

# Real-world asset tokenisation: A game changer for global trade



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# Foreword

Over the past year, we have witnessed a rapid acceleration in tokenisation initiatives, reflecting a significant shift towards more accessible, efficient and inclusive financial systems.

In particular, real-world asset tokenisation of trade finance assets represents both a shift in how we perceive value and ownership, and a fundamental change in the mechanisms of investment and exchange.

Through our successful pilot within Monetary Authority of Singapore-led Project Guardian, we demonstrated the viability of asset-backed tokenisation as an innovative originate-to-distribute structure, and the potential opportunities it presents to investors to participate in financing real-world economic activity.

By transforming trade assets into transferable instruments, we unlock a level of liquidity, divisibility and accessibility previously unimaginable. Not only does it provide a new opportunity for investors to balance their portfolio with a digital token that has traceable intrinsic value, but it can also help narrow the USD 2.5 trillion global trade finance gap.

As we continue to build on our learnings and move towards operationalising this innovation at scale, this paper explores the transformative power of trade finance asset tokenisation. We delve into the remarkable opportunities this brings and share why now is the perfect time to adopt and scale tokenisation in trade finance. We also examine the key benefits of embracing tokenisation, and present actions you can take now as investors, banks, governments and regulators to capture this opportunity and join us on the journey to shape the next chapter in finance.

At Standard Chartered, we are committed to advancing the adoption of digital assets and unlocking its full potential to solve for real challenges in global trade, and to power real economies.



**Kai Fehr**

Global Head,  
Trade & Working Capital  
Standard Chartered



**Yves Roesti**

Managing Partner  
& Group CEO,  
Synpulse

As a progressive innovator, Synpulse is delighted to collaborate with Standard Chartered to produce this paper.

In today's financial landscape, digital assets have become an integral part of the ecosystem and strategies of most major financial institutions.

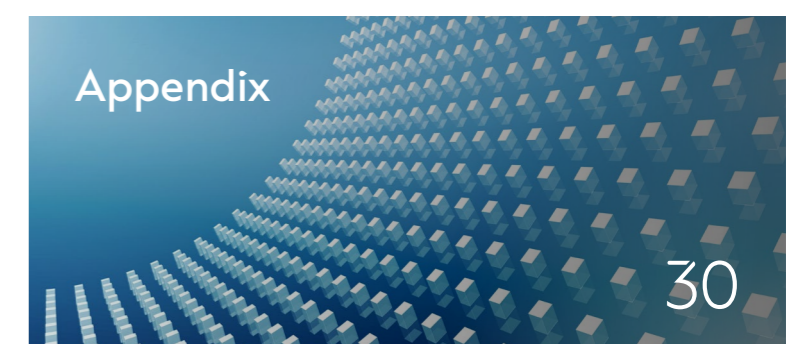
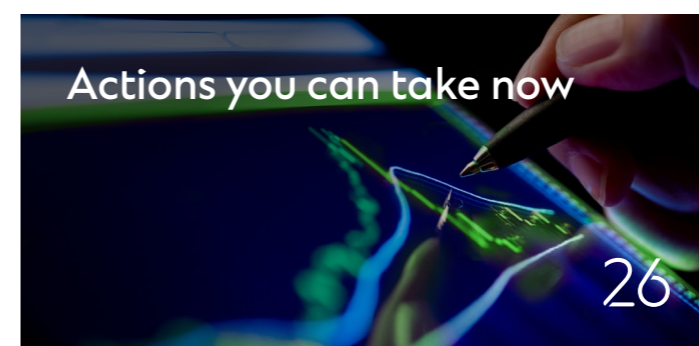
Recognising the transformative potential of real-world asset tokenisation across industries, we began tokenising our own profits in 2021 at Synpulse in the context of an employee participation program. It is encouraging to witness tokenisation gaining momentum among our clients and the broader market. This growing acceptance not only validates our early initiatives but also heralds a future filled with exciting opportunities.

As the industry continues to transcend current business models and embed tokens as a core component of the financial future, we remain committed to helping our clients scale and operationalise tokenisation.

We are excited to share our insights and experiences in this white paper and to explore the vast opportunities that tokenisation offers.

Together, we can pave the way for a more innovative and inclusive financial ecosystem.

# Contents



# What is asset tokenisation?

As the financial world experiences rapid digitalisation, digital assets stand at the forefront, revolutionising how we view and exchange assets. Combining the innovation brought by blockchain with traditional finance, they usher in a new era of digital finance that is fundamentally reshaping our sense of value and ownership.

While the financial industry grapples with a precise definition of digital assets, their ubiquitous presence in our tech-driven lives has been with us for a long time and is undeniable. From information-rich digital documents that we utilise daily to the content we consume on social media, they permeate every corner of our modern existence.

Yet, before 2009, the idea of value transfer through digital assets remained inconceivable. Value exchange in the digital realm relied on intermediaries, acting as gatekeepers, and creating inefficient processes.

## Key terms\*



### Blockchain

A distributed ledger that is updated in groups of transactions called blocks. Blocks are then chained sequentially via the use of cryptography to form the blockchain



### Central Bank Digital Currency (CBDC)

A central bank digital currency is the digital version of a country's currency issued by the central bank or monetary authority



### Real-World Assets (RWA)

A type of digital asset that derives value from any asset whether physical or digital that exist outside of the blockchain



### Trade finance assets

Can be classified under various banking products (e.g., import/export financing) that help to facilitate international trade flows. Such assets are usually not correlated to bond or equity markets

\*Expanded glossary included in the appendix

The introduction of blockchain technology was the game changer. It is revolutionising the financial markets. What was once unthinkable is becoming a reality, and tokenisation has emerged as a crucial element in expanding digital assets markets, transforming them from niche and experimental to widely accepted and mainstream.

The term tokenisation may sound like a recent buzzword, but the concept itself has evolved under many different names over time. At its core, tokenisation refers to the process of issuing digital representations of real or traditional assets in the form of a token on a distributed ledger.<sup>1</sup> Notably, it aligns closely with the idea of fractionalisation, where a single asset is divided into smaller, transferable units.

These tokens, essentially digital certificates of ownership, enable operational efficiency and automation. But perhaps the most revolutionary aspect is the enhanced access to the new asset classes and improved financial market infrastructure, opening doors to innovative applications in decentralised finance (DeFi) and entirely new business models.

