptp=118d_2023&repfiddoc=712&repinline=true
[6] https://www.gov.uk/government/publications/accelerated-settlement-taskforce

Europe

Europe is currently considering CSDR Refit. Under the Council and Parliament proposed amendments, there will be a provision for ESMA to conduct a report on the potential shortening of the settlement cycle in Europe.

ESMA have announced a call for evidence on an EU move to T+1, as well as soliciting views on the impact of 3rd country moves on European stakeholders[7].

2.5. The US T+1 obligation

The standard settlement cycle in the US is codified in the Code of Federal Regulations under part 240.15c6-1. Under the published final rules, the SEC have adopted the below:

- **Rule 15c6-1 - Shorten the standard settlement cycle from T+2 to T+1**

"Rule 15c6-1(a) will prohibit broker-dealers from effecting or entering into a contract for the purchase or sale of a security (other than an exempted security, a government security, a municipal security, commercial paper, bankers' acceptances, or commercial bills) that provides for payment of funds and delivery of securities later than the first business day after the date of the contract unless otherwise expressly agreed to by the parties at the time of the transaction."

- **Rule 15c6-2 - Prohibit broker-dealers entering into a trade unless the contract requires same day affirmation (i.e. match the trade by 9PM EST on trade date).**

"Any broker or dealer engaging in the allocation, confirmation, or affirmation process with another party or parties to achieve settlement of a securities transaction that is subject to the requirements of § 240.15c6-1(a) shall:

(1) Enter into a written agreement with the relevant parties to ensure completion of the allocation, confirmation, affirmation, or any combination thereof, for the transaction as soon as technologically practicable and no later than the end of the day on trade date in such form as necessary to achieve settlement of the transaction;

or

(2) Establish, maintain, and enforce written policies and procedures reasonably designed to ensure completion of the allocation, confirmation, affirmation, or any combination thereof, for the transaction as soon as technologically practicable and no later than the end of the day on trade date in such form as necessary to achieve settlement of the transaction.

- **Rule 204-2(a)(7)(iii) – Requirement for an Investment Advisor registered under section 203 of the Advisers Act to maintain books and records of allocations, affirmations and confirmations.**

"Specifically, the Commission proposed to amend Rule 204-2 under the Advisers Act by adding a requirement that if the adviser is a party to a contract under proposed Rule 15c6-2, it must make and keep records of each confirmation received, and any allocation and each affirmation sent, with

[7] https://www.esma.europa.eu/press-news/consultations/call-evidence-shortening-settlement-cycle

a date and time stamp for each allocation (if applicable) and affirmation that indicates when the allocation or affirmation was sent to the broker or dealer."

"As with other records required under Rule 204-2(a)(7), advisers will be required to keep originals of written confirmations received, and copies of all allocations and affirmations sent or received, but may maintain records electronically if they satisfy certain conditions."

2.6. US T+1 scope

As stated above, the SEC requirement is that US broker dealers entering into any transaction, be done so on a T+1 basis unless a different timeline is expressly agreed otherwise.

Whilst in theory this means any US or non-US listed security that a US broker-dealer trades, this is managed by way of a 1995 published exemption[8]. This exemption applies for any securities without US transfer or delivery facilities (e.g. CSD activities) or with a traded volume lower than 10%.

"The Commission believes that it is appropriate to provide a limited exemption for securities that do not generally trade in the U.S. from the scope of Rule 15c6-1. Under the exemption, all transactions in securities that do not have transfer or delivery facilities in the U.S. will be exempt from the scope of Rule 15c6-1.\7

Furthermore, if less than 10% of the annual trading volume in a security that has U.S. transfer or delivery facilities occurs in the U.S., transactions in such security will be exempted from Rule 15c6-1\8\ unless the parties clearly intend T+3 settlement to apply.

If a foreign security is not exempted from Rule 15c6-1 under either of these two exemptions, the parties may arrange to settle the transaction in more than three business days if the parties expressly agree to the alternate settlement time frame at the time of the transaction pursuant to paragraph (a) of Rule 15c6-1."

More practically, we believe that firms currently and in the future will assess this criteria against venues rather than individual securities, and will adopt a position that T+1 settlement is the default for any US-listed asset or ADR unless an alternate settlement cycle is otherwise agreed.

Euroclear's view[9]

There will be an impact for some multi-listed securities. The settlement cycle will be determined by exchanges, trading venues and broker-dealers, depending on the security and the trading location. Therefore, it is possible that some securities will have more than one settlement cycle for market trades.

An example of a multi-listed security is the carmaker Stellantis, which by virtue of its corporate history, has pools of liquidity in Italy, France and the United States. It is headquartered in Amsterdam and its securities are traded on Euronext Paris, Euronext Milan and on the New York Stock Exchange (NYSE). DTC is the Issuer CSD. Our expectation is these securities will trade on

[8] https://www.govinfo.gov/content/pkg/FR-1995-05-26/html/95-12986.htm
[9] The Road to T+1 settlement in the Americas – Frequently asked questions – October 2023

Euronext Paris and Euronext Milan with a T+2 settlement cycle and on NYSE with a T+1 settlement cycle.

2.7. US market - What happens if a trade isn't matched on trade date for a T+1 trade?

The SEC requirement is that the broker has a written agreement with their counterpart that requires allocation, confirmation, and affirmation to be completed by no later than end of day (which the industry has interpreted to mean 9PM EST) on trade date. There is no official indication on how this will be enforced.

As the broker is under the obligation to have the written agreement in place, they may take a medium/long term view of their counterparty/client affirmation performance, with a view to encouraging the counterpart to improve their matching rates.

There is also a non-regulatory incentive for parties to a trade to have instructions matched by trade date given the positive impact on settlement rates. Given that most markets rely on an overnight or start-of-day batch, if most participants have trades matched by T, it cascades into better settlement rates across settlement chains (e.g. deliver trades relying on incoming receipt trades).

Trades that match and settle earlier in the overnight cycle face a lower CSD fee per trade vs those that settle intra-day (USD 0.04 → USD 0.54), though these fees are faced by the CSD participant.

2.8. US Market - What happens if a trade doesn't settle on value date for a T+1 trade?

FINRA rule 11810[10], provides provisions where *"a securities contract that has not been completed by the seller according to its terms may be closed by the buyer not sooner than the third business day following the date delivery was due".*

- For bilateral trades, this means that a buy-in intent or threat can be sent to the counterpart two days preceding the execution of the proposed buy-in, during which time the seller can deliver the securities.
- For trades clearing through CNS, DTC operates a buy-in process whereby the beneficiary of a long position may issue a buy-in intent once a security has failed. Members failing the delivery may be passed liability for the buy-in.

Generally, both participants to a trade prefer to avoid a buy-in and often the threat of a buy-in is sufficient to encourage the failing party to resolve the settlement issue, though executed buy-ins are seen.

For receipts, the trade will still need to be funded. For deliveries, it's understood the buy-in period is being brought forward to T+3.

[10] https://www.finra.org/rules-guidance/rulebooks/finra-rules/11810

2.9. US market - What happens if a trade is booked with a longer settlement cycle (T+2/3)?

The legislation allows for two counterparts to agree to a non-T+1 trade cycle at the time of the transaction. Whilst in theory this could help with a funding gap (e.g. between a fund operations lifecycle and US equity trade), there are a few potential implications:

- It has been anecdotally heard that the SEC may consider repeated systematic trading on a non-T+1 basis as an inducement.
- Some firms had anecdotally heard that brokers may only be able to agree a certain number or proportion of their trades as non T+1. This may be particularly relevant if all firms are looking to instruct a longer security lifecycle on the same day (e.g. due to a bank holiday in an FX currency).
- Agreeing and processing at a non-industry standard settlement cycle may reduce in STP (straight through processing) rates and automation and could result in a higher operational cost over time.
- Given the broker may have to fund the trade for an additional day or two in effect, this may result in a higher commission rate or funding fee.

