Token markets need liquidity: Where will they get it from?

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On 13 February 2025 BX Digital hosted a virtual seminar that addressed the question: "Token markets need liquidity: Where will they get it from?" The importance of the topic is obvious. A market in which assets can be bought and sold quickly without moving the price is bound to grow more quickly than one in which assets can be bought and sold slowly, if at all, and only by moving the price in an adverse direction. By this criterion, the cryptocurrency markets, let alone the tokenised asset markets, lack sufficient liquidity. The conventional solution is to attract more issuers and investors. Unfortunately, it is fallacious. The experience of traditional markets shows that liquidity is not generated sufficiently by buyers and sellers alone. Furthermore, liquidity must be manufactured by market-makers, lead brokers, securities dealers, inter-broker dealers, exchanges and trading venues, banks, investment banks, and principal and high frequency trading firms. Yet blockchain was invented precisely to get rid of intermediaries such as these. So the purpose of the discussion hosted by BX Digital was to test whether blockchain-based finance can indeed scale without intermediaries, whether tokenisation can make the generation of liquidity more efficient and what exchanges can do to encourage the growth of liquidity.

The seminar, held in conjunction with Future of Finance, attracted 116 registrants. They heard Lidia Kurt, CEO of BX Digital, Michael J. Cyrus, Head of Short-Term Products, Equity Finance & FX at DekaBank, Mike Reed, Head of Partnership Development for Digital Assets at Franklin Templeton, Jasmine Burgess, Chief Risk Officer at Coinbase Asset Management, and Lloyd Wahed, Founder and CEO at Members Capital Management, discuss the question from a variety of angles. The registrants contributed to the discussion by completing an on-line poll, the results of which are published here.

This is a Summary written by Future of Finance and as such is fully responsible for the content. This summary reflects a range of opinions provided during the roundtable.

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Executive Summary

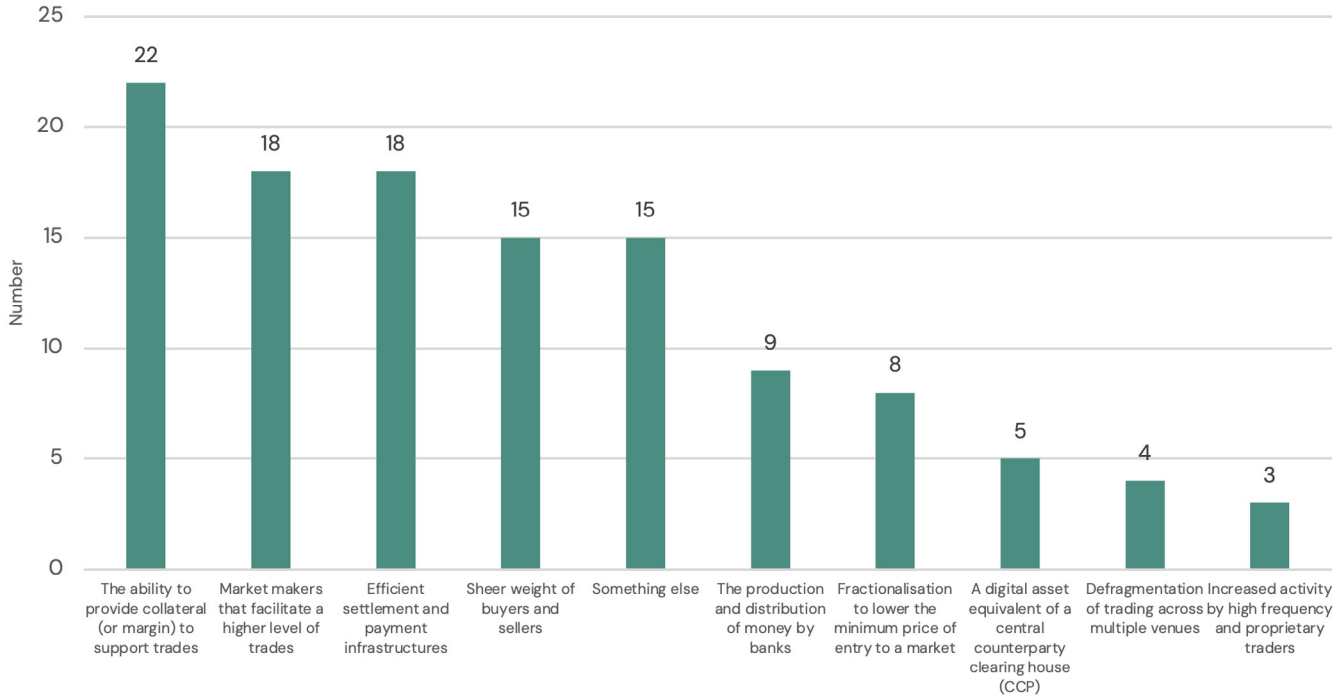
- Markets do not manufacture liquidity by chance. They require facilitation by specialised agents, even in blockchain-based markets.
- Specialist infrastructure and service providers, including regulated exchanges and insurers, help to generate liquidity by winning the trust of issuers and investors.
- Tokenised money market funds foster liquidity by providing a yield-bearing form of cash and cash collateral on-chain.
- The operational efficiencies of tokens are bound to encourage transactional activity but are mitigated by the fact most tokens are not yet fully "native."
- Fully "native" tokens will enjoy multiple liquidity-enhancing features, such as round-the-clock trading, instant settlement and transparent ownership.
- By enabling round-the-clock trading, faster settlement, reduced-on-boarding costs and automating asset management, "native" tokens will be more liquid.
- By broadening the range of assets that can be transformed into financeable instruments, tokenisation can add liquidity to any asset class.
- Clearing and netting of token transactions through a clearing house would add liquidity to token markets just as they add liquidity to traditional asset markets.
- Fiat currencies on-chain would enhance liquidity by eliminating work-arounds such as Stablecoins and increasing the velocity of money.
- By enabling round-the-clock trading, faster settlement, reduced-on-boarding costs and automating asset management, "native" tokens will be more liquid.
- "Native" tokens will boost liquidity by making more assets available for use as collateral, reducing the financing and capital costs of market participants.
- Interoperability between traditional and tokenised asset markets will add liquidity but depends on regulated exchanges to host issuance, trading and settlement.
- So far, experience has shown that traditional institutions are more inclined to invest in and trade tokens via regulated exchanges and intermediaries.

