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Intraday-Maturity Tokenised Gilt Certificates (IMTGCs)

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1. Introduction

Recent work by Darrell Duffie has proposed Public Offers of Treasury Securities (PORTS) as a means of strengthening financial stability and supporting settlement in digital-asset markets. The core mechanism of the instrument is that sovereign instruments can function as safe settlement assets in always-on markets. We do not assess or critique PORTS here. Instead, this paper explores how a similar objective may be implemented within the United Kingdom's institutional, legal, and operational framework, where gilt issuance practices, central bank liquidity provision, and settlement infrastructure are different from the United States.

In this paper we propose the introduction of a new instrument, termed Intraday-Maturity Tokenised Gilt Certificates (IMTGCs), within the existing sterling monetary framework and Debt Management Office (DMO) market issuance mechanism, as a tool to ensure liquidity stability during periods of money market volatility.

The proposed IMTGC is a very short-term UK government instrument that repeatedly matures during the day, giving its holder guaranteed sterling liquidity at known times throughout the day, and that can be used as a safe settlement asset in both traditional and digital markets. They would differ from existing gilts in that the latter are issued at fixed scheduled times, and are not designed for intraday liquidity. The former, despite being sovereign obligations, would not interfere with monetary policy and therefore would not require decisions from the Bank of England. That said, IMTGCs would help ensure the continuous functioning of the gilt market, for example by reducing the amplitude of the stress; this would contribute to maintaining financial stability in a general sense (analogous to a "seatbelt" in a car). Furthermore, IMTGCs could reduce reliance on the repo market to settle gilt cash positions, thereby relieving dealer banks of balance sheet costs.

In sum, IMTGCs would reduce the frequency, intensity, and urgency of discretionary BoE liquidity interventions, thereby lowering the risk of tension with monetary policy objectives.

2. The UK Institutional Infrastructure

2.1 UK DMO and Short-Term Cash Management

In addition to its gilt issuance responsibility, the UK Debt Management Office (DMO) fulfils a long-standing mandate to manage the government's cash position through short-term instruments. The current DMO Cash Management Operational Notice and UK Treasury Bills

Information Memorandum (28 March 2024) explicitly mentions bills as instruments issued to support flexibility when managing temporary cash needs, compared to benchmark securities issued within rigid auction schedules (UK DMO, 2024).

The Debt Management Report 2025–26 confirms that these operational arrangements remain central to UK cash management and are updated through operational notices rather than through statute (HM Treasury & DMO, 2025).

This confirms that ultra-short term sovereign liabilities are already an accepted product of UK debt management. What we propose is moving from day-level to intraday maturity segmentation. This would represent an incremental operational extension, rather than a conceptual departure from what is already in place. We cannot foresee any required significant change in existing market infrastructure.

2.2 Bank of England Intraday Liquidity as Existing Public Infrastructure

The Bank of England (BoE) routinely supplies intraday liquidity in central bank money under the Sterling Monetary Framework (SMF) to support settlement in RTGS, CHAPS, and CREST. This is consolidated practice.

The SMF Operating Procedures (December 2025) allow for intraday liquidity supply as a standard mechanism to prevent settlement disruption. This is provided against collateral and unwound by the end of the business day (Bank of England, 2025).

Earlier articulation of this role is also mentioned in the Sterling Monetary Framework Annual Report 2016–17. This frames intraday liquidity as part of the BoE's liquidity insurance function (Bank of England, 2017).

The evidence above suggests that intraday liquidity is already treated in the UK as core financial-stability infrastructure. Hence, IMTGCs can be seen as a tradable, standardised sovereign representation of this function, rather than as a new policy tool.

2.3 RTGS Renewal and Interoperability with External Ledgers

The Bank of England's RTGS Renewal Programme explicitly aims to modernise settlement infrastructure and improve interoperability with external platforms.

The Roadmap for the RTGS Service beyond 2024 (13 February 2023) sets out the following objectives:

- increased resilience and availability,
- support for extended operating hours,
- development of a synchronised settlement interface to interact with other ledgers (Bank of England, 2023).

This direction is reinforced by the BoE's public materials on the renewed RTGS service, which emphasise compatibility with new technologies rather than exclusive reliance on a single central ledger.

The maturity-based intraday sovereign instrument suggested in this note, would align naturally with the BoE's stated preference for time-segmented, synchronised settlement, rather than continuous discretionary redemption.