3. Potential impact on asset managers based in the UK & Europe

3.1. FX and FX Funding

The smooth trading and operational flow of FX has become increasingly important for an asset manager over recent years given an increasingly international array of clients and securities invested in. In many cases, there will be a need to FX a client or fund's base currency into the currency of the traded security in time to fund the settlement of a trade (e.g. for an Australian client where the decision has been made to invest in the US, an AUDUSD FX trade will be needed).

The process today – FX Instruction

FX requirement

Generally the FX requirement will be assessed against cash flows, with aggregated receipts or deliveries of US securities creating a need to FX into or out of USD to settle the ongoing securities transactions.

FX for the buy-side is commonly instructed in one of three ways:

Traded FX

Having an FX trader source and instruct the FX. This may result in more competitive exchange rates for the FX but is more reliant on liquidity pools and timings. This is more commonly seen in the non-restricted and major traded currencies and is prevalent for trades settling in USD. Some firms view traded FX as offering best execution for clients.

Under the T+2 securities settlement cycle seen today for a US security trade, many firms will trade the FX component only once the underlying security trade is matched to ensure the economics won't change. This is commonly done on T+1 to settle through CLSSettlement (see below) or bilaterally gross on T+2.

Custodian instructed FX

Having the custodian manage the FX either via standing instructions on an account or via an 11A currency FX instruction in the MT541-RvP or MT543-DvP SWIFT message. This may make the FX more straightforward but may not result in an optimal FX rate compared to having a trader source liquidity from elsewhere. Custodian FX is more frequently used for less commonly traded and/or restricted currencies (e.g. in India to convert INR to settle trades in a T+1 market).

An FX outsource provider (currency manager)

Distinct from outsourcing the FX on a trade-by-trade basis or standing instructions to the custodian or prime broker, some firms may opt to leverage a specialist currency manager to ensure currency liquidity is available to settle trades. The specialist provider may benefit from global coverage and economies of scale but this may come at an additional cost to the asset manager as the currency manager will impose their own fees.

The process today – FX Settlement

Settlement risk and PvP (payment vs payment) mechanisms

A recent GFMA paper outlined the settlement risk (or Herstatt risk) possible in FX transactions where a firm "pays away the currency being sold but fails to receive the currency being bought."[11] Increasingly in recent years, firms have been encouraged by policy makers and through internal drivers to mitigate settlement risk using central matching platforms and FX is no exception.[12]

PvP Settlement

A payment vs payment settlement mechanism allows for the simultaneous settling of receipt and delivery payments resulting from FX trades.

The mechanism may also offer multi-lateral netting, allowing for the netting of the many delivery and receipt trades against several counterparts into fewer, more manageable and netted values.

The simultaneous settling and netting aspects offered allow for a much easier reconciliation process. As each netted payment can be reconciled against internal cash flows rather than the tracking and exception management of each individual currency payment and counterpart.

CLS offers this service across 18 different currencies. Currently their deadline to participate within the daily CLS Settlement product lifecycle for FX settlement next day is 12 AM CET. The buy-side can only access CLS through custodian banks who are direct CLS participants and who will generally have a further 1-2 hour deadline prior to this (~ 10 PM CET).

USD currency pairings that don't flow through a PvP mechanism may face the potential following implications:

Settlement or counterparty risk – The risk that only one side to an FX transaction settles.

Liquidity risk – PvP netting often enables FX transactions to settle start of day and allow for onward transactions to settle. Bilateral transactions, particularly where manually chased, may settle later and cause cashflow liquidity issues.

Operational workload – There is an additional operational workload to track and reconcile the FX transactions settling manually rather than through CLS's settlement workflow. Additionally, some counterparts or custodians may require partialing into smaller shapes of an FX transaction or require receipt before sending on the delivery.

Ongoing settlement risk – CLS has a target settlement completion time of 9AM CET (3 AM EST), meaning that all instructed FX funding should be available for security settlement. If the FX transaction only settles later in the day due to the more manual bilateral process, this may in-turn cause delays in the settlement of a security transaction. If multiple firms face these issues it could result in failing settlement chains (dependency on a receipt trade to settle a delivery) and lower settlement rates across the board.

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[11] https://www.gfma.org/wp-content/uploads/2023/05/gfxd-fx-considerations-for-t1-u.s-securities-settlement-may23-003.pdf
[12] https://www.bis.org/cpmi/publ/d207.pdf

How might US T+1 for securities impact USD and CAD FX and what are firms doing?

Trading liquidity – Under T+1 security settlement in the US, some firms have speculated that associated demand for trading in USD currency pairs may shift to two pools, the existing end of day EMEA timeframe along with a newer demand spiking around close of business US time (9-10PM London time), where many firms may be attempting to trade FX in the market to seek next-day settlement. Depending on available liquidity of these currency pairs at the potential new demand spikes, there may be a potential increase in pricing, manifested by wider spreads.

Trading liquidity (end of week) - Trading liquidity may be particularly impacted by end of day Friday. Liquidity dependant on US brokers currently tends to dry-up sooner as trading desks slow down and close earlier at the end of the week and with no rollover into APAC.

The below illustrations highlight the short period in which to trade FX for an EMEA currency into USD and the challenges in settling an APAC currency into USD in time to settle an underlying transaction.

GBPUSD FX Trade Timeline - Workflow for T+1 US Securities Settlement

FX Trade Workflow	T0 (Trade Date)									T+1 (Value Date)					T+2
London	0500-1300	1300-1700	1700-2100	2100-2200	2200-2300	2300	2300	0100	0100-0500	0500-1300	1300-1700	1700-2100	2100-2300	2300-0100	0100-0500
New York (EST)	0000-0800	0800-1200	1200-1600	1600-1700	1700-1800	1800	1800-2000		2000-2400	0000-0800	0800-1200	1200-1600	1600-1800	1800-2000	2000-2400
Execution Allocation Confirmation Settlement - CLS Settlement - Non-CLS (Bilateral)			UK - GBP Same day Cut-off		New FX Value Date - Changes 5pm NY	CLS T+1 Cutoff*									T+1 Securities Settlement 7pm FedWire Funds Service close
Equity Execution Equity Confirmation/Matching/ Settlement															

UK Based Fund Manager *- Source GFMA – FX Considerations for T+1 US Securities Settlement*[13]

USDHKD FX Trade Timeline - Workflow for T+1 US Securities Settlement

FX Trade Workflow	T0 (Trade Date)								T+1 (Value Date)					T+2
Hong Kong	1200-2000	2000-2400	0000-0400	0400-0500	0500-0600	0600	0600-1000	1000-1200	1200-2000	2000-2400	0000-0400	0400-0600	0600-1000	1000-1200
New York (EST)	0000-0800	0800-1200	1200-1600	1600-1700	1700-1800	1800	1800-2200	2200-2400	0000-0800	0800-1200	1200-1600	1600-1800	1800-2000	2000-2400
Execution Allocation Confirmation Settlement - CLS Settlement - Non-CLS (Bilateral)	HK 3pm - HKD$ Same day Cut-off				New FX Value Date - Changes 5pm NY	CLS T+1 Cutoff*								T+1 Securities Settlement 7pm FedWire Funds Service close
Equity Execution Equity Confirmation/Matching/ Settlement														

Asian based fund manager *- Source GFMA – FX Considerations for T+1 US Securities Settlement*[7]

Relocation of functions to the Americas – For those with an Americas presence, they may decide to move FX functions to the US. For example, if an equity fill came in at 4PM EST (9PM GMT), they would have staff focus during conventional working hours to instruct the relevant FX. Depending on legal entity set-up there may be an authorisation question on whether a US desk could authorise a trade for funds not delegated to that entity.

