

FICC E-TRADING  
& MARKET STRUCTURE

# T+1 Settlement: Impact on FX and Other Asset Classes

November 2023

**BofA SECURITIES** 

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# Summary

## Key Points

- US securities will move to T+1 settlement on May 28, 2024
- The potential impact is global and has prompted other jurisdictions (EU & UK) to explore speeding up their own settlement times to match the US
- Foreign exchange trading is set to be impacted by the reduced settlement times for US equities

## The Basics of T+1 Settlement

### Which US securities are moving to T+1?

- Equities, Fixed Income and Money Markets – see complete list from DTCC [here](#)

### Why is the US moving to T+1 settlement?

- The SEC says recent episodes of market volatility – notably March 2020 and the ‘meme stock’ incident in January 2021 – have exposed potential vulnerabilities in operational processes which could be mitigated by shortening the settlement cycle

### How does T+1 create FX challenges for international investors in US assets?

- A disproportionate amount of US equities trading takes place at or near the New York close (4pm ET)
- A move to T+1 settlement will leave a 2-hour window for foreign investors to trade equities, purchase US dollars and then settle via CLS
- In other products, ETFs could see funding strains for authorized participants and result in costs rising in secondary market trading
- Fixed Income investors purchasing US assets at or near the close could also face challenges

### Has the US shortened the settlement cycle before?

- Yes, most recently in 2017 from T+3 to T+2

### Which other jurisdictions have T+1?

- Canada and Mexico are moving to T+1 to align with the US, while India and China have already established T+1 settlement for some products
- EU and UK regulators have opened discussions around reducing settlement times from T+2 but this could be years away from implementation

For more information, please see Bank of America’s [Preparing for T+1 Settlement](#) website.

## US Key Dates

<b>SEC announces T+1 rule</b>	Feb 15, 2023
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<b>Industry Testing begins</b>	Aug 14 2023
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### 2024 Transition Weekend Timeline

Friday, May 24	Last T+2 Trade Date
Saturday, May 25	Conversion Weekend
Sunday, May 26	Conversion Weekend
Monday, May 27	US: Conversion Weekend CA/MX: First T+1 Trade Date
Tuesday, May 28	US: First T+1 Trade Date CA/MX: Double Settlement Date
Wednesday, May 29	US: Double Settlement Date

# Global Outlook for T+1



## Who is Settling / Moving to T+1?

- US – May 28, 2024
- Canada – May 27, 2024
- Mexico – May 27, 2024
- China – T+0 / T+1 for equities market and T+0 for its interbank government bond market
- India – T+1 for shares traded on exchange

## UK

- The Accelerated Settlement [Taskforce](#) was launched in Dec 2022
- It is exploring whether to shift UK securities markets to T+1
- Initial findings will be published in Dec 2023, final report by Dec 2024
- UK is also debating moving to T+0 in the future, perhaps with the help of new infrastructure like distributed ledger technology (DLT)

## EU

### Summary

- The European Securities and Markets launched a [consultation paper](#) on Oct 5 to gather industry feedback on moving to T+1
- This was sparked by the US's upcoming move to T+1 on May 28, 2024
- The EU previously harmonized its settlement cycle to T+2 via the Central Securities Depositories Regulation (CSDR) in 2014
- The European Commission will publish a final report in Q4 2024 at the latest

### Key Points of Consultation Paper

1. Readiness to move to a T+1 cycle is not uniform across the EU
  - Clearing houses and CSDs would likely be able to make the move
  - Asset managers may incur additional costs operating T+1
  - T+1 could pose challenges for Exchange Traded Funds
2. T+1 would increase pressure on the current post-trade processes
  - e.g., sending written allocations and confirmations
  - ESMA estimates these would have to be finalized T+0
3. ESMA is aware shortening to T+1 would entail costs, but says it would reduce risks:
  - the reduction of counterparty risk
  - encouraging additional automation and STP
  - lower collateral requirements

# FX Impact: US Equities

## Key Points

- Foreign investors buying US equities may need to settle FX T+1 versus T+2
- Investors based in APAC may need to shift to T+0 due to time zone difference
- If settling FX via CLS, investors will have a 2-hour window from market close
- Regulators are concerned that more FX transactions could settle bilaterally

## What's the Issue?

Today, foreign investors that purchase US equities need to fund them in the FX market by exchanging their local currency for US dollars.