Are specialist intermediaries such as market-makers necessary to generate liquidity in tokenised asset markets?

Traditional markets prove that liquidity does not arise naturally from the interaction of issuers and investors, and cannot be sustained by their activities either, but must instead be created by market-makers and sell- and buy-side firms using collateralised credit and asset borrowings to take positions and increase the value of their trades (see Chart 1). So liquidity provision by intermediaries is essential. Indeed, asset managers are wary of markets which lack a means of enabling them to buy and sell quickly and efficiently when natural buyers and sellers are inadequate or absent. In Europe, regulators also prefer digital assets to be supported by at least two market makers whose prices are visible on a regulated Multilateral Trading Facility (MTF) or an Organised Trading Facility (OTF). It follows that the provision of liquidity requires a degree of institutional complexity. A financial eco-system for digital assets that encompasses intermediary institutions providing issuance, trading, market-making, settlement, custody and registration services is now emerging, but it is not yet stable and complete.

Chart 1

What Is Most Likely To Generate Sustained Liquidity In Tokenised Asset Markets?



Why don't issuance and investment activity create sufficient liquidity?

Chiefly because it takes time and effort to build trust among issuers and investors. Both sides of the market need the reassurance of regulated exchanges and intermediaries, institutional-quality custody arrangements, traditional risk management and compliance processes and – to support the cash leg of transactions in the absence of fiat currencies on-chain - regulated and transparent Stablecoins which have maintained their value over a prolonged period. As institutional confidence builds, growth in the amount of capital committed to tokenised asset classes will make liquidity easier to create, perhaps eventually without intermediary institutions. For now, however, net infusions of new capital are so limited that transactional activity depends largely on the recycling of existing monies.

What will attract additional capital to tokenised asset markets?

Efficient market infrastructures are one means. They aggregate and support primary market issuance, secondary market trading and the settlement of transactions and provide, either directly or via third parties, the digital wallets used by investors to custody digital assets. To attract institutional intermediaries and their buy-side clients, it is also helpful if the infrastructure is regulated. A second attraction is adequate insurance cover. Tokenised assets generate unfamiliar risks, such as the hacking of data oracles that trigger smart contracts. Unfortunately, the lack of experience of insuring such risks currently means that there is insufficient data for underwriters to make considered actuarial judgments. Solving this problem would reassure potential investors. A third attraction for fresh capital is provided by the identification and exploitation of new use cases, such as tokenised money market funds.

What contribution do tokenised money market funds make to liquidity?