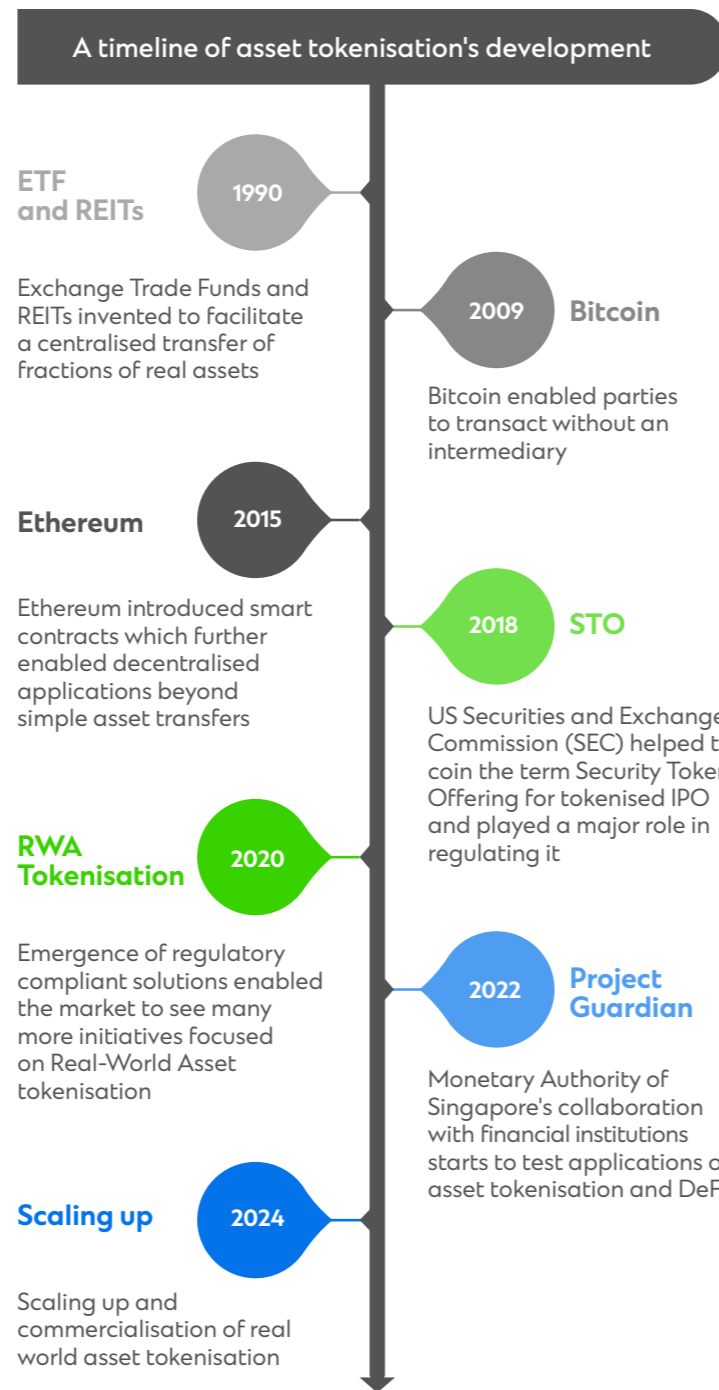
<sup>1</sup> OECD. Definition of tokenisation.

# The evolution of asset tokenisation

The roots of tokenisation stretch back to as early as the 1990s. Real estate investment trusts (REITs) and exchange-traded funds (ETFs) were pioneering fractional ownership of real assets, enabling investors to own a fraction of real assets, such as buildings or commodities.

Fast forward to 2009, the world witnessed the birth of Bitcoin, a digital currency that challenged the very notion of intermediaries. It sparked a revolution that resulted in Ethereum entering the scene in 2015.

Ethereum, a groundbreaking software platform powered by blockchain technology, introduced smart contracts that supported the tokenisation of any asset. It laid the groundwork for the creation of thousands of tokens that represent various assets, such as cryptocurrencies, utility tokens, security tokens, and even non-fungible tokens (NFTs), which demonstrated the use of tokenisation to represent digital and physical items.



The years that followed saw a flurry of new phenomena: the first-ever Initial Exchange Offering (IEO) and Initial Coin Offering (ICO). The US Securities and Exchange Commission (SEC) coined the term Security Token Offering (STO) in 2018 and paved the way for regulated tokenised offerings, giving rise to regulatory-compliant solutions. These developments paved the way for real-world asset tokenisation to step onto the main stage. They continue to serve as the catalysts for change and technological refinement within financial services, paving the path for continued new applications.

The financial services industry continues to actively explore the potential of tokenisation. One prime example of such initiatives is Project Guardian<sup>2</sup>, an industry-wide collaboration between the Monetary Authority of Singapore (MAS) and industry leaders to test the feasibility of asset tokenisation and DeFi applications. These industry pilots are expected to shed more light on the opportunities (and risks) that are associated with the rapid innovations of tokenisation in digital finance.



2 Monetary Authority of Singapore and Bank for International Settlements. [Project Guardian: Enabling Open and Interoperable Networks](#) (2023).



### Real-world Project Spotlight

## Project Guardian: Leading an asset-backed securities (ABS) tokenisation pilot

At the heart of Project Guardian lay a bold vision: to explore how blockchain networks can help to advance the development of safer and more efficient financial networks. A collaboration between MAS and industry leaders, participating institutions conducted market case studies to design the blueprints for future market infrastructure that leverage the innovation potential of blockchain and DeFi.