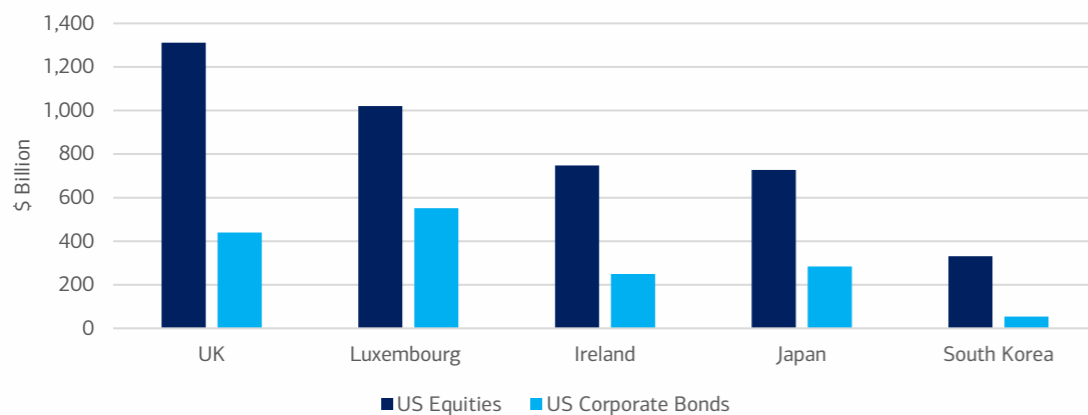
Once allocations and confirmations are received by investors as to the price of the equities bought, an FX transaction is then completed to deliver US dollars to the counterparty to pay for the securities.

The current settlement time for US equities and the associated FX is T+2. This means investors have the trade date plus two business days to settle the FX trade and pay for these securities.

From May 28, 2024, that time is cut in half (T+1). The change raises the risk that FX funding may not occur in time to settle these securities transactions, particularly for investors in certain time zones.

According to the Department of the US Treasury [data](#), foreigners own 20% of all outstanding US securities, which equates to roughly \$24 trillion. The majority of that is in equities (\$12 trillion), while corporate debt holdings are \$4 trillion.

Foreign Holdings by Country



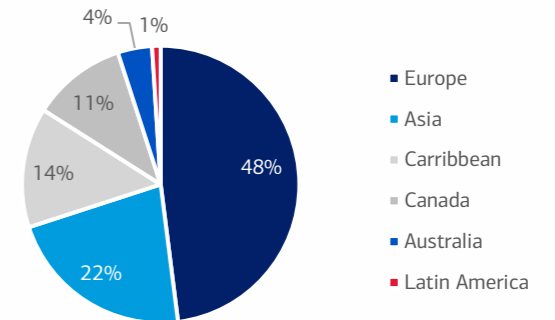
Source: Department of the US Treasury (June 2022)

## US Market Close

The change to T+1 is particularly acute for US equities markets for three reasons:

1. There is a diversity of foreign investors that sit across many different time zones (see pie chart)
2. A high percentage of daily activity takes place near the end of the trading day in New York – **4pm ET**
3. The cut-off time for FX trade submissions to CLS is **6pm ET**

Foreign Holdings of US Equities June 2022 (\$12 Trillion)



