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TOKENIZATION FOR DEVELOPMENT

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CONTRIBUTOR

Irene Arias Hofman

CEO, IDB Lab

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Table of contents

Tokenization for development

Instantly transacted tokenized assets are estimated to reach US$15 trillion by 2030, carrying with it the potential to reshape sectors like healthcare, education, conservation, and notably, the financial sector.

By enabling the conversion of physical and financial assets into digital tokens on a blockchain network, tokenization offers a transformative opportunity for a more inclusive financial system. When combined with other technologies like generative AI, tokenization holds immense potential to increase access, reduce costs, and improve user experience, particularly for those who are still excluded from accessing financial services.

Its application in finance aims to streamline transactions, expand access, and even expand the frontier of new digital financial products. In particular, **its power to create liquidity from normally non-liquid assets is appealing.**

The tokenization of financial assets, such as cash, securities, and central bank digital currencies (CBDCs), opens doors to expedite and automate payments, clearing, and settlement, with transformational implications in remittances and financial inclusion sectors.

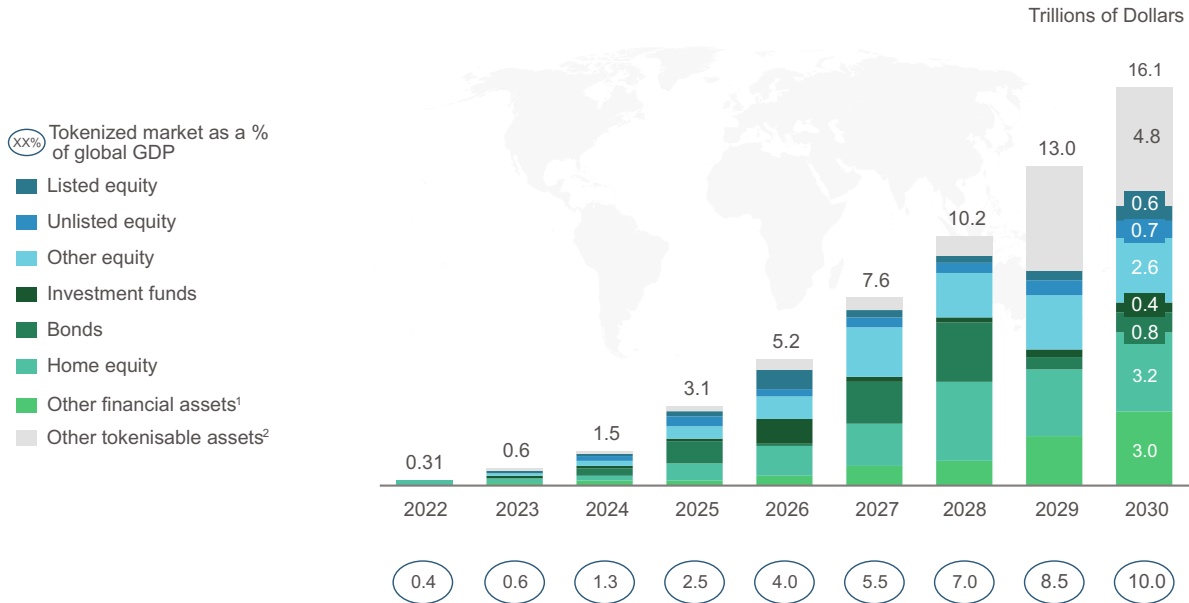With respect to financial inclusion, the opportunity and the need to act is compelling:

1. The existing financial system faces major shortcomings in speed, cost, and accessibility. **Tokenization is projected to save up to $20 billion annually in global clearing and settlement costs and can unlock $16 trillion of illiquid assets by 2030.** *(See Figure 1 on next page)*.

2. There is momentum with multiple initiatives on the policy and regulatory front.

3. We are seeing increasing activity of applications on top of web3 networks with increasingly scalable solutions.

Tokenization of global illiquid assets estimated to be a $16 trillion business opportunity by 2030

Highly conservative forecast; Tokenization potential of $68 trillion by 2030 in best-case scenario

Tokenized asset **potential differs across countries** due to variation in maturity of regulations and size of asset classes

Trillions of Dollars

XX% Tokenized market as a % of global GDP

- Listed equity
- Unlisted equity
- Other equity
- Investment funds
- Bonds
- Home equity
- Other financial assets[1]
- Other tokenisable assets[2]

Year	Total	Other tokenisable	Listed equity	Unlisted equity	Other equity	Investment funds	Bonds	Home equity	Other financial
2022	0.31								
2023	0.6								
2024	1.5								
2025	3.1								
2026	5.2								
2027	7.6								
2028	10.2								
2029	13.0								
2030	16.1	4.8	0.6	0.7	2.6	0.4	0.8	3.2	3.0

2022	2023	2024	2025	2026	2027	2028	2029	2030
0.4	0.6	1.3	2.5	4.0	5.5	7.0	8.5	10.0

For example, Insurance policies, Pensions, Alternative Investments; 2 e.g., Infrastructure Projects, Car Fleets, Patents
Note: The analysis does not include crypto assets

Total **tokenized market to be 10% of global GDP** by 2030

Figure 1: Tokenization of illiquid assets to be a $16 trillion worth opportunity globally. (Source: World Economic Forum – Global Agenda Council, BCG Analysis)

Enabling an ecosystem of new services and products

1. **Tokenization of Money and Payments:** Exploring and utilising digital cash, CBDCs, stablecoins, and tokenized deposits to enhance the efficiency, expedite settlement, reduce counterparty risks, and cost-effectiveness of cross-border payments, aligned with development and inclusion objectives.