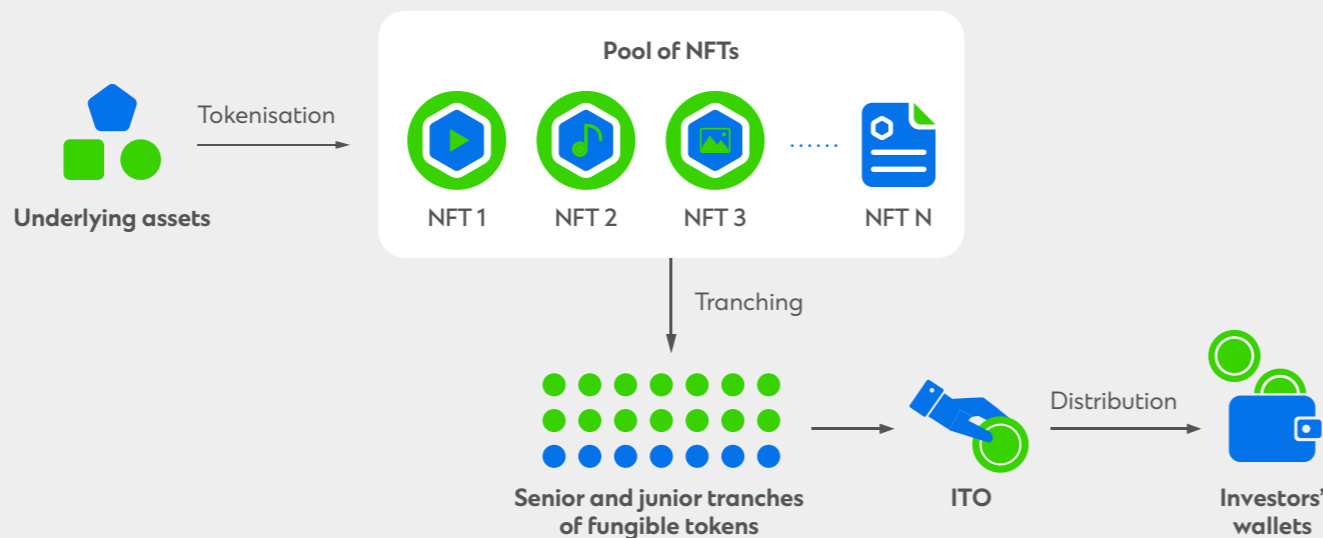
Standard Chartered has taken this vision a step further, pioneering an initial token offering platform for real-world assets. They successfully simulated the placement of USD 500 million in asset-backed security (ABS) tokens backed by trade finance assets on the public blockchain Ethereum.

Through this initiative, Standard Chartered tested an end-to-end process, from structuring to distribution, including a simulated default scenario.

- **Tokenisation:** Trade finance receivable assets are tokenised in the form of Non-Fungible Tokens (NFTs).
- **Risk-based allocation:** According to the expected risk and reward profiles, these NFTs are then allocated into senior and junior tranches, ensuring strict cashflow allocations.
- **Fungible token creation:** As a result, two new classes of fungible tokens, linked to the same NFT portfolio with the senior/junior split, were created. The senior fungible token offers a stated coupon, while the junior fungible token has an excess spread.
- **Distribution and access:** Finally, these tokens are distributed to investors through an ITO.

The pilot's success is a demonstration of how open and interoperable networks can be used in practice to facilitate access to decentralised applications, spur innovation, and foster growth within the digital asset ecosystem.

### An illustration of the end-to-end process piloted by Standard Chartered



Project Guardian's industry pilots have successfully demonstrated that tokenised financial assets such as fixed income, foreign exchange and asset management products can be traded, distributed, and settled seamlessly across borders.

### Mr Leong Sing Chiong

Deputy Managing Director  
(Markets and Development), MAS

Public-private partnerships are key to establishing an open, interoperable and trusted network for tokenised trade assets as a complement to the traditional market infrastructure. By tokenising real-world assets in the form of trade and working capital loans, we introduced this new digital asset class to a wider base of investors and helped boost liquidity in the trade market. Standard Chartered looks forward to operationalising this innovation at scale by leveraging our unique strengths in asset base, network, technology, and Singapore's strategic location as an established global trade centre.

### Patrick Lee

CEO, Singapore and ASEAN  
Standard Chartered

# What's next in tokenisation

Tokenisation is often touted to unlock vast potential, particularly in markets plagued by inefficiency and illiquidity.

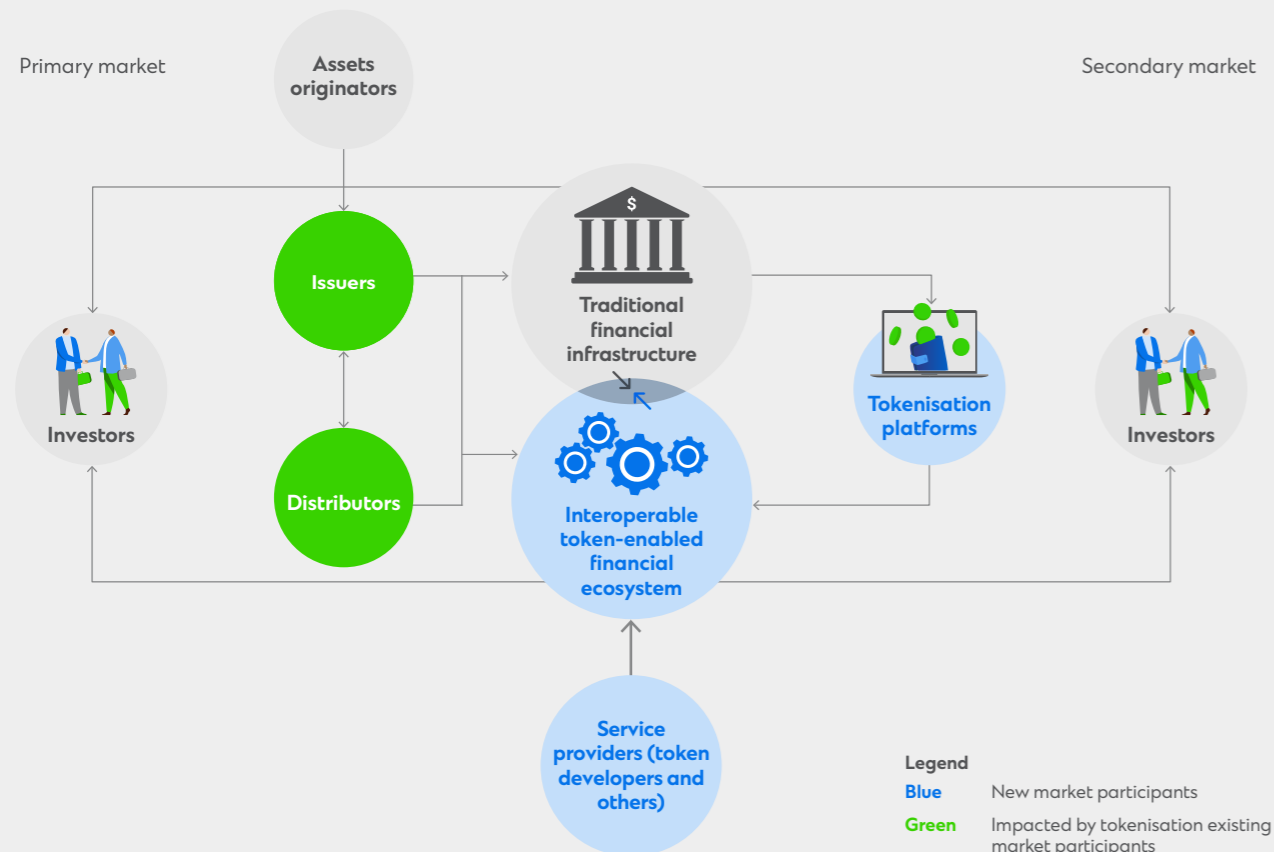
There is a market consensus forming that investors are drawn to adopt tokenised assets due to reduced transaction costs and enhanced liquidity. For institutions on the supply side, the allure seems to lie in accessing new capital, boosting liquidity, and streamlining operational efficiency.