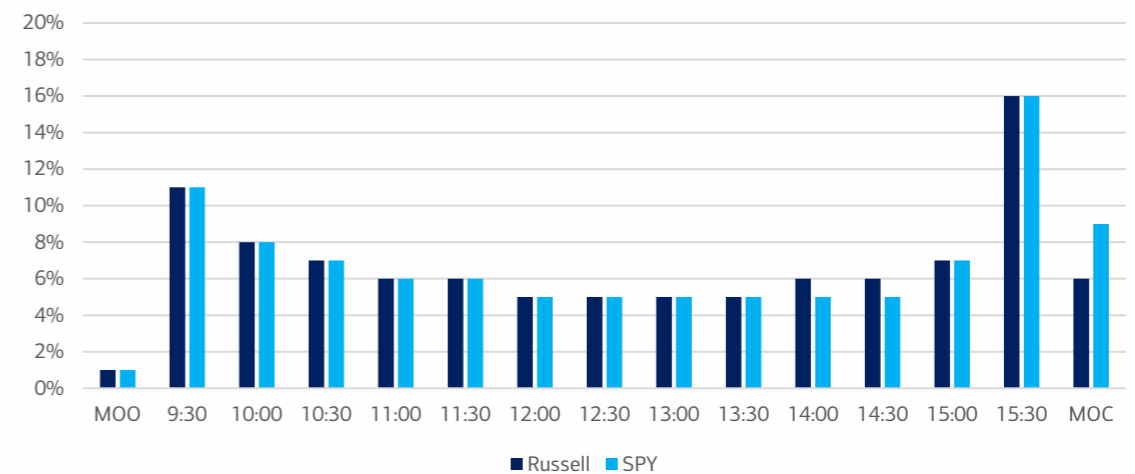
Source: GFMA

Market close has become one of the most important parts of the trading day in equities for many investors due to the better liquidity during this period.

For example, 22% and 25% of stock volume in the Russell 2000 and S&P 500 indexes respectively are traded during the final 30 minutes of the trading day on average.

Typically, investors wait until they receive final trade confirmations and processing of their equities transactions before then making the FX transaction to be settled via CLS.

US Equities Trading Activity



Source: BofA Insight Quant Consulting, TAQ



# FX Trading & Liquidity

## T+1 Shift Potential Impacts

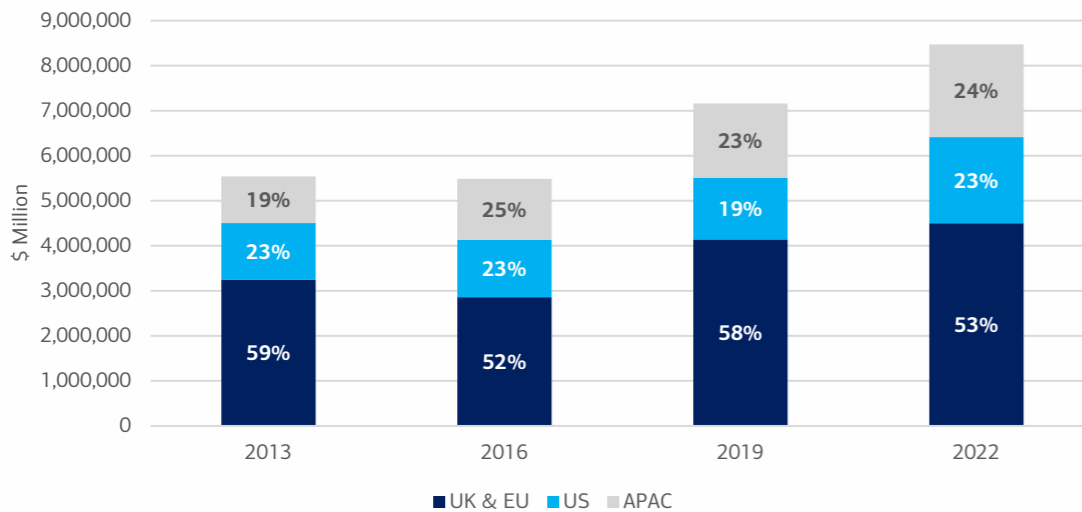
- Some FX trading could shift towards after US equities market close
- FX trading conditions could become volatile in New York afternoon
- Some participants may trade FX in morning APAC hours for T+0 settlement
- Demand for forwards and swaps could rise to meet T+1 liquidity needs

## FX Volume Shifts

Liquidity in FX crosses declines during New York afternoon hours, given London is closed, and becomes even less traded post US equities market close at 4pm ET.

Central bank data shows how the US makes up 23% of average daily FX volume versus 53% in European countries, with the bulk of that represented by the UK.