Tokenised money market funds are proving a valuable lubricant in token markets, as a form of on-chain collateral, value storage and even payment. For example, they enable investors to hold cash on-chain in a yield-bearing form. This allows purchases to be made relatively efficiently by exchanging the tokenised money market fund shares for other on chain assets, e.g., a Stablecoin, rather than using the conventional banking system off-chain to use fiat currency to buy a Stablecoin or other assets on chain. Tokenised money market funds are also proving popular with industrial and commercial corporations that need cash or cash equivalents urgently and cannot wait for the one or two days set by conventional settlement timetables. Lastly, private equity firms use tokenised money market funds to transfer money to portfolio companies directly, enabling them to deliver yield-bearing assets to company treasurers immediately rather than having to wait several days for payments to clear and deposits to start earning interest.

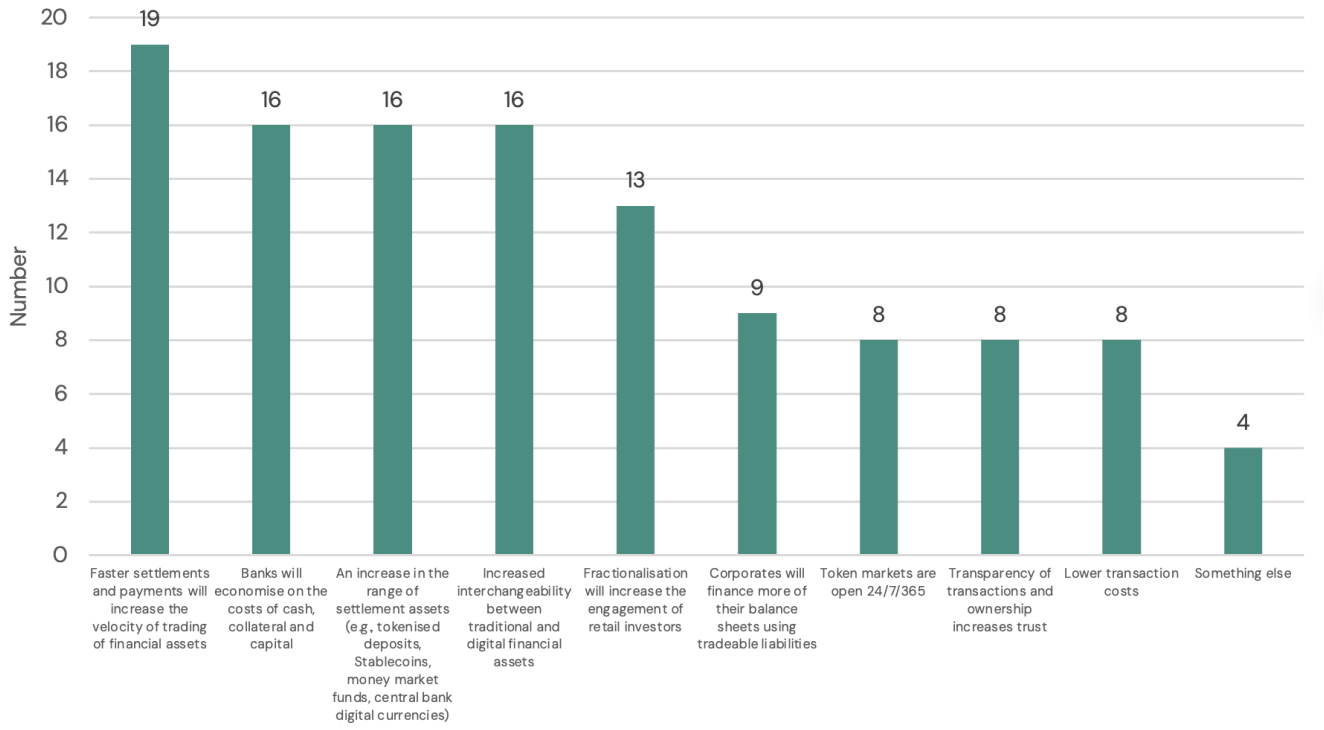
Does operational efficiency contribute to liquidity?