However, we believe the true transformative power of tokenisation is far greater. We see the next three years as a critical junction for tokenisation with new

asset classes being rapidly tokenised, and trade finance assets taking a center stage as a new asset class. Industry development is reaching a new level where public utility will be rewarded more than siloed efforts.

To provide access to new asset classes, banks have a critical role to play in providing trust and bridging existing traditional financial markets with new, more open, token-enabled market infrastructure. Holding a position of trust is foundational to validate issuer and investor identity, run KYC/AML checks and grant credentials to participate in this new interoperable financial ecosystem.

## An illustration of the future market structure where an open financial ecosystem owned by market participants converges with traditional markets



Standard Chartered, with its early mover advantage in digital assets and the pioneering leadership in Project Guardian, acknowledges the vast potential of tokenisation.

We envision a future where traditional and tokenised markets co-exist and ultimately converge.

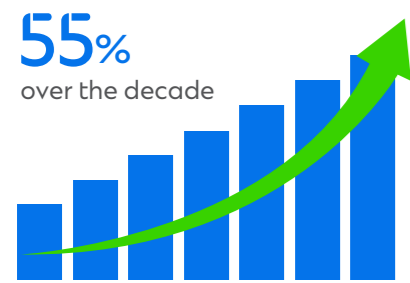
We recognise the immediate need of an open and permissioned multi-asset and multi-currency digital assets infrastructure that complements traditional markets. In contrast to the closed-loop and analog markets of the past, the ownership and utility are shared between a broader range of market participants, striking a balance between inclusiveness and security. Such an infrastructure will not only facilitate efficiency and innovation, but also address the industry's current pain points, such as duplicate investment and siloed, fragmented development, which have hindered growth and collaboration.

# Tokenisation in trade finance: Why now?

As tokenisation brings unprecedented levels of liquidity, divisibility, and accessibility for an asset class that has been perceived as complex over the past decade, the current macro and banking environment acts as a catalyst for adoption.

## The “missing middle”: Unlocking the multi-trillion-dollar opportunity in bridging the trade finance gap

Global trade is projected to grow by



reaching  
**32.6** USD trillion  
by 2030

Global trade is projected to grow by 55% over the decade, reaching USD 32.6 trillion by 2030<sup>3</sup>. Digitisation, expanding global trade, increased market competition, and enhanced inventory management are factors driving this expansion. However, there is a critical gap between trade financing demand and supply, particularly for small and medium-sized enterprises (SMEs) in developing nations.

The trade finance gap has been increasing dramatically – from USD 1.7 trillion in 2020 to USD 2.5 trillion in 2023. This growth represents a 47% increase, the biggest one-period increase since the metric’s introduction.

Several factors, including the COVID-19 crisis, economic difficulties, and political instability, have made it more difficult for banks to approve funding for trade finance. Furthermore, the International Finance Corporation (IFC) estimates that 65 million firms, or 40% of formal micro, small and medium enterprises (MSMEs) in developing countries, have unmet financing needs.<sup>4</sup>

While the plight of SMEs and MSMEs is widely acknowledged, a crucial market segment remains under the radar: the “missing middle”.

<sup>3</sup> Standard Chartered. [Future of Trade](#).

<sup>4</sup> SME Finance Forum. [MSME Finance Gap](#) (2017).

<sup>5</sup> Asian Development Bank. [2023 Trade Finance Gaps, Growth, and Jobs Survey](#) (5 September 2023).

The “missing middle”, or middle market enterprises (MMEs), embody the largest hard-to-access group that investors can provide capital to. Nestled between big investment-grade corporations and small retail and SMEs, MMEs are especially active in fast-developing regions such as the Middle East, Asia, and Africa. They represent a sizeable and largely unaddressed market, offering a significant opportunity for investors.

This investment opportunity is also resilient to downturns. With trade closely linked to the economy, a downturn will have an impact on bank lending. However, the large trade gap provides a good opportunity for investors to enter the market as, even during economic slowdowns, MMEs still require significant financing, creating a consistent investment opportunity.

It’s also important to note that the USD 2.5 trillion global trade financing gap accounts for 10% of all trade exports.<sup>5</sup> As current trade financing covers 80% of all exports today, another 10% could represent an additional undisclosed trade financing gap as enterprises have either not sought such financing or have no access to it. This means that the combined amount of current and undisclosed trade finance gaps could reach a potential total opportunity of USD 5 trillion instead.

At Phillip Capital, we take pride in our ability to curate financial products for distribution to our extensive network of investors. By providing ownership transparency and reducing the cost of asset movements, blockchain technology makes liquidity provision possible for some of these assets. We are convinced that the synergy between the traditional and token-enabled financial ecosystems will create opportunities in digital assets, leading to better curation, global distribution, and increased asset liquidity.

**Luke Lim**

CEO, Phillip Securities

Why now?

## A lucrative market yet untapped by investors

Trade finance assets are attractive yet underinvested. They yield strong risk-adjusted returns and have some unique characteristics:

### Allow for risk diversification

Trade assets are short-tenor, self-liquidating, and considered to be low-risk investments with a relatively low correlation to the stock and bond markets. This makes them a more stable asset class, while still delivering strong risk-adjusted returns.