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[13] https://www.gfma.org/wp-content/uploads/2023/05/gfxd-fx-considerations-for-t1-u.s-securities-settlement-may23-003.pdf

A change to the way the FX requirement is calculated and traded:

The most common approach for a non-US asset manager looking to manage their USD requirement to settle trades is to look at an aggregate of their confirmed security transactions and to trade the FX based off this. Under today's T+2 trade cycle this can be done start of day on T+1 to settle in time for T+2.

Given the move to T+1 securities settlement, the timelines are compressed and thus managers have started to consider:

A shift to US FX trading and settlement – For firms with a US presence, they may be looking to shift existing functions to the US in the aim of executing FX between the close of equities trading at 4PM and the CLS cut-off to minimise the amount of trades missing PvP Settlement. These firms are likely shifting FX trading for USD from end of day UK to end of day US.

A transition to T+0 FX settlement – For European firms without a US presence, they may look to instruct a T+0 FX at start of day Europe on T+1 of the security settlement trade, looking to ensure that USD in in place in time for the US market open on T+1. This will retain the certainty of trading the exact amount of USD necessary, but will mean that none of the USD trades that would previously settle through PvP netting would be able to do so

Trading FX based on unmatched security transactions – Firms may decide to instruct the FX component of an underlying security transaction once the broker execution notice is received and where that transaction is unconfirmed, rather than waiting until the transaction is confirmed.

Anecdotal discussion among firms suggests that there are relatively few changes to the trade economics once an unmatched trade is confirmed and that a minority of firms already instruct FX this way.

Given US security broker fills may only come in near US market close (4PM EST – 9PM GMT) switching to instruct FX on unmatched trades may be of limited benefit to EMEA and APAC based entities given their business days are closed locally anyway.

Trading FX based on security trades sent for execution – Some firms may go further and look to move towards a model where they will trade based on the trades they have sent for execution and assuming it will be filled, rather than waiting until the broker execution notice has been received.

To do so, they've discussed instructing an FX based off the total security value with scope for value movements same-day (e.g. 105% of the aggregate security values), with a true-up FX instruction booked next day to clean-up the relatively small amount of slippage. Booking this way may allow firms a more realistic timeframe to settle through PvP netting, if they choose to do so.

Instructing FX only via trades sent for execution carries risks, however. In a worst-case scenario where the security executions are not filled, the FX transaction and it's associated fees have been instructed in error, causing cash flow issues and undue costs to the fund or client.

Holding more USD cash as part of a "slush fund" – Holding USD as part of a fund allows for more flexibility in cash flows and cash management, but may cause the fund performance to suffer to the detriment of the end investor.

Pre-funding – Given many of the difficulties around FX, some firms may explore pre-funding trades. This removes some of the challenges in executing and settling a short-dated FX transaction but may lead to lower performance on the committed cash as with the slush fund.

Fewer trades going through PvP (CLS) settlement – Given the CLS deadline of 12AM CET for next day netting and that many firms in today's T+2 cycle only instruct the FX trade the day following instruction, our members have suggested that there may be far fewer trades flowing through CLS and more FX transactions being settled bilaterally against counterparts. This increases liquidity risk for each FX counterpart leveraging greater FX bilateral settlement as well as the wider market.

Our members have suggested that additional headcount requirement may be necessary to manage the additional flows. Additionally, either side to the counterpart may impose additional risk mitigating measures on the other, such as the shaping of large transactions or the receipt of one side of the FX before releasing the delivery.

Some funds or clients impose PvP netting only for FX transactions, presenting an additional challenge given the tight timelines.

APAC/Americas currency pair challenges – Firms looking to exchange APAC currencies into USD and CAD for clients and accounts have noted additional challenges owing to the time zone differences (e.g. even an early broker fill at 9AM EST comes in at 9PM Singapore time with many APAC central banks closed and liquidity tight).

Some EMEA based firms trading these pairs will struggle to instruct the FX on time, whilst on the other hand facing challenges whereby some of the APAC region clients tend to be more averse to the use of overdrafts.

For clients and funds in APAC, there may be an increased need to pre-fund or hold USD within a fund. Anecdotally, some members have discussed that APAC funds already choose to use USD as a base currency.

Bank holidays – Bank holidays pose a particular issue when instructing a T+1 FX for a T+1 securities cycle. Where there's a bank holiday in the underlying fund/account currency being exchanged into USD to settle a trade, the trade will fail.

In looking to mitigate this, our members have explored looking to pre-fund the trade or to extend the settlement of the underlying security trades.

Extended bank holidays – Some firms have discussed that for extended bank holiday periods such as Japanese Golden Week or Chinese New Year, they may instruct a large FX transaction prior to and

after the extended period, to move the base currency into and out of USD to settle US security transactions during the holiday periods.

Advocacy for a CLSSettlement cut-off move?

Given the above referenced challenges in accessing CLS by the 6PM cut-off, the buy-side have called for CLS to explore moving this cut-off back by 2 hours to 2AM CET (8PM US time). Simultaneously, many buy-side firms are engaging with their custodian banks to explore whether improvements can be made to the individual custodian cut-offs in accessing CLSSettlement.

It's understood that CLS is surveying direct CLSSettlement members on the impact of moving this cut-off as discussed, following a risk assessment, though this is unlikely to be completed prior to May 2024.

How might a UK T+1 securities lifecycle impact FX?

For firms in EMEA, many of the challenges faced on US securities will be similar for the UK, though with a time zone that makes it slightly easier for other jurisdictions trading in and with some overlapping standard business hours to address any exceptions.

APAC investors may be impacted in a similar way to the US move, with an impacted ability to raise GBP to settle trades and challenges in settling through PvP netting, if they choose to use this service.

How else should firms look to ensure readiness?

The IA recommends that members:

- *Engage with custodians to understand deadlines to access PvP netting (where used) and gross bilateral settlement of FX, and see if they are changing as a result of US T+1 security settlement.*
- *Consider the additional time pressures on their current model of FX and explore whether changes need to be made to the FX requirement calculation, instruction and settlement processes and the time at which these are done..*
- *Consider eventualities such as public holidays and extended public holidays in the base currency.*
- *Where third party vendors, FX custodians or currency managers are used, explore whether they are able to fulfil requirements in the shortened timeframe.*
- *If trading FX, any potential changes to liquidity availability within certain time windows with the counterparts that you trade with.*
- *Consider whether any changes need to be made to future proof against a UK/Europe move.*

3.2. Trade Matching – Allocation, Confirms & Affirmation

Allocation: Where an Investment Manager sends instructions to the broker on how they wish to allocate a block trade to underlying client accounts.

Confirmation: The details provided by the broker dealer that verifies trade information so the trade can be prepared for settlement.