FX ADV by Region



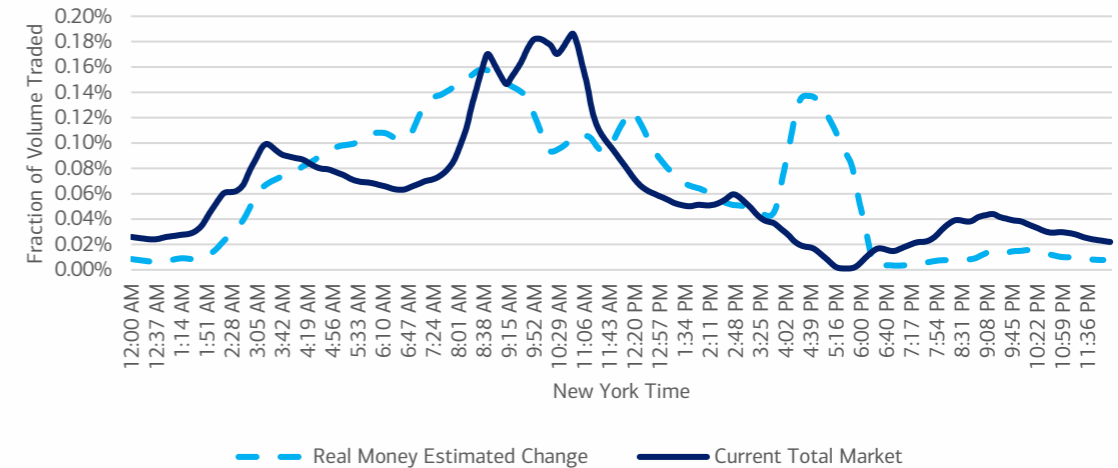
Source: Bank for International Settlements 2022 Triennial FX Survey

The volume by region is reflected in the trade data daily, too.

Current volume distribution among G-10 currencies in the past 12 months shows a strong pick up in total FX activity in London hours and peaks in the New York morning, before declining rapidly for the rest of the New York trading day.

But the market could see trading shifts to New York afternoon once T+1 settlement takes effect to meet settlement obligations before the CLS 6pm ET cut off.

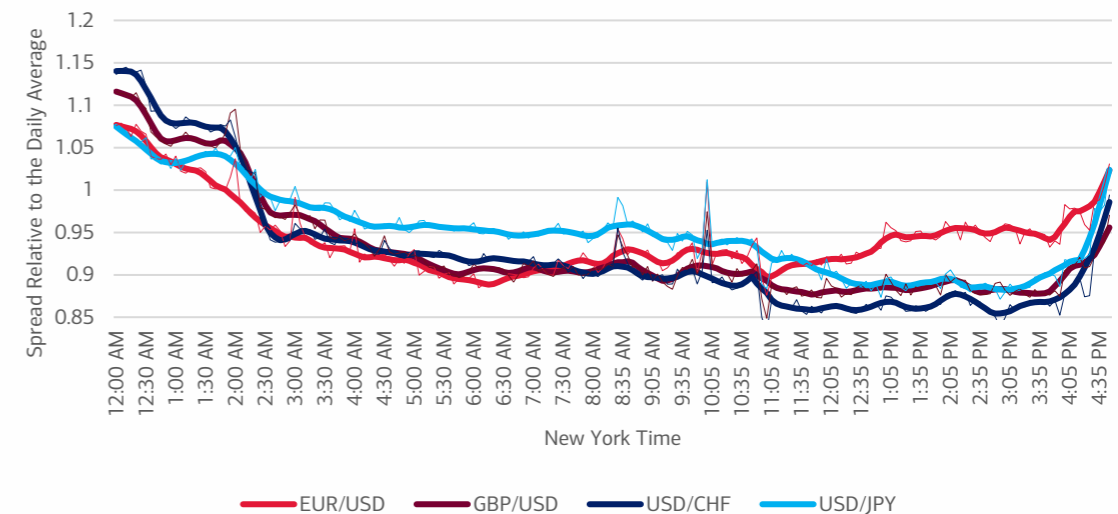
G10 Smoothed Minute Volume Distributions (2022 - Oct 2023) & Expected Change under T+1



Source: BofA Securities estimates of primary and secondary markets

Declines in trading volume also are reflected in spread changes throughout the trading day, as shown below. Average spreads for \$5MM trades narrow during New York morning before beginning to widen out towards the US market close.

