

## Chia Der Jiun: Creating the future of finance - a journey of innovation and collaboration

Remarks by Mr Chia Der Jiun, Managing Director of the Monetary Authority of Singapore, at the Singapore FinTech Festival 2025, Singapore, 13 November 2025.

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Good morning, and welcome to Day Two of the Singapore FinTech Festival (SFF).

This year we mark our 10th edition. In the first year, we had 11,000 participants and 70 exhibitors. This year, we have upwards of 65,000 participants and 600 exhibitors. The development of the SFF since 2016 parallels the growth in scale and scope of our FinTech ecosystem.

I want to acknowledge the contributions of colleagues, past and present, from MAS, GFTN, Constellar and ABS. Especially Ravi Menon who was there at the very start.

I also want to thank all of you here. FinTech innovators, forward-thinking FIs and global tech companies. You are at the heart of a dynamic FinTech ecosystem and the reason for the success of the SFF.

**Over the past 10 years, MAS set out to build an ecosystem where innovation can flourish.** We provided support to hundreds of innovation projects and centres. We established the regulatory sandbox and exercised regulatory flexibility to test innovative technology and business models. We recognised the benefits of technology and innovation, and not just the risks. We sought to apply regulation in the right proportion, at the right time, to the right risk. **Today, we have a vibrant FinTech sector comprising more than 1,800 FinTech firms in a range of domains.**

**New business models have taken root in our ecosystem and reshaped financial services.** Robo advisors have broadened access to wealth management to more retail investors at lower cost. Multi-currency mobile wallets reduced the complexity and costs of cross-border payments. Digital banks and FinTech firms are using data-driven underwriting to give SMEs access to small loans with flexible terms and tenor. And FinTech startups are enhancing efficiency through technology. They are developing AI solutions, from fraud detection to multi-lingual chatbots, that are being used across the financial services industry.

**We have over 50 Innovation Centres set up by financial institutions (FIs).** They drive transformation in user experiences and back-end processes. Our newest FI innovation centre will develop quantum-safe encryption solutions, and work with academia and industry partners to apply quantum technology to benefit financial services.

**We have also made low-cost digital payments ubiquitous and accessible.** Over 90% of businesses, including Singapore's heartland shops and hawker centres, have adopted PayNow or SGQR.

PayNow and QR can now be used outside Singapore – in Thailand, Malaysia, Indonesia and India. More will follow. I was in Bali and had used my Singapore bank app to scan Indonesia's QRIS QR code to make a payment at small shops. The exchange rate was displayed in my app and the payment was instant. In the next stage of development, we will further improve the customer journey and enhance functionalities.

**Our expanding FinTech ecosystem has brought new solutions, lower cost, greater convenience and more choice to retail and corporate customers.**

Now, if we look ahead to the next 10 years, two transformative themes commonly come up. They are AI and Tokenisation.

## **Fostering responsible AI adoption**

Let me first turn to the topic of AI.

**We are seeing the momentum of AI adoption and experimentation build up across our financial sector.** At a foundational level, FIs are using AI to empower and augment their workforce in general work processes – in information search, retrieval, summarisation, first draft generation, speech to text transcription and translation of multiple languages. AI co-pilots have also been piloted or deployed in a growing number of specialised functions, such as software development, marketing, customer service, client advisory, analysis of financial markets, credit underwriting and fraud detection. An emerging area of application is in the use of autonomous agents in more complex processes. For example, in processing credit applications from underwriting to approval, or administering standard insurance claims end-to-end. There are also projects to develop consumer agents, collecting information and executing transactions. But agentic autonomy must come with sufficient guardrails.

The growing adoption of AI portends significant transformation in financial services. **Our aim is for our FIs to adopt AI productively and safely, and our workforce to have the skills to use AI.** We are doing this on four fronts.

**First, we are anchoring leading AI competencies in Singapore.** More than thirty FIs have established AI competency centres in Singapore, working on solutions that serve not just our local market, but also their global operations. These AI solutions span front-, middle- and back-office functions. We welcome more FIs to anchor AI competencies in Singapore.

To support FIs with leading AI capabilities take on more complex challenges, I am pleased to announce a new initiative – BuildFin.ai. We will bring together technology providers and research institutes to work with FIs on complex problems of common interest. The aim is to create shared resources and solutions that benefit the ecosystem.

**AS and our FI partners have identified our first common problem statement.** It turns out Singlish presents a level of complexity that existing LLMs are not fully ready to take on. A\*STAR will partner FIs to develop a Voice-to-Text AI model for the financial

industry, to transcribe conversations in Singlish and a mix of our commonly spoken languages and dialects. By working together, they can pool their data, develop a better model, and serve customers better.