Affirmation: The affirmation provided by the broker's client agreeing to the details of the trade as outlined in the confirmation.

There is a common misconception that a matched trade in the US automatically means that it's been affirmed. Trades in the US can settle without being affirmed. Firms may find it beneficial to reach out to custodians to confirm their affirmation rates on trades as of today before reviewing internal processes and whether a change is needed. Some European buy-side firms have discussed that prior to the SEC commitment to transition to T+1 settlement, affirmation rates were either very low or zero.

Trade Matching - The process today

Once a trade is instructed, the broker will revert with a notice that it has been executed and filled, either partially or fully. On receipt of this notice, the buy-side firm will send the allocation to the broker and custodian, either via direct messaging or through a trade matching platform such as DTCC's CTM (central trade matching) platform.

Once the allocations are received, the broker will look to instruct the CSD with the relevant breakdown and send a confirmation message. This will be reviewed and affirmed by the custodian based off information via CTM or sent to them by the asset manager.

Asset managers broadly use one of 3 methods to match a trade for a US security:

Trade matching and instructing the CSD via a custodian

Once a trade has been filled by the broker, the asset manager will instruct the relevant custodian to instruct the CSD.

Trade matching and instructing the CSD via a trade matching platform

The parties to a trade use a trade matching platform such as DTCC's CTM, which gives the information for the custodian to instruct the CSD.

Trade matching and instructing the CSD directly through a platform.

The asset manager and broker may use a further trade matching facility such as DTCC's Match to Instruct (M2I) that will allow them to allocate, confirm and affirm a trade without leveraging the custodian to instruct the CSD. M2I auto-affirms trades by virtue of them matching through CTM.

Trade Matching – How might US T+1 impact trade matching

Counterpart capacity and availability

Under a T+2 settlement cycle, some member firms have anecdotally suggested that STP rates of trade matching on T for US trades are quite high, with T+1 used to resolve relatively low numbers of manual exceptions, though this may not include affirmations.

Firms, especially those not relying on a US operational presence, may wish to conduct an analysis of the trades that don't already match on T and look to solve for the remaining issues given these firms may have zero operational business hours to resolve for exceptions. Some of these exceptions may come from the broker (e.g. not sending their instructions on time) and require bilateral negotiation to resolve. Though many brokers and custodians have a follow-the-sun models, this is not the case across the board and service levels may vary across regions.

CSD and custodian deadlines

Given broker fill notices may be received very close or just past the market cut-off (4PM EST) and the new 9 PM EST trade matching deadline, this provides very little time in which to complete the trade matching process.

Commonly in today's T+2 transaction lifecycle, EMEA investment managers transacting in US securities will instruct the market through a custodian, who will be participants of the CSD, DTC (though the custodian may instead use sub-custodians who themselves are DTC participants). They will therefore be subject to the custodian bank's own deadlines in which to instruct the various settlement messages to settle a trade T+1 (i.e. if the market practice is now to match a trade by 9 PM EST, the custodian may ask instructions to be in by 7 PM).

Potential costs

DTCC have outlined the different costs to direct participants of trades matched by 9PM on T and going through the overnight batch[14], versus those instructed, matched and/or delivered later on in the day on a T+1 cycle.

> ***"There is a tiered fee for delivery of affirmed and unaffirmed transactions through DTC:***
> ***4 cents: DTC processing of affirmed transactions processed through DTC's ID ANE service***
> ***17 cents: For a transaction processed as a Night Deliver Order through DTC***
> ***54 cents: For a transaction processed as a Day Deliver Order through DTC"***
> ***Source: https://www.dtcc.com/dtcc-connection/articles/2023/march/22/accelerating-to-t1-industry-readiness***

Whilst the above represent direct CSD charges, custodians will also have their own custody fees and any impact to trade matching rates may impact these fees over the long-term.

Trade Matching – How might UK T+1 impact trade matching

Cross-CSD alignment

Firms have suggested that whilst the US largely has just one CSD, one of the challenges faced by the UK and to a greater extent across Europe is that securities can be held across a range of CSDs. A

[14] https://www.dtcc.com/dtcc-connection/articles/2023/march/22/accelerating-to-t1-industry-readiness

common cause of a failing trade today is that a trade will be instructed in the domestic CSD (e.g. Euroclear-CREST for the UK), but the inventory will be held within an international CSD (ICSD) such as Clearstream or Euroclear.

A move to T+1 will give even less time for firms to manage inventory and to instruct cross-CSD realignments where necessary.

Irrespective of T+1 and due to the higher rates of fails, some firms have explored lessening this misalignment risk. Such measures may include more consistently holding and trading within a given CSD or ICSD, more stringent processes around location reconciliation or by encouraging the use of the PSET (place of settlement) field as a mandatory matching field within trade matching platforms.

Trade Matching – Books and record keeping for Investment Advisers for the allocation, confirmation and affirmation of trades

US T+1 introduces a requirement for Investment Advisers listed under section 203 of the Adviser's act. European firms should take steps to verify internally whether this regulation applies to them[15] and, if so, whether they need to make adjustments internally to ensure the amended regulation is being adhered to.

In looking to solve for the books and record storing requirements, member firms have discussed a few different options:

Vendor solutions – There are some solutions that provide visibility to trades including whether or not they have been affirmed.

Custodian sourced – Where a custodian is assisting with or affirming on a firms behalf, they may be able to convey the matching information to their client.

Custodian stored – Where a custodian is assisting with or affirming on a firms' behalf, they may agree to store the books and records on behalf of their clients. Should the client be an RIA, however, the client would be liable should those records not be stored.

Other sources – Some firms have discussed pulling the matching status and timestamps from communication messages, such as an MT548 SWIFT.

Trade matching – Written agreement or policies and procedures

Under the new rules from the SEC, there's a requirement for brokers engaging in allocation, confirmation or affirmation processes with counterparties to either enter into a written agreement dictating that these processes are done by end of day on trade date **or** to establish, maintain and enforce written policies and procedures that ensure these processes are done.

Investment managers may wish to engage with their US brokers to understand whether there are any additional written agreement obligations.

[15] https://www.sec.gov/help/foiadocsinvafoia – Link to download the register of Investment Advisers

How else should firms look to ensure readiness?

The IA recommends that members:

- *Review current trade matching processes for US securities, including contacting custodians to assess current levels of trade affirmation and whether it's offered.*
- *Review whether firms are registered as US Investment Advisers and therefore have an imposition to store books and records (including timestamps) of allocations, confirmations and affirmations.*
- *Accordingly to consider whether as an RIA, how they will store books and records on the allocation, confirmation and affirmation processes including timestamps.*
- *Consider how the US affirmation process is carried out ahead of and post go-live.*
- *Consider the new requirements on broker-dealers and whether that will change the way they engage or trade with their buy-side clients such as new documentation or matching processes.*

3.3. Fund lifecycle and structure

The process today

In 2014, where the UK European security settlement cycles moved or started moving from T+3 to T+2, the IA co-ordinated with members for an industry change best practice in the fund lifecycle in the UK from T+4 to T+3 to lessen the impact of the securities trade misalignment. Despite this, the subscription and redemption settlement cycles used in the UK remains varied. Whilst T+3 is the most common settlement cycle for UK funds, there are also large minorities using a T+2 or T+4 lifecycle, and others still adopting longer or shorter cycles. Globally there is also a wide variety in the settlement cycles that funds adopt. Many US mutual funds such as 40Acts more commonly settle as T+1.