### Wide range of exposure available

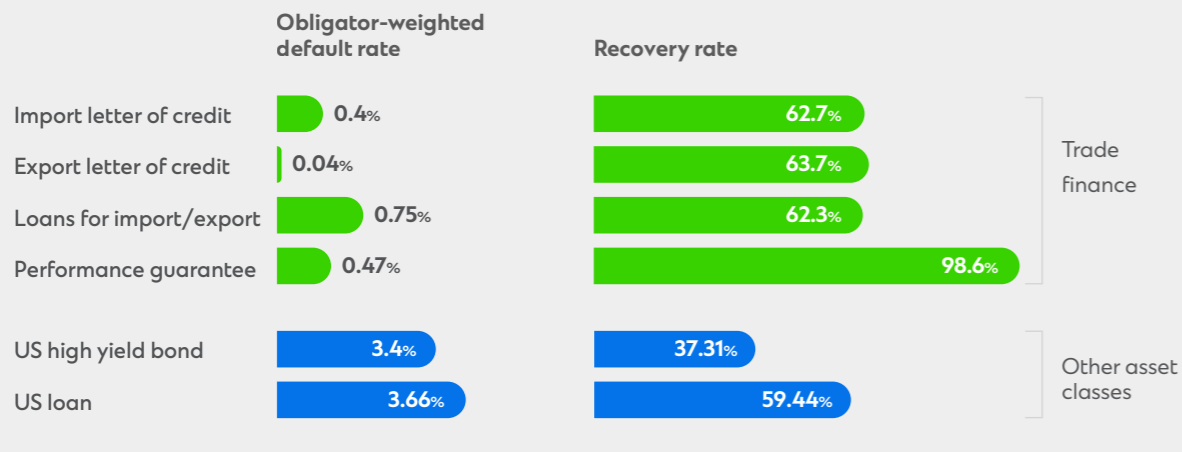
There is a full range of trade assets available to meet investor specific risk preferences. Together with exposure to emerging and frontier markets not easily accessible such as Ghana, Ivory Coast, Bangladesh, or Saudi Arabia, this asset class can cater to a broad range of investors.

### Low default risk and high recovery rates

Most significantly, trade finance assets boast an impressive track record. Trade finance is shown to have relatively lower default rates and better recovery rates in the case of default compared to public credit, which serves as a great indicator that trade assets have better risk-adjusted returns among other debt instruments.

This asset class is underinvested by institutional investors due to a lack of understanding and familiarity of the asset class, pricing inconsistency, lack of transparency, and operational intensity. Tokenisation can help to address that.

## A comparison of trade finance and other asset classes (investor perspective)



Source: Allianz Global Investors

“We are now at the threshold of realising the potential innovation value that tokenisation can bring. Organisations need to collaborate closely to unlock the true value of Distributed Ledger Technology (DLT). At Julius Baer, we adopt an open innovation approach to this topic and are conducting multiple concurrent explorations with like-minded partners such as SC Ventures, where we are exploring new use cases for tokenised assets.”

### Jonathan Chan

Head of Global Innovation, Bank Julius Baer

Why now?

## Banks are incentivised to adopt tokenisation and unlock capital in frontier markets by leveraging blockchain-based digital originate-to-distribute models

Basel IV is a comprehensive set of measures that will make significant changes to the way banks calculate risk-weighted assets. Though the full adoption is not expected to happen until 2025, banks will need to strategise the growth under Basel IV by modernising the distribution business models. Through blockchain-based originate-to-distribute, banks can derecognise the assets from their balance sheets, which reduces the regulatory capital to cover the risks and helps to facilitate efficient asset origination.

Banks can leverage tokenisation by distributing trade finance instruments to the capital markets and the emerging digital assets markets. This “digital originate-to-distribute” strategy for their trade books can allow banks to raise return on equity, expand their funding sources, and enhance net interest revenue.

The global trade finance market is a behemoth, and is ripe for tokenisation. Most of these trade finance assets across banks can be tokenised and transformed into digital tokens, giving access to a global pool of investors seeking returns.



### Why now?

## Demand is here, and it's only going to grow

Demand is expected to soar, with 69% of buy-side firms planning to invest in tokenised assets by 2024, up from 10% in 2023. Furthermore, by 2024, investors aim to allocate up to 6% of their portfolios to tokenised assets, rising to 9% by 2027.<sup>6</sup> Tokenisation is not a fleeting trend; it's a fundamental shift in investor preferences.

However, the supply side of the market is still in its infancy, with the total value of tokenised real-world assets, excluding stablecoins, standing at around USD 5 billion by early 2024, primarily across commodities, private credit, and US treasuries. This in comparison to the total addressable market size for tokenised trade finance, including the trade finance gaps, amounts to USD 14 trillion.<sup>7</sup>

With the current market trends, we expect demand for overall tokenised real-world assets to reach up to USD 30.1 trillion by 2034, with trade finance assets being in the top three tokenised assets, and reaching up to 16% of the total asset tokenisation market in the next decade.

As demand will likely outstrip supply in the coming years, the potential is there to help to address the USD 2.5 trillion trade finance gap.



## The expected growth in market size for tokenised assets over the next decade

Expected total market  
for asset tokenisation - 2034

**30.1** USD  
trillion

We estimate  
tokenised trade finance  
assets to reach up to

**16%**

of total assets tokenised  
in 2034

- Trade finance
- Alternatives
- Non-financial corporate and quasi sovereign debt
- Securities financing and collateral
- Real estate
- Other

Market sizing analysis by Synpulse and Standard Chartered Bank

Datapoints: IMF, WEF, Pitchbook, ISLA, Valuates Reports, Coingecko

<sup>6</sup> EY Parthenon. *How tokenization in asset management is driving meaningful opportunity* (18 August 2023).

<sup>7</sup> Total addressable market sizing by Synpulse

# Embracing the four benefits of tokenisation

Trade finance fuels the global economy, yet traditionally, such assets are sold largely to banks. Tokenisation opens doors to a broader pool of investors and unlocks a new era of growth and efficiency.

## 1 Improving market access



Institutional investors today are hungry for new, fast-growing markets. Emerging markets can be an attractive option for diversification. However, the lack of the necessary local expertise and effective distribution networks have blocked investors from fully capitalising on the opportunities the emerging markets present.

This is where the advantages of tokenisation shine through. By distributing trade assets through digital tokens, banks can raise their net interest income and optimise their capital structure, while investors, businesses, and communities that rely on trade finance benefit through improved accessibility.