In theory, yes. Faster settlement would increase the velocity of money and cut the capital and interest rate costs of holding cash and collateral (see Chart 2). This increases liquidity since the money can be used more often at lower cost. In addition, peer-to-peer trading of tokens lowers transaction costs by eliminating intermediaries, further boosting liquidity. In their fully realised, “native” form, tokens can add liquidity through fractionalisation (which lowers minimum subscription amounts) and automation of entitlement distribution (via data oracles and smart contracts). In practice, however, transacting in tokenised "digital twin" assets on blockchain networks is not yet operationally more efficient than purchasing conventional assets through a traditional stock exchange. Transactions still require investors to review the prospectus and pass investment suitability and Anti Money Laundering (AML), Countering the Financing of Terrorism (CFT) and sanctions screening checks. The provenance and compliance of the Stablecoins used on chain to complete the cash leg of a transaction must also pass

AML, CFT and sanctions screening checks. In the case of tokenised funds, almost all of which are non-native, regulators insist a transfer agent is retained to keep an off-chain register of investors that shadows the on-chain record. The maintenance of an intermediary in this way obviously reduces the operational efficiency gains. In the markets of today, neither the issuance of tokens, nor investment in them, is driven by operational considerations alone. Insurers issue tokenised reinsurance contracts, for example, not because tokens are operationally more efficient than conventional reinsurance contracts, but because they attract additional sources of risk capital.

Chart 2

What Is The Most Important Way Tokenisation Can Enhance Liquidity In Tokenised Asset Markets?



Does liquidity depend on tokenised assets being "native" (or wholly "on-chain")?

If a tokenised asset is a "digital twin" of a security or a fund which continues to exist off-chain, it means liquidity-enhancing benefits such as round-the-clock trading, instant settlement and ownership transparency cannot be achieved. The asset remains tied to traditional settlement timetables and records of ownership such as the registers maintained by transfer agents. Regulators also remain cautious about "native" token issuances and must be persuaded, for example, to authorise a tokenised money market fund on a blockchain without on off-chain transfer agent to support it. Tokenised funds invested in assets off-chain also run the risk of on-chain transactions falling out of synchronisation with the associated off-chain transactions. An instant on-chain redemption is undermined if the sale of underlying assets takes two days to settle. This risk is reduced where the underlying assets are government securities, whose value is relatively stable, allowing asset managers

to maintain a Constant Net Asset Value (CNAV) for buyers and sellers in all but the most extreme market conditions. But the risk is eliminated only where the shares in the fund, the register of investors and the underlying assets are all on-chain.

Would settlement in central bank money help liquidity?

Yes, because it would reduce counterparty risk. The European Central Bank (ECB) has pursued an initiative to settle tokenised asset transactions in central bank money as part of the efforts by the European Union (EU) to better integrate European capital markets. The ECB trials, conducted between May and November 2024, proved security token transactions could settle in central bank money. However, the trials relied on manual processes which would struggle to support high volumes of transactions. And although work is in hand to provide a central bank money settlement service for digital assets through the TARGET system, the service is not available yet. The modest size of security token issues so far, and their distribution mainly to retail and corporate rather than institutional investors, means both issuers and investors are comfortable for now to take the counterparty risk of settling in commercial bank money. Stablecoins provide this option. But the sustained engagement of institutional investors in tokenised asset markets will demand settlement in central bank money.

Would eligibility for financing at a central bank help liquidity?

In principle tokenisation can increase liquidity by turning any asset into a financeable instrument – that is, exchangeable for money - as well as a tradable financial contract. It follows that tokenised assets accepted as collateral for financing by a central bank would be the most liquid asset of all, because central banks set such strict eligibility criteria. However, one of those criteria currently presents an obstacle to the financing of tokenised assets. Any asset eligible for financing at the central banks of the Eurosystem must be deposited in book-entry form at a national central bank or central securities depository (CSD). Tokenised assets issued on to blockchain networks cannot yet satisfy this criterion, even if assets from the same issuer are eligible in their conventional form.

Does netting through a central counterparty clearing house (CCP) add liquidity?

Experience of netting in traditional securities markets suggests it does enhance liquidity by reducing the need to maintain large holdings of cash, collateral and capital, freeing these up for use in other transactions. A CCP is, as the name suggests, a centralised intermediary of the kind blockchain is designed to avoid. But it is difficult to see how a CCP can deliver all the benefits of netting without being centralised. It is by becoming the buyer to all sellers and the seller to all buyers, reducing bi-lateral credit and liquidity risk, that CCPs enable transactions to be netted. So decentralised clearing in tokenised asset markets, while not impossible, is unlikely to develop. Instead, clearing is likely to become a service provided on a common or unified blockchain ledger which hosts tokenised cash, securities and derivatives. Because all assets would be tokenised to a standard design, the clearing service could manage risk and net transactions across all asset classes, facilitating economies in cash, collateral and capital. Such a clearing and netting service would in effect be centralised, but it would impose lower costs on market participants than the purely bi-lateral trading between counterparts envisaged by the classic decentralised blockchain model.