The process today – Misalignment challenges

Misalignment with the security lifecycle

Given the current T+2 securities settlement cycle and the common T+3 fund subscription/redemption cycle, many funds today face an existing misalignment:

> **With a fund subscription**, the fund wishes to use the proceeds to fund securities transactions and avoid performance drag. The difficulty is that the cash to settle this T+2 security transaction is only received on T+3.
>
> **On the redemption leg**, the fund receives the proceeds from the securities transaction before they are due to the investor, leaving potential client money (CASS) issues.

To manage this firms may consider:

> **The leverage of short-term credit facilities** – Some firms may leverage a credit facility (i.e. overdraft) in order to fund the security transaction before the subscription cash is received. These credit facilities are uncommitted (not guaranteed). Every time a fund wants to use this facility it needs express permission. At times during a festive holiday, financial year-end or during a credit crunch, funding in size might not be available. Some clients or funds may not permit use of an overdraft.
>
> **Instructing the underlying security transaction on a non-default T+3 settlement cycle** – Some asset managers may engage with their brokers to settle trades – particularly large ones – to match their fund settlement lifecycle on a T+3 basis (rather than the default T+2) but this will require manual intervention, detract from STP rates and potentially pass on additional costs, either to be taken by the broker or end investor.

Misalignment between funds

The range of fund subscription and redemption lifecycles also poses challenges. Wealth managers and investors find it a challenge transferring between funds of different lifecycles and the 1- or 2-day gaps can often create cashflow and/or client money (CASS) issues. Fund investors as a collective benefit from an industry aligned fund settlement cycle.

Constraints to shortening the fund settlement cycle?

Cash flow limitations

In the UK, there is a known operational constraint and reliance upon the three-day clearing period for BACS transactions, typically used by investment platforms for subscription settlements to firms and by firms for redemption settlements to investors, which causes potential restrictions in creating a scalable model for a shorter fund settlement cycle.

For UK retail investors using debit cards, there is a two-day clearing period which may require pre-funding for subscriptions.

A move to a T+1 trade settlement lifecycle may necessitate improvements in the fund operational infrastructure. It could potentially necessitate a look at alternative cash transaction flows away from BACs, looking towards other 'bulk' or 'net' settlement commercial solutions, or advocacy for the relevant stakeholders to shorten the cash settlement cycle in line with the securities cycle.

Fund valuation

To facilitate an investor subscription or redemption from a fund, the price will be based on the Net Asset Value (NAV). For many US funds and EU funds, this is generally taken at close of business once trading has closed and values are set. In the UK, funds tend to use a mid-day valuation point, though many will also use close of business.

For funds looking to move to a T+1 settlement or shorter cycle, an end of day NAV calculation will cause particular difficulties for APAC fund investors. The close of US equities trading equates to early morning next day in APAC, with the fund admin processes likely to add additional hours. This provides a very small window for an APAC client to fund the subscription and perform the necessary FX. These difficulties may encourage pre-funding, where the end investor may suffer for being out of the market.

A move to T+1 securities settlement, may necessitate a rethink in the time and process in which a fund is valued and/or trading cut-off times to a fund.

Consistency within an umbrella fund

For operational consistency many firms managing a range of funds or an umbrella fund many prefer a consistent fund settlement period across the range and may prioritise this consistency when considering whether individual funds (e.g. with a North American focus given the transition to T+1) should change their fund settlement range in isolation.

Global or multi-region focused funds

Many funds invest in a global basket of underlying securities. Should there be misalignment across the security lifecycles of the underlying jurisdictions, the fund lifecycle will be unable to match the settlement period of all underlying assets. Firms may wish to consider the composition of underlying assets at different settlement cycles when determining whether they wish to amend their fund settlement lifecycle and on what that might be. For example, a fund with more than 50% of US securities may consider moving to T+1.

Redemption impact on funds with a short settlement cycle

Where a fund has a short fund settlement cycle (e.g. T+1), any redemption from the fund creates a necessity to sell the underlying securities in the market at the time of the instruction, whereas a fund with a longer settlement cycle may provide more flexibility. A short settlement cycle can therefore force portfolio managers to sell underlying securities at a time of low liquidity and wider spreads. Any market stress or periods of heightened volatility (e.g. the UK Gilt crisis in October 2022) may particularly impact T+1 funds and could exacerbate conditions in a stressed market.

The fund platform perspective

Fund platforms

Fund platforms provide access to UK retail investors to funds. Given the range of fund settlement periods, many fund platforms can facilitate fund settlement cycles from T+1 onwards.

Early feedback from questions posed to the UK Platform Group around T+1 settlement[16] suggests that fund platforms do not foresee an issue with funds shortening their settlement cycles but expressed a preference for funds to move in a co-ordinated way and according to a co-ordinated timeline should they wish to do so.

Should firms change their fund settlement cycle?

In discussing approaches to a fund settlement cycle it has quickly become clear that there isn't an "optimum" approach:

For funds at a T+3 and T+4 subscription & redemption settlement cycle – A move to a T+1 securities settlement cycle exacerbates an already present settlement cycle mismatch. Firms will have to cover the funding gap, either by using an overdraft, negotiating for extended settlement or otherwise. Redemptions can mean that the cash is held for additional days before being released to the investor, with potential CASS considerations. The model does provide for flexibility and can be useful where the fund mandate is for a range of products with varied settlement cycles (e.g. T+1 securities in the US, T+2 in EMEA with some markets still T+3).

For funds at or moving to a T+2 subscription and redemption settlement cycle – A move to a T+1 securities settlement cycle continues to present a challenge with a funding gap, albeit with a one-day gap that many firms are familiar with addressing now. The model provides a degree of flexibility where the fund has a global mandate.

For funds at or moving to a T+1 subscription and redemption settlement cycle – A move to a T+1 securities settlement cycle is aligned with the subscription and redemption settlement cycle and should provide for the most efficient funding model. A T+1 subscription and

[16] https://www.theia.org/system/files/private-downloads/2023-06/UK%20Platform%20Group%20-%20Anonymised%20responses%20on%20amending%20fund%20lifecycle%20for%20platforms.pdf (IA Membership required)

redemption settlement cycle poses other challenges, with an extremely tight timeline around NAV calculation, FX processing for overseas investors and more. Some managers have raised concerns for funds on a T+1 settlement cycle in market stress conditions, where panic redemptions force same day sales of assets into falling markets and potentially causes a procyclical effect.

In view of this it has been challenging to set a good practice or recommendation, however in speaking to asset managers, wealth managers and others, we believe that it's important to give the industry a focal point for firms looking to transition their fund settlement cycle, even if this isn't adopted by all funds.