**Second, we are supporting FIs which are earlier in their AI adoption journey, with shared resources to start and scale.** PathFin.ai is a collaborative initiative with the industry. FIs and tech companies will share their AI adoption experience and successful use cases. The platform curates a library of industry-validated solutions and best practices. Using this shared resource, FIs can reduce time and effort, when they search for and implement effective AI solutions. Some examples of solutions on PathFin.ai include an AI solution to optimise multi-currency cash management for corporate treasuries, and an agentic AI solution for end-to-end insurance claims processing. When we launched the PathFin.ai platform in July this year, we had 20 participating FIs. This number has now grown to over 100. We welcome more participants to join this initiative.

**Third, let me turn to governance and safety.** As AI adoption in the financial industry grows, governance and safety are essential. In fact, one of the key factors determining the pace of AI use, and the extent of AI autonomy permitted in work processes, is the robustness of guardrails and controls over the AI life cycle. FIs have told us that they would like more regulatory clarity.

**How has MAS responded?** We did not run ahead of innovation with prescriptive regulation. More than two years ago, we started an industry consortium called Project MindForge, to create a shared appreciation with the industry on AI risks and governance. The first task was to co-develop an AI risk framework so that there is common understanding of the key risks around AI use. This was published in early 2024.

In July this year, I shared that MAS was developing a set of AI supervisory guidelines. **Today, MAS will publish the set of Guidelines on AI Risk Management for consultation.** The proposed Guidelines set expectations for FIs to identify AI risks and to implement controls across the entire AI life cycle, appropriate to the scale and risk of AI use. The Guidelines will be principles-based rather than prescriptive. It sets up flexible guardrails to enable responsible innovation in a fast-moving space.

**In parallel, Project MindForge consortium will also be publishing today an AI Risk Management Executive Handbook.** This Executive Handbook sets out the key components of good AI risk management. It will be followed with a detailed document containing actionable insights and industry good practices next year, which can serve as a companion guide for FIs implementing the MAS Guidelines.

The Guidelines and the Handbook will work together. For example, the Guidelines will require risk materiality assessments, while the Handbook will provide examples of how such assessments are done. These two initiatives constitute our approach towards safe and responsible AI adoption. The Guidelines set out a flexible regulatory framework, while the Handbook can be dynamically updated to stay up-to-date and industry-relevant.

### **Our fourth plank is to support the upskilling of our financial workforce.**

Fundamentally, it is people and talent that drive the success of organisations. We want our finance professionals to have the skills to make effective use of AI and manage the risks.

We have published a Gen AI Jobs Transformation Map for the financial sector. Here we have identified the impact of Gen AI on key job roles and the upskilling that is needed as these jobs are transformed and augmented by AI.

Guided by the Jobs Transformation Map, MAS and the Institute of Banking and Finance are partnering FIs to equip their employees with needed AI literacy and skills.

So this is our approach to AI across four fronts.

- Anchoring leading capabilities;
- Broadening adoption;
- Building strong AI governance; and
- Upskilling an AI-ready workforce.

### **Building a tokenised future**

**Next, I will touch on tokenisation and stablecoins.** Please allow me to call tokenised financial assets "asset-backed tokens".

Some market participants tell us that tokenisation may be on the cusp of a take-off, driven by greater regulatory clarity and substantial investment and innovation in this space.

**MAS started our journey with asset-backed tokens when we launched Project Guardian in 2022.** We collaborated with industry partners to test use cases in FX, funds, fixed income, and showed that tokenisation worked and delivered benefits. 24/7 near instant settlement; programmability enabling PvP and DvP; no settlement lags, fewer intermediaries, less pre-funding.

**Are asset-backed tokens clearly out of the lab?** Without a doubt. There have been many commercial products launched. Bonds have been issued natively and settled on chain. Money market funds have been tokenised. Major banks have offered tokenised cash management services to corporate treasuries. So tokenisation has lifted off the ground. But have asset-backed tokens achieved escape velocity? Not yet.

**Optimists in the industry believe that we are headed for a future where most financial assets will be tokenised, traded and settled on chain.** They see a number of benefits. Efficiencies and liquidity in transacting multiple assets on interconnected ledgers. Better optimisation of cash and collateral by corporates and market participants. Fractionalised ownership of financial assets benefiting more retail investors. Smart contracts enabling self-executing contractual processes, like trade finance. All with less time lag, lower cost and potentially lower risk.