Would fiat currencies on-chain enhance liquidity?

Yes, because it would increase the velocity of money by accelerating payment of the cash leg of tokenised asset transactions, allowing more business to be transacted with the same amount of money. In the absence of a central bank digital currency (CBDC) in a major reserve currency, the tokenised asset markets are reliant on Stablecoins as an on-chain substitute for cash. But for banks, Stablecoins are a less-than-ideal form of cash on-chain. Using them amounts to pre-funding a position. They also necessitate adaptation of existing treasury and cash management systems and structures. This is why BX Digital provides its customers with an option to trade digital assets without relying on Stablecoins, by triggering payments between bank accounts off-chain, ultimately in central bank money. This eliminates counterparty risk without using Stablecoins. In other words, tokenised assets are traded off-chain but transferred between digital wallets on-chain against cash transfers between traditional bank accounts off-chain. While this on- and off-chain hybrid model is unlikely to provide a permanent solution, it does enable banks to participate in tokenised asset markets immediately without reconfiguring their existing payments systems and processes.

Does blockchain technology itself have a positive impact on liquidity?

Once tokenised assets issued onto blockchains are widely embraced, and market participants are comfortable with digital wallets, automated on-boarding, trading on-chain at trusted venues, and using Stablecoins and tokenised money market funds as cash and collateral, blockchain technology will enhance liquidity in several ways. First, it will enable trading not just around the clock but around the world, broadening the range of traders and investors engaged in the token markets. Secondly, by accelerating settlement timetables, blockchain reduces counterparty and settlement risks and their associated capital costs, freeing up cash, collateral and capital resources for firms to do more trading. Thirdly, programmable digital wallets can reduce financial crime and mis-selling compliance risk without compromising the privacy of the investors. They achieve this by using Zero Knowledge Proofs to disclose whether the investor is retail, wholesale, sovereign or a politically exposed person, and by restricting distribution to certain investor types and jurisdictions. By automating and accelerating the customer due diligence process in this way, and making it effectively invisible to investors, digital wallets enhance liquidity by making it quicker and easier to transfer value to more counterparts. It also facilitates global distribution of tokens, by making it easier to on-board investors in multiple jurisdictions. Fourthly, tokens allow portfolio management to be fully automated. Algorithms can be written to buy security tokens that meet certain criteria and sell security tokens that

meet other criteria, re-balancing the portfolio automatically as market conditions dictate. This will increase activity while minimising transaction costs.

Can blockchain add liquidity by making collateral management more efficient?

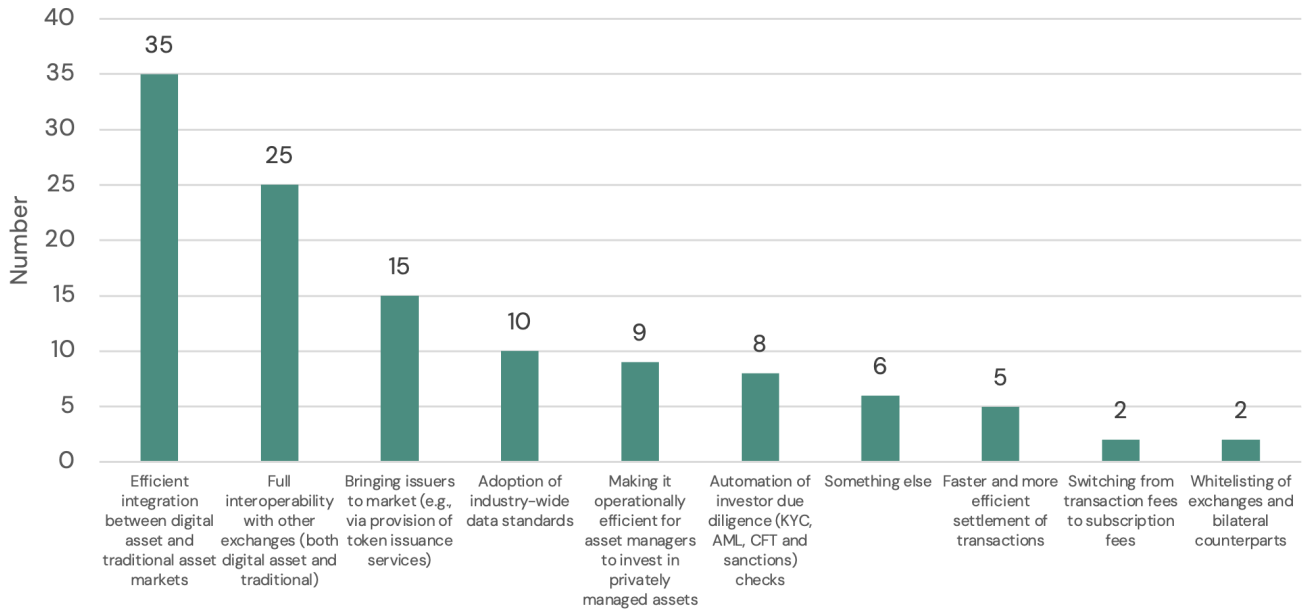
Efficient collateral management plays a crucial part in fostering liquidity in traditional securities and derivatives markets. It creates credit to enable firms to trade and leverage positions by reducing the risks incurred by lenders and by easing cash and capital costs. Several blockchain-based projects aim to make it easier to use as collateral assets held in banks and central securities depositories (CSDs) across national borders by issuing transferable digital twins of the assets held in custody. However, 80 per cent of collateral is located and used in domestic markets. In addition, for the 20 per cent of assets held abroad, tri-party agents already provide cross-border collateral mobilisation services via their sub-custodian bank networks. An implication is that issuing digital twins of traditional assets on to a blockchain network adds little to existing processes in terms of efficiency because it merely adds a layer on top of the existing infrastructural silos. Meaningful gains in liquidity through more efficient collateral management are contingent, as with securities in general, on tokenised assets being available on a common blockchain network (or network of networks) in "native" form only.