A closer look at the earlier featured collaboration between Standard Chartered and the Monetary Authority of Singapore on Project Guardian highlights the transformative power of tokenisation. The initiative illustrates how open, interoperable digital assets networks can unlock market access and allow investors from different ecosystems to participate in this tokenised economy, paving the way for more inclusive growth.

## 2 Simplifying trade complexity



Trade finance is often deemed complex due to the multi-party and cross-border nature of capital and goods movement globally. As a result, this asset class is less standardised, with different ticket sizes, timing and underlying goods which make it hard to invest at scale. Tokenisation provides a platform to harness this complexity.

Tokenisation is more than just a new way to access investments, it is also an enabler for deep-tier financing.<sup>8</sup> Generally, trade finance is available to established tier-one suppliers only, and “deep-tier” suppliers – the SMEs further down in the supply chain that frequently lack scale – are often locked out of trade financing.

As a solution, a token-enabled deep-tier supply chain finance cuts through the complexity. Beyond bringing much-needed transparency and efficiency to trade finance, tokenisation can increase the supply chain’s overall resilience and liquidity, through enabling SMEs to rely on the credit rating of the anchor buyer.

You can learn more about Standard Chartered’s tokenisation initiatives to tackle trade complexity in the ‘Real-world Project Spotlights’ that follow.

<sup>8</sup> Deep-Tier Supply Chain Finance ([adb.org](https://www.adb.org))



### Real-world Project Spotlight

## Project Dynamo: Addressing trade complexity with Digital Trade Tokens

Project Dynamo<sup>9</sup>, a collaboration between Standard Chartered, BIS Innovation Hub Hong Kong, Hong Kong Monetary Authority, and technology companies, is a prime example of how trade complexity can be addressed with Digital Trade Tokens, revolutionising the way financing is provided.

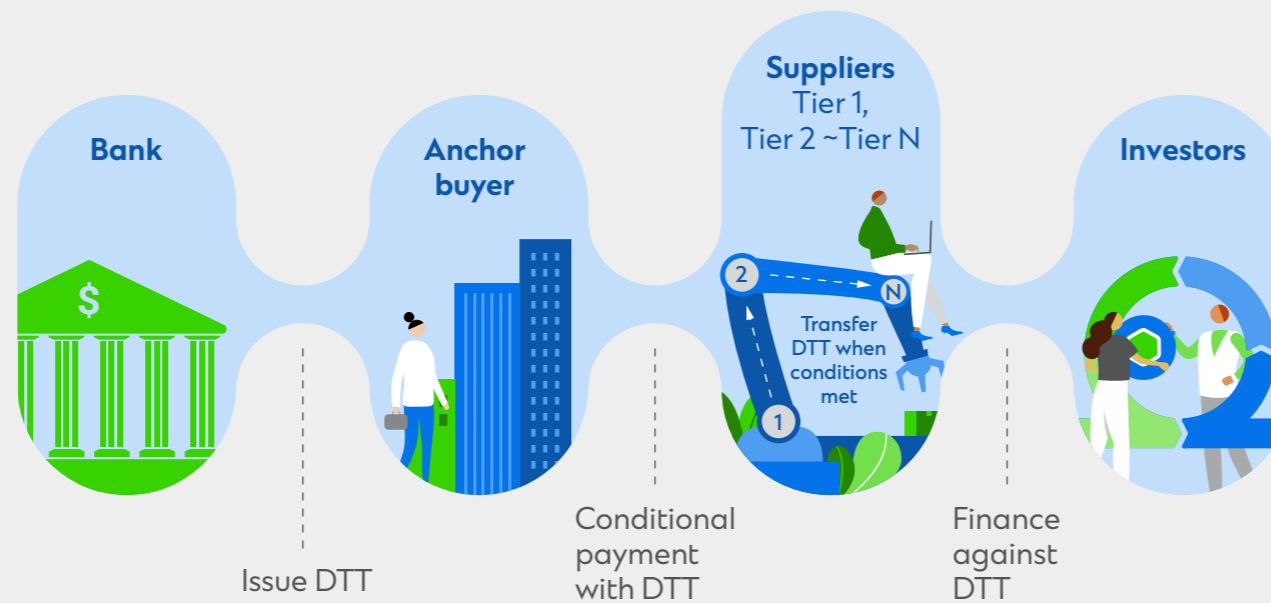
This collaborative effort saw the development of a prototype platform, where an anchor buyer uses tokens for programmable payments to the suppliers along its entire supply chain. Smart contract technology is used to automatically cash out these tokens in response to specific events, enabling efficient and transparent trade flows. Anchor buyers can also make conditional payments with the tokens to their SME suppliers, and the tokens will only be converted to cash when the preset conditions, such as proof of delivery or an electronic bill of lading, are fulfilled.

Token holders also have multiple options to deal with the tokens. They can hold them, sell them for funding, or use them as collateral for loans. The transfer of ownership through tokenisation empowers deep-tier suppliers with greater flexibility in managing their finances.

The benefits also extend further than just the individual players. The digital trade tokens are issued as 'stablecoins' and backed by ringfenced bank funds or by bank guarantees. Coupled with the programmability and transferability offered by the blockchain infrastructure, institutional investors are given the boost in confidence to invest in SMEs, supply chain financing, an area previously regarded as high-risk.

Project Dynamo is just the beginning. It lays a blueprint that addresses the difficulties suppliers, especially SMEs, face in obtaining deep-tier supplier financing by offering a more adaptable and effective mode of financing and payment. Ultimately, it creates a new avenue of financing for those who were previously unable to access traditional financing options.