Accordingly the IA suggests that:

1. **Firms transition to a T+2 fund settlement cycle for funds with a North American focus, or those with heavy North American weighting to align settlement on the 29th May 2024 with the US market move.**

2. **Firms start work on considering transitioning the rest of their funds to T+2 in order to future proof against the UK and/or Europe moving to a T+1 security settlement cycle as we expect.**

3. **Firms currently operating at T+4 and so increasingly misaligned but unable to adopt a T+2 fund settlement cycle yet, consider moving to T+3 at a minimum.**

Transition weekend timings

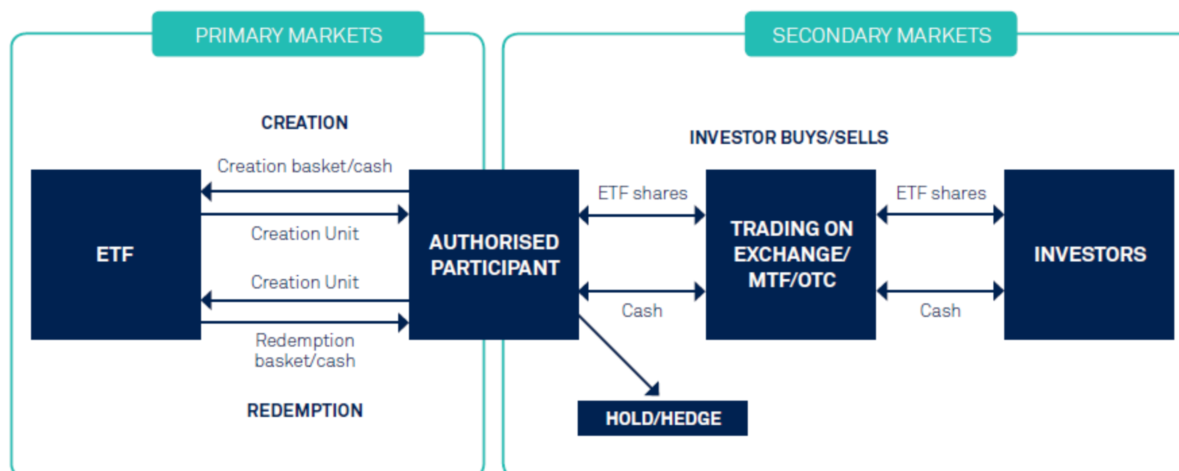
A firm wishing to entirely align its changes would follow the following timetable. All dates are May 2024:

<table>
<tr><th></th><th>Weds 22/5</th><th>Thur 23/5</th><th>Fri 24/5</th><th>Sat 25/5</th><th>Sun 26/5</th><th>Mon 27/5</th><th>Tues 28/5</th><th>Wed 29/5</th></tr>
<tr><td>UK T+4 fund moving to T+3</td><td>Last T+4 trade date</td><td>First T+3 trade date</td><td></td><td colspan="2" rowspan="4">Weekend: Market closed</td><td rowspan="4">US & UK bank holiday</td><td></td><td rowspan="2">Settlement date</td></tr>
<tr><td>UK T+3 fund moving to T+2</td><td></td><td>Last T+3 trade date</td><td>First T+2 trade date</td><td></td></tr>
<tr><td>US market pre-conversion T+2 flow</td><td></td><td></td><td>Last T+2 trade date</td><td></td><td>Last T+2 settlement date</td></tr>
<tr><td>US market post-conversion T+1 flow</td><td></td><td></td><td></td><td>Conversion day - First trade date</td><td>Double settlement date</td></tr>
</table>

3.4. ETFs (Exchange-traded funds)

The process today

Unlike mutual funds, ETFs (exchange-traded funds) are traded on a stock exchange. Creation and redemption of ETF shares is based on market demand, with authorised participants (APs) incentivised to create or redeem ETFs in accordance with the below model.



The settlement process can be particularly difficult for ETFs compared to other products given a particular ETF can represent hundreds of different underlying securities and that these baskets of securities can be global in nature, especially for global funds. Due to this, ETFs benefit greatly from alignment in the global securities settlement cycle. Conversely, they are significantly impacted by any jurisdiction changing their settlement cycle and causing misalignment, particularly if it's a major jurisdiction with a heavy asset weighting across many ETFs such as the US.

Currently, the settlement process for ETF primary market transactions in the US, UK and Europe is operated on a predominantly T+2 basis, however settlement fail rates are high compared to other products due to settlement misalignments in the creation/redemption process.

Impact of misalignment between North America and EMEA

Misalignment of the underlying basket (e.g. for global funds)

A particular area of concern for ETFs as it comes to T+1 is how to approach cash in global baskets with misaligned settlement cycles, whether the EMEA based ETF remains at T+2 or moves to T+1.

Where a global basket contains instruments with misaligned settlement cycles, firms may have to make a choice as to whether, dependent on certain thresholds, they treat the basket overall as a 'US' or 'EMEA' basket for settlement purposes.

For Investment Managers where the US is T+1 and EMEA is T+2 on a global basket

> **On ETF creation,** assuming the primary market settlement cycle remains at T+2, the misalignment could cause the fund to go overdrawn as the underlying basket of securities is settled T+1 but the ETF settles T+2.

Should the primary market settlement cycle move to T+1, the ETF settling on T+1 whilst the underlying securities settle on T+2 could cause UCITs cash breaches as the fund is left with too much cash overnight.

ETF redemptions under the same conditions would have the opposite impacts. Depending on the primary market settlement cycle, the misalignment could necessitate overdraft usage or cause cash breaches.

For Authorised Participants where US is T+1 and EMEA is T+2 on a US focus fund.

On ETF creation, the ETF may be created on T+1 due to the shorter US settlement cycle (assuming a primary market settlement cycle) but only delivered on T+2. The authorised participant may have to fund the ETF position for a day before settling the onward delivery.

On ETF redemptions the authorised participant would acquire the ETF positions from the market as T+2. The fund would be processing the underlying securities as T+1 which could lead to settlement fails for a day and generate interest and CSDR claims.

For ETF investors

More broadly, the operational difficulties of managing ETF flows may lead to wider spreads for the end investor.

CSDR cash penalties

CSDR cash penalties went live in February 2022 with the goal of improving settlement rates. The mechanism works by charging the counterpart seen at fault and crediting the other counterpart.

ETFs in particular find cash penalties a challenge, as their baskets can contain a large number of different securities traded on different jurisdictions that can be contingent on other trades settling.

Both US and EMEA ETFs may see an increase in CSDR cash penalties, which may manifest in costs to the parties of the ETF flow and ultimately wider spreads for the underlying investor.

Impact of misalignment between the UK and EU

Multi-listings across the UK & Europe

Exchange traded funds in EMEA are often listed across multiple exchanges to provide a wider distribution and greater access to a larger range of investors. They may commonly be listed on exchanges across the UK, Germany, Switzerland and more.

Whilst a disparity across underlying securities within an ETF basket is difficult, ETF processing flow participants have suggested that having ETFs trading at different timeframes on the secondary cycle poses a far bigger and extremely difficult challenge in managing the creation and redemption process.

It may be that an exemption is sought for ETFs from T+1 secondary market settlement, but this poses additional difficulties where underlying securities are aggregated to be traded as blocks.

Should there be an extended period where the UK and EU are out of alignment on settlement cycles, we may see ETF providers consider moving listings for their pan-European listed ETFs from the UK exchanges to other markets (e.g. for USD share classes).

3.5. Security lending

Asset owners may opt to use security lending programmes to supplement the returns on their portfolio. This entails allowing the loan out of long positions on eligible securities to other market participants who will use the temporary liquidity in return for a lending fee.

The process today

For security lending programmes, they are typically agreed either:

- For the security lending programme to be facilitated by the account custodian (agency lending) or a 3rd party securities lending agent, as agreed by the asset owner either in conjunction with the asset manager or otherwise.
- For the asset manager to manage the security lending programme

The invisibility principle

One of the benefits to a lending programme leveraging a 3rd party lending agent, is that the lending programme is "invisible". The portfolio manager may not have visibility to the stocks that are on loan or not and are in theory not impacted either, given that settlement should occur either way. This principle is being tested in recent times, as funds are looking to ensure they're compliant with ESG label requirements such as voting in company general meetings and are being held to account for what the borrower is using the securities for.