Would increased interoperability between tokenised and traditional markets help?

Yes, it would add liquidity if traditional market participants could trade and invest security tokens (see Chart 3) and token markets participants could trade and invest securities. Regulated infrastructures such as BX Digital, which can bridge the current gap between on-chain tokens and off-chain payment systems, are a prerequisite for this kind of interoperability. The obstacle is not the trading and investment instruments. Traditional securities and funds are being tokenised already. But if interoperability is to encourage institutional participation, this cannot happen in the absence of regulated trading venues for tokenised securities. Cryptocurrency exchanges are functioning, but they focus on cryptocurrencies only. The emergence of liquid, regulated security token exchanges such as BX Digital creates for the first time the possibility of interoperability between traditional and tokenised markets. This in turn will make it easier to attract traditional trading firms, asset managers and end-investors to the security token markets.

Chart 3

What Is The Most Important Step Digital Asset Exchanges Can Take To Improve Liquidity In Tokenised Asset Markets?



Is the need to manufacture liquidity a temporary need that will wither away as tokenised markets achieve scale?

Liquidity is the ability to exchange an asset for money, so the nature of money is central to the question of liquidity. The original cryptocurrency, as designed by Satoshi Nakamoto, aimed to replace the central and commercial bank money duopoly created by the fiat currency system. Bitcoin exists, and the technology that underpins it has proved robust, so the design has demonstrably worked. Its proof that value can be transferred through time and space without intermediation was seminal, spawning a multitude of use cases across money, securities and derivatives markets. But experience so far has also shown that many users of money still value intermediaries as service providers and especially the risk transformation role performed by banks. Most users do not want to operate their own node on an un-intermediated blockchain network, or self-custody their tokenised assets in their own digital wallet. They want asset managers to help them choose which tokenised assets to buy. They want market-makers to make it easy for them to sell tokenised assets. And they want compliance functions to check counterparts are not money launderers or terrorists or sanctioned individuals, organisations or states. In short, intermediation seems to be a natural organising principle of financial markets, because it provides the trust and confidence to transact. At such an early stage in the development of tokenised markets, collaboration is anyway proving a more popular idea than disintermediation. This is partly because disruptors do not want to recreate the asset class silos of the existing financial system and partly because incumbents currently own the customers. All of that said, the rising generation of retail investors and the coming talent in financial services are less attracted by continuity than by disruptive models of the future. Blockchain will certainly enable further disruption of banks. It is often forgotten that blockchain is an Internet technology that traditional market participants can use as readily as younger investors. Indeed, the fact that banks have been ceding previously core businesses such as payments, credit and trading to asset managers and FinTech competitors for a long time already proves that established firms are not averse to disruption of their service providers. Nor is it unthinkable that governments will eventually be displaced from the process of money creation.

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