### An overview of Project Dynamo's prototype platform



Source: Catalysing innovation for SME growth: Project Dynamo

9 BIS Innovation Hub. Catalysing innovation for SME growth: Project Dynamo (2023).

“ Selecting and completing this project has been an exciting journey. From the early concept of applying digital tokens to trading activity for the benefit of SMEs, to designing the tokens on a public blockchain with programmable features such as eBL and ESG triggers, and to analysing the regulatory compliance and legal implications, it has been a true learning experience that we hope may benefit the further evolution of the use case. ”

**Benedicte Nolens**

Head of the BIS Innovation Hub  
Hong Kong Centre

“ SMEs are the backbone of economy. As a leading international cross-border bank, we are dedicated to leveraging fintech breakthroughs, and collaborating on innovative tokenisation initiatives like Project Dynamo, to make the access to trade financing for SMEs more convenient, transparent and secure, so as to further support the growth of trade flows and real economy. ”

**Mary Huen**

CEO, Hong Kong  
Cluster CEO, Hong Kong, Taiwan & Macau  
Standard Chartered

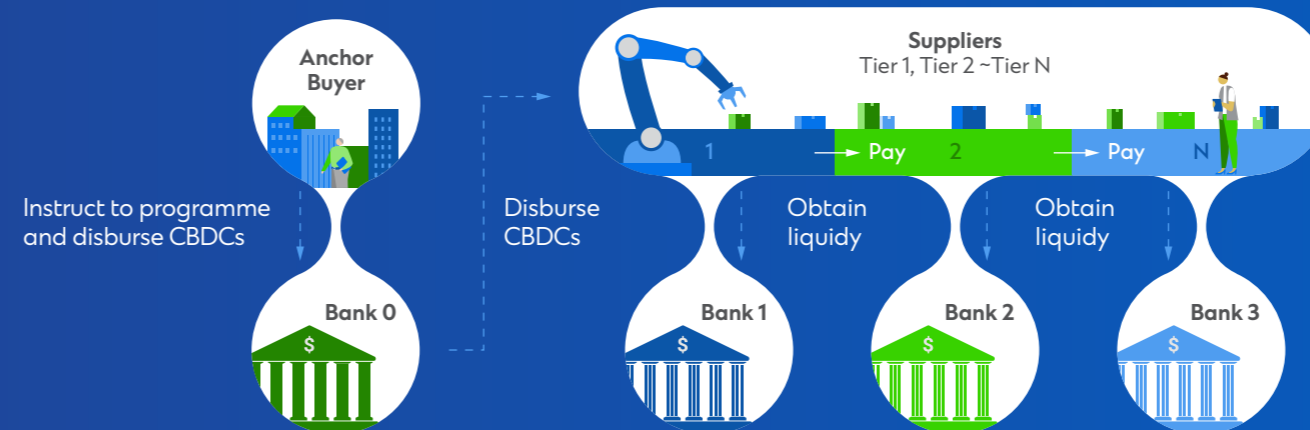


## Real-world Project Spotlight

# Supply chain financing with programmable CBDC

While tokenisation unlocks exciting possibilities in addressing the complexity of the trade ecosystem, another game changer emerges with programmable Central Bank Digital Currencies<sup>10</sup>, or CBDCs. These digital versions of fiat money, issued by central banks, can further simplify trade and supply chain finance by leveraging the automatic execution capabilities of smart contracts to enable programmable trades.

Imagine this: there is a large company with a solid credit history (the anchor buyer) with a network of suppliers, many of whom are SMEs with little access to lenders. With programmable CBDCs, the anchor buyer can instruct its bank to programme and distribute future-dated CBDCs directly to their suppliers, who can then use them to fund their banks or pay the suppliers at a deeper tier.



This streamlined system offers a multitude of advantages for deep-tier supply chain finance:

- **Enhanced flexibility:** Deep-tier suppliers can make use of digital currencies as collateral for borrowing fiat currency, unlocking new financing options and additional flexibility in their operations.
- **Smoothing credit assessment:** Banks can leverage the customer information gathered through the payment data, streamlining the process of SME credit assessments, and reducing operational costs and risks faced by banks when gathering data.
- **Scalability and transparency:** CBDCs make SME operations more scalable and easier for all parties along the supply chain to report on ESG management and sustainability.
- **Stability and confidence:** On a larger scale, CBDCs strengthens stability and transparency in the overall supply chain.

Programmable money leverages the idea of smart contracts, a blockchain technology designed to automate actions as defined in code. It can aid in the automation of payment flows and financial transactions, while removing the need for intermediaries.

## How smart contracts can help automate payment and financing flows



### Pre-defined contract

By leveraging smart contracts, CBDC can be programmed and combine payment and trade information to become a new form of a trade finance instrument



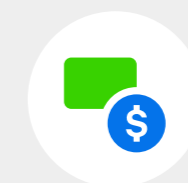
### Purpose-bound payment

Such CBDC can be passed by the anchor buyer to their suppliers, who can immediately use it as a form of payment to their deep-tier suppliers



### Purpose-bound financing

Deep tier suppliers who don't have the required credit standing could leverage tokens as collateral to obtain financing related to the purpose for which they were issued



### Obligation fulfilment

Once conditions in the smart contract are fulfilled CBDC limitations will be automatically removed

<sup>10</sup> Standard Chartered Bank and PwC China. Co-creating the future ecosystem of banking with Central Bank Digital Currencies (CBDCs), A whitepaper on CBDCs in the Greater Bay Area and beyond (May 2023).

### 3 Digitalising securitisation



Traditional securitisation of trade assets into a financial product works well, but only for a limited subset of such assets such as working capital loans and import/export financing assets. Tokenisation significantly expands this investable set.

Due to the short tenor of trade assets, the replenishment process is operationally inefficient, but this can be solved with artificial intelligence within the traditional securitisation approach while tokenisation brings new ways to approach this.

To track the underlying asset, evaluate performance, and determine funding and payments, the trade asset class requires a comprehensive management solution. The complexity and diversity underlying it necessitates a high level of automation.

Enter programmability. By automating flows, data management can be simplified and automated. Each token is traceable as it is linked to a receivable. This facilitates status monitoring, minimises manual errors in favour of transparency for all parties involved, and supports the assessment of receivables and funding volume.

Programmability also simplifies the process of transferring ownership during the transaction, enhancing transaction efficiency. As tokenisation involves a standardised representation of receivables, it creates a common language that could make the management of receivables across jurisdictions more straightforward.

### 4 Reducing information asymmetry



Looking into the underlying assets, leveraging the blockchain provenance, helps to reduce information asymmetry between issuers and investors to increase investor confidence.

The development of a listing framework for tokenised assets is an important step in encouraging adoption and boosting

investor confidence. The public disclosure of offering documents makes it easier for the investor to have access to the relevant information needed for due diligence. Listing a token also ensures a certain level of transparency from the issuer and ascertains the regulatory disclosure requirements are fulfilled, that is critical for many institutional investors.