3. How Would IMTGCs Work?

We propose that Intraday-Maturity Tokenised Gilt Certificates (IMTGCs) would be UK sovereign obligations that:

1. Mature multiple times per day (e.g. two, three or four fixed maturity points)
2. Are automatically reissued at maturity unless the holder opts out
3. Trade at par due to negligible duration (see 1 above)
4. Remunerate via a transparent, rule-based rate linked to SONIA (or Bank Rate)
5. Exist in both CREST-settled and tokenised form
6. Deliver liquidity through maturity rather than selective redemption
7. To mitigate unintended consequences related to financial stability, their issuance could reasonably be capped.

IMTGCs would be seen as cash-management instruments, not benchmark gilts.

4. How Do We Design it? Rationale and Evidence

4.1 Maturity-Based Liquidity Instead of Selective Redemption

Liquidity in IMTGCs is provided via frequent maturity points, for example at 06:00, 14:00, and 22:00 UTC. All outstanding units mature at the next scheduled window.

The advantages of this is that it will avoid:

- selective redemption across fungible securities (this would increase infrastructure network complexity),
- legal ambiguity around investor-initiated withdrawals,
- clustering of redemption requests at a single daily point (preserve financial stability).

If we consider the evidence from money market and repo markets, that would indicate that shorter liquidity cycles and more frequent settlement windows reduce run incentives and collateral bottlenecks (CPMI-IOSCO, 2012; BIS Quarterly Review).

4.2 Automatic Rollover and UK Settlement Practice

As we explained, by default, holders roll into the next (new) IMTGC issuance at par unless they opt out.

This mechanism is consistent with UK market practice:

- CREST routinely processes mandatory events at maturity (Euroclear UK & International, 2020),
- BoE standing facilities operate on automatic access subject to eligibility,
- CCP cash margin is routinely reinvested according to predefined rules.

In our view, the automatic rollover we propose would fit nicely with existing framework while avoiding discretionary redemption queues.

4.3 Rule-Based Remuneration (No Auctions)

IMTGC remuneration is determined by a published formula (no auctions), for example:

IMTGC rate = min(SONIA, Bank Rate) − demand-adjustment spread

This mirrors existing UK conventions:

- SONIA has been the BoE-administered sterling risk-free rate since April 2016 and was reformed in April 2018 (Bank of England, 2025).
- Monetary policy implementation in the UK relies on standing facilities and administered rates, not frequent auctions.

Avoiding high-frequency auctions reduces operational complexity and limits incentives for strategic behaviour.

5. Settlement, Tokenisation, and Legal Foundations

IMTGCs would:

- be issued under UK sovereign law,
- settle in CREST and BoE RTGS,
- be mirrored on regulated DLT platforms.

We believe that the UK has already established a legal and regulatory pathway for such experimentation through the Digital Securities Sandbox, introduced under the Financial Services and Markets Act 2023 and operationalised through BoE–FCA policy statements in September 2024 (BoE & FCA, 2024).

The Law Commission's Digital Assets Final Report (28 June 2023) confirms that English law is well-positioned to accommodate tokenised representations of traditional financial instruments without undermining settlement finality.

7. Using It In The UK Context

IMTGCs would facilitate a digitally-secure stability mechanism for UK money markets that mitigates risks of potential liquidity squeezes in sterling cash intra-day, overnight and repo markets. This would reflect:

1. Sterling stablecoin reserves, aligned with UK regulatory expectations for high-quality liquid assets
2. Tokenised gilt repo markets, providing an intraday cash leg referenced to SONIA
3. CCP margin and default fund cash, reducing duration and liquidity risk
4. Corporate and institutional treasury, enabling intraday sterling liquidity management across time zones

8. Conclusion

IMTGCs should be understood as an evolutionary extension of existing UK practice, not as a re-engineering of sovereign debt markets. The UK's institutional framework – spanning the DMO, the Bank of England, and ongoing RTGS renewal – makes it particularly well suited to exploring intraday-maturity sovereign instruments as settlement assets in tokenised markets. In this sense, IMTGCs complement the intellectual contribution of PORTS by demonstrating how the same underlying objective can be achieved through different operational designs, depending on jurisdictional context.

We believe this instrument could be introduced reasonably quickly by the DMO and be adopted by market participants in a very straightforward manner.

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