Given that frequently the lending agent will have liability for the security lending process, asset and fund managers will sometimes offer less priority in improving the process.

The recall process

When a sale is instructed on an asset that is out on loan, the stock first needs to be re-called from loan before then settling as part of the sale transaction. This adds another layer of actions that need to be completed before a sale can go through. The sale of securities on loan suffer higher settlement fail rates than transactions for securities not on loan.

The agent lender will often recall stock out on loan only on the matching of the sell trade, which can leave a short turnaround to recall the stock to settle the sell on settlement date.

To encourage better settlement rates, some firms are able to send and consume pre-advice SWIFT messages to grant a larger timeframe for the security to be recalled by the settlement date of the underlying sale trade. This would typically be an MT541/543 (RvP/DvP SWIFT settlement message) with the function of the message marked as PREA (pre-advice). Not all lenders and borrowers are able to process these messages.

The DvP vs FoP mismatch

Many markets have separate DvP (delivery vs payment) and FoP (free of payment) settlement windows. These vary across jurisdictions but settlement windows commonly close earlier for DvP than FoP transactions (e.g. many European countries close DvP settlement at 3PM and FoP at 5PM).

Standard convention is that security lending transactions are booked as free of payment (FOP) with collateral exchanged separately, whereas security transactions are booked as DvP. This means that an FOP recall can settle but is unable to settle an onward transaction if the DvP window has closed. This becomes especially relevant where the intended settlement date is used for operational processes and therefore recalls settle later in the day as may occur under a T+1 security lifecycle.

What could happen going forward?

Supply and demand

It's unclear at this point whether a move to T+1 will:

> **Dissuade and reduce securities lending activity** – Given the additional complexities around the lending process and the increased likelihood that it causes a trade to fail, the underlying asset owner may opt against a securities lending programme, thus missing out on performance costs but achieving higher settlement rates and avoiding applicable settlement discipline.
>
> Unrelated to T+1, securities lending has faced increased scrutiny of late, with some ESG label requirements necessitating a fund to vote on all possible General Meetings of held equities, which isn't possible where securities are loaned out, and regulatory scrutiny on what borrowers are using the securities for.
>
> **Encourage and increase securities lending activity** – Given the potential need for faster liquidity, market participants and market-makers may further look to leverage stock borrows with their potential to settle same-day to manage short-term inventory. Demand may increase from brokers who regularly manage their security inventory near zero and utilise stock borrows to facilitate client sell instructions. Similarly, borrowers may look to entice lenders into term lending arrangements.

Operational flow of the recall

To make the operational process of securities lending more viable, we may see asset managers, custodians and agency lenders make greater use of pre-advice messages.

Some investment managers have also explored sending a message to prompt recalls earlier still, and potentially once the trade is sent for execution to the broker (potentially via FIX messaging) rather than waiting until trades are matched and confirmed. Whilst this may require an internal build, it could result in better recall and consequent settlement rates.

Underpinning this, member firms have discussed the importance and dependency of connection and "pipes" between firms and any technology opportunities and constraints that may provide. Having better technology in place to connect investment managers, custodians and agent lenders provides more flexibility in the timing and content of messaging.

Operational flow of the lending process

The stock lending process is still reliant on a large amount of e-mail and similar communication methods for agreeing security loans and their returns between the lender and the borrower, along with consequently addressing any issues or dealing with failing transactions.

Given the amount of e-mails to be tracked, it can cause bottlenecks in operational processes and make it less transparent on the issues facing a particular recall fail and the party those issues sit with. This is exacerbated further for the investment manager, given the mail exchanges will be between the agent lender and borrower. This lack of transparency contributes to further mail traffic.

We may see T+1 encourage a rethink of the securities lending process. Lending product vendors are considering and building new products in the market that may offer a more streamlined, STP flow with greater visibility across the process.

The US market – The buy-in process

The US market relies on a buy-in process for settlement discipline. Failing transactions (including recalls) may be subject to a buy-in “threat” should they fail to deliver. Given the costs of the buy-in to the failing party, many firms (particularly borrowers) have established buy-in teams that will prioritise the settlement of failing transactions that have been threatened with a buy-in. Consequently, though executed buy-ins are seen, it remains more of a threat than a commonly executed transaction.

Depending on the impact of T+1 on settlement and the lending process, we may see an increased demand of exception management on these buy-in teams. Given the buy-side are generally lenders, they may be issuing an increased amount of buy-in threats and may have to monitor accordingly.

The EU markets – CSDR cash penalties

Europe introduced the CSDR cash penalty regime in February 2022. Whilst, the buy-side and their clients tended to be net beneficiaries with more credits than debits, securities lending commonly caused settlement fails and therefore debits. Managing to recall the stock to settle an onward delivery could mean two debit penalties on the account, with the investment manager, custodian and agency lender having to determine where the fault lay and negotiate accordingly.

With T+1 settlement, this is likely to exacerbate the amount of failing trades. A large increase in debits caused by securities lending fails (and the onward fail of the underlying security transaction), may decrease appetite from firms to lend.

Collateral

Given the buy-side and their clients tend to be lending, they will often be the receivers of collateral and impact may be minimal. The firms borrowing will be the party posting the collateral and most tend to use tri-party collateral models for securities lending. Member firms do not believe that T+1 settlement will place an onerous build for borrowers looking to substitute collateral.

3.6. Securities used as collateral

Securities as collateral - The process today

Collateral as protection is required across a number of financial transaction to provide security against default. Whilst collateral, also known as margin, against security borrowers has been discussed in the previous section, investment firms may also have to post collateral against derivatives.

Whilst CCPs will demand cash against cleared derivatives, rules for margin posted for uncleared derivatives allow for more flexibility of what can be used. Many investment managers will post cash collateral for simplicity, though increasingly some firms are using or exploring sovereign bonds and credit funds as a more efficient way to manage inventory and collateral.

Collateral models

Firms that must post collateral for bilateral margining generally consider two separate models:

> **Third party –** A firm will open a collateral account with a third-party custodian against each in-scope counterparty and manage and agree collateral posted according to an agreed list of eligible assets.
>
> **Tri party –** A specialist collateral vendor undertakes many of the functions on behalf of the pledgor. There will be a "long box" that will contain eligible assets that can be posted against eligible counterparts. Products can be committed or withdrawn against the longbox as long as the overall collateral requirement is met.

Collateral recalls (margin substitution)

Whilst posting securities as collateral can be a more efficient use of available assets than sourcing cash, it also has some operational complexities. When assets used as collateral are sold, the security recall has to be executed and something else has to be posted in its place (e.g. a margin substitution).

Rehypothecation

Where securities are posted as collateral, one of the options for clients doing so is to permit the bank or prime broker to use these securities whilst posted, in return for reimbursement or lower fees. This is known as rehypothecation. A bank or broker may then use these rehypothecated shares as part of their overall inventory and clearing position, potentially using the rehyped shares to cover internal or client short positions or reducing the amount that they're borrowing through securities lending.

Similar to securities lending, an issue arises where these rehypothecated shares need to be recalled or substituted as collateral, potentially because they've been instructed to be sold. In such a scenario the bank or broker will need to find other securities to cover the rehypothecated shares before being able to deliver them back.

How might T+1 impact margin substitution?