**But getting from now to that future requires significant progress on several fronts.** First and foremost, market participants must bring use cases that demonstrate value and stability for their clients. They have to build participation and liquidity.

**In addition, there are three critical developments that need to happen.** First, asset-backed tokens need to be standardised, and networks interoperable. Second, there needs to be a deep pool of safe and reliable settlement assets. Third, institutional-grade networks are needed.

**Let me start with discussing the need for standardisation and interoperability.** For asset-backed tokens to be transacted on a network, they need to be embedded with standardised data and features that every participant on the network can recognise. Right now, banks and innovators are building their own networks and racing to scale. These different networks may have different technical specifications, so asset-backed tokens issued on one network may not be portable to another network, or not without friction. At best, the friction would limit the benefits of transacting on chain. Or worse, we could see a fragmented landscape of sub-scale walled gardens, or even a small number of monopolies posing concentration risks.

To avoid these sub-par outcomes, the industry needs to develop and adopt a model of "co-opetition". Where they cooperate to build a marketplace for asset-backed tokens, while competing to bring products, clients and liquidity to the market. This means that they need to agree on common standards for asset-backed tokens even as they compete to scale. So that a bond token or fund token on one network is understood and accepted by participants of another network. And they need to design their networks to be open and interoperable so that asset-backed tokens issued on one network can be transacted on another.

Standardisation and interoperability will mitigate liquidity fragmentation. This is why MAS has been working with a consortium of global policymakers and major FIs to develop standards for tokenisation under Project Guardian. We have published frameworks for funds, bonds and FX as global public goods, and we will do more.

Similarly, MAS is working with industry partners and policymakers to promote network interoperability. This is the Global Layer One initiative. We have developed and made available common principles, standards and templates that network builders can adopt for interoperability. We encourage network builders and market participants to work with us to drive standardisation and enable greater interoperability.

**Second, there needs to be a deep pool of safe and reliable settlement assets.** In the established financial system, everyday corporate and retail transactions are settled with commercial bank money. Holders of commercial bank money may convert to central bank money at par. Large value inter-bank transactions are settled with central bank money. This arrangement anchors the singleness of money, and finality of settlement.

In a tokenised environment, the concept of money is still at an early stage, and there are a few contenders for safe and reliable settlement assets. They include CBDCs, tokenised bank liabilities, and regulated stablecoins. If tokenised transactions are to

scale globally, then these settlement assets must be no less robust and safe. At the current stage, market participants are experimenting with different settlement assets for different use cases. Each will have to demonstrate value through utility and safety.

**Tokenised bank liabilities benefit from current central bank and regulatory arrangements that underpin value stability and singleness of money.** They have been used effectively within a bank's ecosystem, and now have to demonstrate the agility to be used across multiple banks, networks and applications.

**There has been a lot of attention on stablecoins.** They are offered as open platforms, able to work across many different applications and use cases. While agility is a strength, stability needs to be reinforced.

**Unregulated stablecoins have a patchy record of keeping their peg.** Recurrent de-pegging can erode confidence, and trigger runs on other stablecoins. We saw a similar dynamic in 2008 when money market funds that broke the buck triggered runs on other money market funds. Such unregulated stablecoins would not be suitable as safe settlement assets for large wholesale transactions.

**Now, regulated stablecoins, while nascent, offer the prospect of value stability.** Sound and robust regulation of stablecoins will be critical to underpin their stability. We have seen national regulations taking shape rapidly. This is an important start. But things can take a wrong turn if there is a proliferation of poorly regulated stablecoins, undermining confidence in others.

**MAS recognises this, and has finalised the features of our stablecoin regulatory regime and will be preparing draft legislation.** Under our regime, we have given importance to sound reserve backing and redemption reliability.

**Over time, if some regulated stablecoins become systemic,** regulatory frameworks will need to be strengthened further, cross-border regulatory cooperation enhanced, and access to central bank facilities considered.

Eventually, there may be a space for different private settlement assets, operating alongside each other, serving different market needs and use cases, with wholesale CBDCs anchoring the stability of the system.

**MAS is working with industry partners to explore the use of all three settlement assets.** MAS launched the BLOOM (Borderless, Liquid, Open, Online, Multi-currency) initiative to support industry's experimentation with tokenised bank liabilities and regulated stablecoins for settlement. We welcome FIs, as well as clearing and settlement network operators, to conduct trials under this initiative.