Average \$5MM Spread During Trading Day



Source: BofA Securities estimates of primary and secondary markets



# FX Settlement & CLS

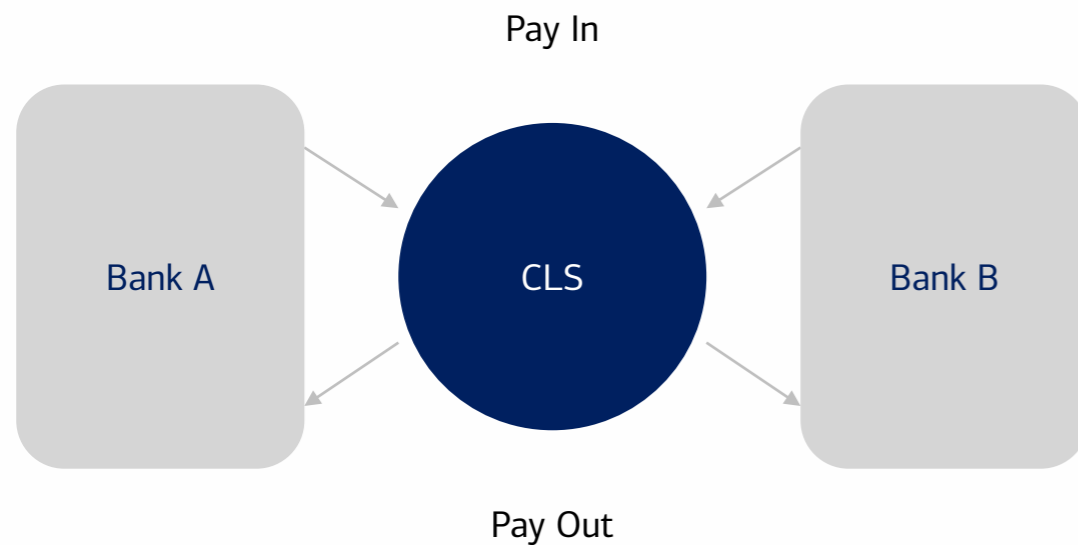
## CLS (Continuous Linked Settlement)

### Background

Launched in 2002, and supported by a broad consortium of banks, \$2.2 trillion of the \$7.5 trillion FX market goes through CLS daily, according to the Bank for International Settlements (BIS).

CLS settles T+1 and on a 'payment versus payment' (PvP) basis, which means a counterparty only gets paid if it pays its own obligation into CLS each day – with the cut off time at 6pm ET / 11pm GMT / 12pm CET.

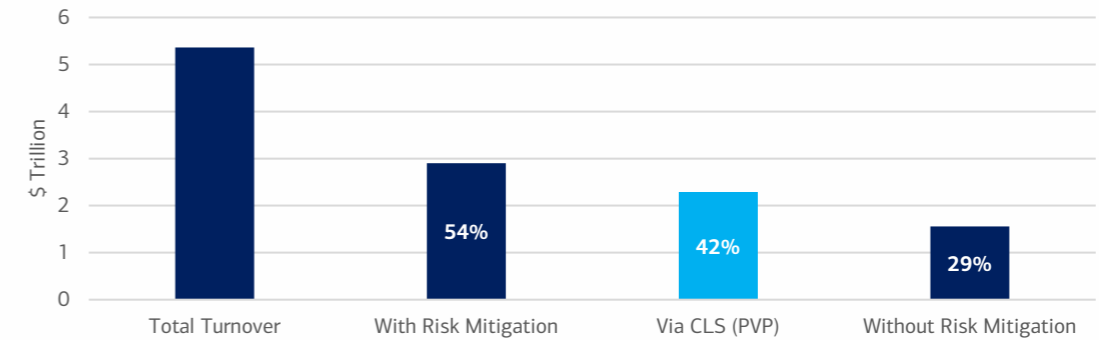
This helps mitigate the risk that one counterparty to the trade should fail to deliver their currency.



Today, 18 currencies are eligible to be settled at CLS, which account for 72% of daily FX turnover (\$5.4 trillion), according to data from the BIS.