#### Real-world Project Spotlight

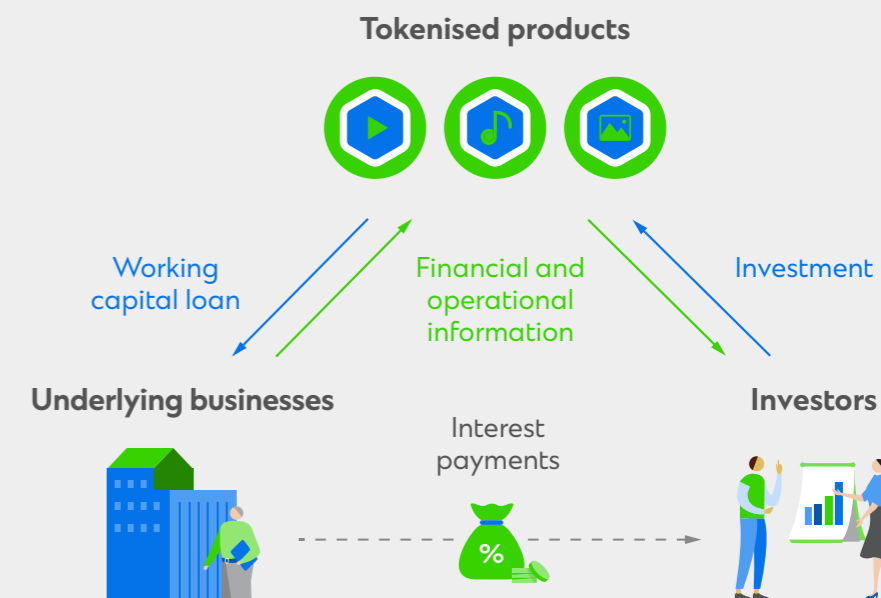
### Bridging information asymmetry with online data

Today's investors are more sophisticated, demanding greater transparency and control. We could very soon see token-enabled products as a novel way to reduce information asymmetry.

Beyond just representing the underlying assets, tokens may incorporate additional features, including providing online access to

the operational and strategic data derived from said assets. For instance, in the tokenisation of working capital loans, investors could gain access to the operational parameters of the underlying businesses, such as profit margin or the number of prospects in the sales pipeline. This model holds the potential to improve investment returns and bring transparency to the next level.

#### How information asymmetry can be addressed through online data



11 The Banker - Digital assets could unlock supply chain finance liquidity

# Actions you can take now

Asset tokenisation has the potential to change the financial landscape, offering increased liquidity, transparency, and accessibility.

While it holds promise for all market participants, realising its full potential requires the collective effort of all stakeholders.

## 1 Adopt

For institutional investors seeking access to new asset classes or enhanced returns, tokenisation can offer more specific and differentiated solutions that are aligned with their clients' specific risk-return profiles and liquidity preferences.

Family offices and high-net-worth individuals (HNWIs) can benefit from a more efficient wealth-growing approach through fractionalisation and transparent product structures, unlocking opportunities that were previously inaccessible.

To capture this investment opportunity investors should start with a firm foundation. As this is a new and evolving space, understanding novel risks is paramount, therefore start with education to build expertise.

Participating in pilot programmes, for example, will enable investors and asset managers to experiment and build confidence in allocating to tokenised assets.

## 2 Collaborate

The industry stands at an inflection point in fully embracing asset tokenisation. Market-wide collaboration is essential to truly realise its benefits.

Overcoming distribution challenges and achieving better capital efficiency requires a collaborative effort. Banks and financial institutions can broaden their reach through collaborative business models, such as developing an industry utility of tokenisation. Similarly, intermediaries, such as insurance companies, can serve as alternative distribution channels, expanding market access. Recognising the transformative impact of tokenisation on capital efficiency and operational effectiveness, the industry must unite to leverage the power of shared infrastructure.

Beyond financial institutions, the broader ecosystem, including technology providers and other players, must collaborate to create a supportive environment. Leveraging standardised processes and protocols for interoperability, legal compliance, and efficient platform operation is crucial. Standards for interoperability<sup>12</sup> or best practices for financial assets on-chain<sup>13</sup> are here but the industry should speed up the adoption.

Tokenisation efforts, currently in a nascent and fragmented state, urgently requires industry-wide collaboration to address these key issues by blending the robustness of traditional finance (TradFi) with the innovation and agility of DeFi. This strategy will pave the way for a more stable, unified, and mature digital asset ecosystem, balancing technological progress with regulatory coherence and market stability.

## 3 Promote

Finally, not only market participants, but governments and regulators play a critical role in promoting the responsible growth of the digital asset industry. By setting policies that encourage global trade and support the communities through, for example, job creation, they can catalyse sector development while mitigating risks.

Clear and balanced regulatory frameworks foster innovation while guarding against the pitfalls observed in the crypto space.

Forming public and private partnerships with banks and other financial institutions is also critical. These collaborations can accelerate the evolution of the industry by promoting responsible and sustainable growth.

Regulators, through such collaborations, can ensure that the digital asset industry's growth benefits the economy, improves global financial integration, creates jobs, and maintains market integrity and investor protection.

<sup>12</sup> IEEE Standard for Blockchain Interoperability Data Authentication and Communication Protocol

<sup>13</sup> BAFT Releases Best Practices for New Financial Asset on Distributed Ledger Technology

# Are you ready to capture the tokenisation opportunity?

## Contact

To learn more and accelerate your digital asset journey, please reach out to Standard Chartered and Synpulse.

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# Appendix

## Glossary

### **Blockchain**

A distributed ledger that is updated in groups of transactions called blocks. Blocks are then chained sequentially via the use of cryptography to form the blockchain.

### **Central Bank Digital Currency (CBDC)**

A central bank digital currency is the digital version of a country's currency issued by the central bank or monetary authority.

### **Decentralised finance (DeFi)**

An emerging model that uses blockchain to eliminate the need for a centralised authority to provide and govern financial operations.

### **Ethereum**

Ethereum is a type of decentralised blockchain technology platform which first introduced smart contract functionality.

### **Real-World Assets (RWA)**

A type of digital asset that derives value from any asset whether physical or digital that exist outside of the blockchain

### **Stablecoins**

Stablecoins are a type of digital assets which value is pegged to another currency, commodity, or financial instrument.

### **Trade finance assets**

Can be classified under various banking products (e.g., import/export financing) that help to facilitate international trade flows. Such assets are usually not correlated to bond or equity markets.

### **Tokenisation**

Tokenisation refers to the process of issuing digital representations of real or traditional assets in the form of a token on a distributed ledger technology platform.



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