Identification

Similar to securities lending, firms may not have infrastructure in place for a portfolio manager to be aware of whether underlying securities are being used as collateral or not. There may need to be a shift in processes to ensure that the team managing collateral management are aware of the sale of the security as soon as possible to initiate the recall and substitution.

For tri-party models

Firms will have to recall the security from the longbox of eligible collateral and ensure there's sufficient assets in place to cover the margin requirement and therefore the security recall.

For third-party collateral models

Firms will have to recall the security from their third party custodian and ensure that securities or cash with sufficient value are posted in their place.

Use of securities as collateral

Given the pressure on cash flows listed in the rest of this document, with a potential greater amount of pre-funding or committed cash for transactions, firms and their clients may increasingly take a look at their collateral models to see where they can find efficiency. They may transition from clean to dirtier CSAs (credit support annexes - i.e. transition from using pure cash to a broader mix of cash and securities as collateral). This could in turn create more pressure on the teams managing collateral and a greater number of substitutions.

3.7. Corporate Actions and dividends

Broker protections and events where record date = deadline to instruct

A shorter trade settlement cycle will have a significant impact on events such as rights issues where the deadline to instruct matches the record date (eligibility) of the shareholder's entitlement.

Where a counterpart is buying or selling rights, it might be expected that there will be a much higher proportion of trades still to settle on record date, which will therefore need managing carefully. Buy-side firms may have to be more proactive in chasing for counterpart deadlines (also known as broker protections) and election confirmations to ensure that their instruction has gone through. Alternately the broker may offer contractual settlement and take on the corporate action risk.

Dividends and other corporate actions

A move to T+1 settlement will necessitate Ex-date moving forward one day to match record date. On the assumption that settlement rates stay the same this would have little operational impact. Assuming that settlement rates are impacted by a move to T+1 settlement could result in a higher number of claims and breaks, which could impact timely payment and the correct application of withholding tax.

3.8. Follow the sun and time constraints

Given all of the potential impacts outlined in this document, firms may need to consider their operational capacity and capability to process trades in different regions. Firms will likely need to conduct operations functions or instruct FX near or after US market close and before the following day. The US equity market closes at 4PM EST, which translates to 9PM in the UK, 10PM across much or Europe and 4AM next day in Singapore/Hong Kong.

Given this, firms may consider their current and future operational processes. Potential options firms have been considering include:

Establishing/increasing operational presence in the US – Potentially establishing or increasing presence across front and/or back-office resource within the Americas to address the time zone.

Considering outsourcing solutions to cover functions – Firms may assess whether they need to outsource some of their existing functions to middle office service providers with a US presence. Equally there may be products that allow them to address the issues.

When a trade is instructed – Firms may look to ensure that all trades are instructed and filled by a certain time of day on trade-date to appropriately address any post-trade functions.

Automate Processes – If parts of a trade matching flow can be automated, it may lessen the need for an operational presence.

Shift work – The potential for adjusted working hours for staff where applicable.

How stakeholders and counterparts will be assessing the issue – Having an increased capability to cover the Americas time zones may not matter if a firm has dependency on a client or broker that do not have the same capacity, to move a process forward.

4. Secondary considerations

Cyber-security

Shortened settlement cycles could be more at risk to cyber-security attacks. There will be risk triggers and thresholds built around a T+2 settlement cycle, with a time window to assess and identify erroneous trades and potentially flag, pause or cancel the trades before completion. A shortened settlement cycle may erode some of these checks, reducing protection against a possible cyber-attack.

Distributed ledger technology (DLT)

Perhaps more related to a future mooted move to T+0 settlement, one of the areas that has arisen is a potential change to the settlement infrastructure with the adoption of new technologies such as distributed ledger technology.

Whilst regulators and policymakers are encouraging experimentation through sandbox & pilot regimes for developing this technology, generally the market does not believe DLT technology is far enough in adoption to yet consider as a solution for T+1 (or T+0) settlement issues.

Global harmony

In recent years there has been a broadening of exposures to different markets and an increased number of global products, be they funds, ETFs or otherwise and many firms are active across global markets.

Having harmony across jurisdictions, in settlement cycles or otherwise, enables firms to optimise and build efficient homogenous processes and achieve better rates of STP. Conversely, disharmony across markets in considering timelines for a move to T+1 settlement creates additional costs and poorer returns for the end investor.

Where possible we encourage harmony across global jurisdictions.

Impacted regulation

Should the EU or UK propose a move to T+1 settlement, we believe it should be undertaken with a full consultation and with extensive analysis on the impact of and to other regulation.

An example of this is the CSDR settlement regime in the EU, with a change to settlement cycle potentially causing an increase in settlement fails and therefore cash penalties. ETFs may be particularly impacted as a mis-match in settlement cycles cause an increase in CSDR cash penalties.

Additionally, the increased complexity of trading T+1 may have an impact on a firms ability to assess best execution.

Key stakeholder dependency

With any move to T+1 settlement there will be a wholesale change across the settlement chain. For an investment manager looking at changes to processes to accommodate changes, there are some key dependencies on stakeholders. Some smaller entities may need to transition away from paper-based processes and given settlement flows in a chain, there will be reliance on custodians to conduct appropriate due diligence and change management.

A notable example was CSDR go-live in February 2022, where the relative unpreparedness and lack of testing offered by CSDs led to inconsistent custodian processes and made it very difficult for the buy-side at go-live.

There is also a range of dependencies internally, and firms should ensure they've considered all areas impacted.

Operational resilience

The move to a shorter settlement cycle increasingly necessitates the need for solutions and vendors that offer a seamless, STP (straight through processing) flow. Where this works it provides for lower trade friction which should translate into lower costs and a better result for the end investor. This move to STP, however, creates an ever greater need for operational resilience, either for the buy-side firm and internal processes, or for the vendor tooling that they may elect to use.

Increasingly short settlement cycles makes it more and more difficult for manual work-arounds to cover situations where an internal process or vendor solution does not work as standard. Arguably, a shorter settlement cycle could lead to an exacerbated impact should any key market infrastructures or vendor solutions be shutdown.

T+0 settlement

As the discussion of T+1 settlement has arisen, there has been a further discussion of T+0 or possible real-time settlement.

Whilst the two ideas are linked, there remains even greater challenges in moving from T+1 to T+0. We believe that the conversations should be held separately at this time such that the issues and impacts of each move are not conflated.

5. External public resources

Industry papers and websites

AFME: T+1 Settlement in Europe: Potential Benefits and Challenges (Sept 2022)

DTCC: High Level Testing Paper (2023)

GFMA – FX Considerations for T+1 US Securities Settlement (May 2023)

IA: Suggested changes to the UK Mutual Fund settlement cycle (Sept 2023)

ISITC: Comments to the SEC on T+1 settlement proposal (April 2022)

ISITC: Industry preparedness for accelerated settlement (May 2023)

Plato Partnership / Redlap Consulting: T+1: Looking at the Bigger Picture (March 2023)

SIFMA: Accelerating the US Securities Settlement Cycle to T1 (2021)

SIFMA: T+1 Industry Implementation Playbook (2022)

UK Finance: Examining the case for trades to be settled more quickly in the UK (Aug 2023)

UST1.ORG

Regulator and market announcements

CCMA: Announcement of Canadian T+1 settlement go-live (March 2023)

HMT: Edinburgh reforms – Accelerated Settlement Taskforce

SEC: Proposed movement from T+2 to T+1 by April 2024

SEC: Confirmation of move to T+1 settlement cycle by 28 May 2024 (2023)