Of the CLS-eligible currencies, 42% of the volume does settle via CLS on an average day, based on triennial survey data from the BIS.

Settlement Risk Mitigation in CLS Currencies



Source: Bank for International Settlements 2022 Triennial FX Survey

### Settlement Risk Increase

The concern from regulators is that the amount of daily FX activity that is settled via CLS could be reduced once T+1 goes live on May 28, 2024.

Anna Nordstrom, Head of the Domestic and International Markets Functions at the Federal Reserve Bank of New York, said at an industry conference recently that the market could see increased [bilateral settlement](#) outside of CLS following the move to T+1.

The amount of FX settlement done via CLS was also raised as an issue by the BIS in a [whitepaper](#) last year.

### Time Zones

Today, FX trades can be submitted after the current 6pm ET cut-off to meet the following day's CLS settlement cycle and still meet the current equities T+2. This is particularly helpful for some APAC time zones where the 6pm ET cut-off is not during the trading day.

To ease this challenge, CLS is considering the feasibility of extending the cutoff by up to 90 minutes, making it possible to submit the FX for settlement and still meet the shortened settlement time.

However, given the change is significant, requires industry consensus and industry approvals, it is not clear whether this will be implemented in time to meet the May 28, 2024 deadline.

# Settling FX with CLS in T+1 Cycle



	New York	London	Paris	Singapore	Tokyo
Current CLS Cut off	6pm	11pm	12am	6am	7am
Proposed CLS Cut off	7:30pm	12:30am	1:30am	7:30am	8:30am

# Other FX Considerations & Potential Solutions

## Other FX Considerations

### Custodians

- Some custodians have more conservative cut-offs compared with CLS
- Therefore, any change to the CLS window may not make a difference for investors using a custodian if those cut off times do not move in unison

### FX Benchmarks

- As more FX trading moves towards the NY close (4pm ET), it could see an emergence of other Benchmarks and impact liquidity around WM/R 11am ET fix
- Cost of trading could increase in the form of wider spreads as dealers may face greater risks in executing fixing orders on benchmarks which become less liquid

### End of Week Trading

- Managing, executing and matching FX could be more challenging through the weekend, which could lead to higher incidents of operational errors and/or liquidity gaps
- This is due to the FX market closing through Saturday and Sunday, meaning liquidity could deteriorate on Friday afternoon

### Financial Stress

- Misaligned settlement cycles globally could create an increased necessity and demand for funding to manage time zone differences
- During a 'credit crunch', this may impact securities settlement and increase costs should clients tap credit lines

### Block Trading

- Traders may need to net blocks based on custodian settlement capabilities or cut off times, possibly increasing the number of FX transactions that need processing
- This may require firms to direct more flow to specific counterparties that can ensure T+1 settlement



## Potential Solutions

Meeting the new T+1 requirements has presented numerous challenges to investors. Below are some potential solutions but they present possible additional costs.

### Expand operations to US time zone

- Some investors have already moved select trading and operations teams to the US to transact FX in that time zone

### Pre-fund US equities transactions

- This would require FX trades taking place prior to final confirmation of equities positions traded

### Custodians or Outsourced Trading

- Using a third-party to conduct FX on investors' behalf might reduce operational burden but could increase costs and settlement times could be more restrictive than CLS

### Real Time Gross Settlement (RTGS)

- Each country has its own cut-off times for same-day settlement, but closer alignment could ease the burden on market participants

### Bilateral Settlement

- This would help investors meet FX obligations but increase settlement risks



# Conclusion



## Key Points

- The US move to T+1 settlement on May 28, 2024, has the potential to create settlement dislocations due to lack of standardized global implementation
- In particular, the EU and UK remaining T+2 – at least for now – looks set to impact FX and funding costs for broker-dealers and investors
- Funding for US equities in the FX markets could see liquidity dynamics change, with more volume moving to New York afternoon trading hours
- FX settlement risk could rise as some sections of the market lean on bilateral channels to risk manage FX trades
- Operational challenges may arise for ETFs and other similar funds where primary and secondary markets face settlement mismatches
- EU and UK markets could be years away from implementing a similar T+1 regime
- The mismatch to the US could result in a permanent shift of trading flows and liquidity

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