In the CBDC space, I am pleased to announce that the three Singapore banks – DBS, OCBC and UOB – have successfully conducted interbank overnight lending transactions, using the first live trial issuance of Singapore dollar wholesale CBDC for settlement. As the next bound, MAS will trial the issuance of tokenised MAS Bills to Primary Dealers and settled with CBDC. We will release more details on this next year.

**Third, institutional-grade networks are needed.** Wholesale token transactions need some foundational attributes from blockchain networks which are not readily available on public permissionless blockchains. Clear governance, secure and reliable performance, predictable and transparent fees, privacy optionality and settlement finality, and regulatory compliance.

FIs and innovators are developing solutions to make blockchain networks "institutional-grade". Some network operators are developing purpose-built private blockchain networks with these features; others are building permissioned and compliance layers on public blockchains.

For market participants to gain greater confidence to put tokens and transactions at scale on these networks, they would like more clarity that these arrangements are compliant with regulatory standards. They would also like to see more industry standards develop around operational performance and functionalities, and the ability to verify alignment to core industry and regulatory standards.

**While many regulators have adopted a technology neutral approach, and regulatory standards apply on the basis of legal and economic substance,** there are specificities in tokenisation and blockchain networks that would benefit from more legal and regulatory clarity. Examples may include issues around investor rights, settlement finality and smart contract governance.

**Taking a step towards providing more regulatory clarity, MAS will be publishing a Guide on the Tokenisation of Capital Markets Products later this week.** This Guide will use case studies to provide more clarity about the regulatory treatment of tokenised capital markets products. It also sets out guidance on applicable disclosures. This guidance will be updated as tokenised activities develop.

**MAS is also working with industry and international counterparts to address gaps or impediments to adoption of asset-backed tokens.** One example is the collaboration between the Investment Association of the UK and the Investment Management Association of Singapore, with the support of UK Financial Conduct Authority and MAS. A joint report<sup>1</sup> was published yesterday. It provides actionable steps – in commercial, operational, legal and regulatory areas – for market participants and regulators to help adoption scale. **We welcome more collaborations with market participants and regulators to further mature the tokenisation ecosystem and help bridge the adoption gap.**

Another contribution has been the launch of the **GL1 Market Infrastructure Toolkit**, under the auspices of the Global Layer One initiative. Network operators and FIs can use this toolkit to assess whether a blockchain network is consistent with internationally recognised regulatory principles like the PFMI<sup>2</sup> and market practices like the DAS CP<sup>3</sup> developed by FMI operators. The toolkit comprise 108 controls derived from these principles. Such verification processes and tools will help build confidence to use compliant blockchain networks.

So these are the essential building blocks for asset-backed tokens to scale.

- Standardised tokens and interoperable networks;
- Safe and reliable settlement assets; and
- Institutional-grade networks.

## Conclusion

Let me conclude by showing you two maps. The first map is of the Mississippi river. It enabled western expansion of the early American settlers, and later enabled the flourishing of industry, agriculture and commerce in the interior of the United States. But it was essential for a system of levees and floodwalls to prevent the Mississippi from bringing flood damage and disruption.

AI too can bring benefits across the financial sector and to consumers and businesses. Like floods, uncontrolled AI use can also bring consumer harm and risks to financial stability. So there needs to be governance and guardrails for safe adoption, and training of the workforce to work with AI. This is what we have set out to do in collaboration with the financial industry.

The second map is of the Grand Canal in China. This was built to connect China's northern and southern regions. It is not a single Canal, but a set of canals that links various rivers and lakes into one connected system of waterways. This is like the tokenised future that we are building – an interconnected system of standardised asset-backed tokens and interoperable networks – so that liquidity can be pooled rather than fragmented, so that frictional costs are minimised, in cash and collateral management, in investments, and in cross border payments.

This tokenised future cannot be built by a single party. It will require collaboration between private and public sector, within and across jurisdictions.

Ladies and Gentlemen, the SFF and the Singapore FinTech ecosystem has been a journey of innovation and collaboration. As we build the future of finance with AI and tokenisation, we can only progress by walking this journey of innovation and collaboration together.

Thank you all, and I wish you many fruitful encounters and partnerships at SFF 2025.

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<sup>1</sup> A joint report titled "Bridging the adoption gap: aligning digital asset offerings with buy-side requirements" by UK Investment Association and Investment Management Association of Singapore, with the support of MAS and the UK Financial Conduct Authority, was published on 12 November 2025.

<sup>2</sup> Principles for Financial Market Infrastructures.

<sup>3</sup> Digital Asset Securities Control Principles.