For instance, the Bahamas launched the Sand Dollar, a digital version of the Bahamian dollar, which has improved financial inclusion in remote islands by making transactions faster and more accessible. Since its launch, over 20,000 Sand Dollar wallets have been created, facilitating transactions in areas with limited banking infrastructure. Similarly, in the USA, JPMorgan's JPM Coin facilitates the instantaneous transfer of payments between institutional clients, significantly enhancing transaction speeds and reducing costs. JPMorgan's blockchain network processes over $6 trillion in transactions daily, showcasing the scalability and efficiency of tokenized payments.

2. **Tokenization of Real-World Assets:** Facilitating liquidity for traditionally illiquid assets prevalent in the developing world, thereby granting access to broader markets and exchanges for both financial and non-financial assets, allowing fractional ownership and microtransactions, which could significantly engage and benefit these regions.

   For example, in Kenya, the M-Akiba project enabled the tokenization of government bonds, allowing small investors to purchase bonds using their mobile phones and making investment accessible to a broader segment of the population. Today, M-Akiba has raised over $10 million from more than 500,000 investors.

   Meanwhile, in Brazil, regulators such as the Central Bank of Brazil and the Securities and Exchange Commission of Brazil (CVM) have active regulatory sandbox programs designed to foster innovation in the financial sector and capital markets. Solutions ranging from tokenization of fixed-income assets and SMB shares allow the regulators to understand how distributed ledger technology can establish new market dynamics, generate cost-efficiency, and democratize investments and access to credit.

   Another example would be in South Africa, where the Momint platform tokenizes high-value art pieces, enabling fractional ownership and making art investments accessible to a broader audience. Momint has successfully tokenized over $2 million worth of art, attracting hundreds of new investors.

3. **Enabling Digital Public Infrastructure for Tokenization:** Evaluating different models, experiences, and outcomes in leveraging and building the necessary digital public infrastructure for effective tokenization. Understanding the interaction between digital assets and traditional banking and payment infrastructures.

   Estonia's e-Residency program has created a digital nation for global citizens, offering digital IDs that enable secure access to Estonia's e-services, fostering a vibrant ecosystem for startups and digital businesses. More than 80,000 e-residents from across 170+ countries have established over 16,000 companies through this program.

   In Argentina, the implementation of blockchain for public records and land titles in the Córdoba province ensures transparency and reduces fraud, promoting trust and security in land transactions. The project has recorded over 200,000 land titles on the blockchain, significantly reducing the time and cost associated with land registration.

Similarly, in Rwanda, the government's use of blockchain for land registry has streamlined property transfers, reducing the time and cost associated with land registration and improving transparency. The blockchain-based land registry system has recorded over 1 million parcels, making property transactions faster and more reliable.

4. **Tokenization and the Sustainable Development Goals (SDGs):** Tokenization can significantly contribute to the achievement of several SDGs by promoting transparency, reducing corruption, and improving efficiency.

   For example, Repsol's tokenization of renewable energy certificates supports SDG 7 (Affordable and Clean Energy) by increasing transparency in energy production and consumption, encouraging the use of renewable sources. Additionally, the United Nations Department of Economic and Social Affairs (UNDESA) has documented several SDG Good Practices where blockchain and tokenization have been successfully implemented to achieve various development goals, such as improving access to quality education (SDG 4) and promoting decent work and economic growth (SDG 8).

Tokenization opens new avenues for expanding access to ownership, increased liquidity, and transparency,

However, the journey is fraught with challenges, including regulatory uncertainties, technological integration complexities, security vulnerabilities, interoperability issues, and the critical need for broader and streamlined adoption. These factors demand careful, strategic implementation to realize the full potential of tokenization in transforming financial services. Digital wallets and digital identities are particularly important since improper identification in low-income populations has been a persistent issue in underserved communities.

While tokenization opens new avenues for expanding access to ownership, increased liquidity, and transparency, it must ensure compliant, responsible, and inclusive adoption to effectively contribute to Sustainable Development Goals (SDGs).

Overcoming these hurdles necessitates concerted efforts from governments, businesses, and international organizations to establish clear standards and frameworks for responsible tokenization adoption. Addressing these challenges unlocks the full potential of tokenization to drive positive change and empower individuals and communities worldwide.

Regional alliances within the African Union, the Association of Southeast Asian Nations, and Latin America and the Caribbean underscore the significance of tokenization, fostering solutions on agricultural & natural capital, financial inclusion, employment, health, essential infrastructure services, gender & diversity and climate segments.

Collaborative platforms such as the public-permissioned network of LACChain, orchestrated by a neutral entity (LACNet), the Global Blockchain Business Council (GBBC), and the Blockchain Research Institute (BRI) are crucial in addressing implementation challenges. These platforms facilitate knowledge exchange, foster partnerships, and develop frameworks for a resilient, fair, and sustainable future.

Conclusion

Aligned with the priorities set by the G20 Working Groups on International Financial Architecture and the Global Partnership for Financial Inclusion (GPFI), the Inter-American Development Bank (IDB) advocates for dialogue and collaboration to advance tokenization for development. Brazil's presidency of the G20, coupled with its pioneering advancements in this area (with PIX and other advancements by the Central Bank of Brazil and private players), offers a unique window of opportunity to bring other countries along and promote a more integrated and interconnected digital infrastructure for the future.

We need concerted discussions to develop clear strategies that put development and individuals at the centre, building on tokenization cases with impact on inclusion, and fully understanding the challenges and opportunities in driving socio-economic progress. Only then will we have a chance to maximize the benefits of tokenization in development while addressing the conditions essential for its successful implementation.

Irene Arias Hofman
CEO, IDB Lab

I write about the use of technology and innovation to solve development challenges. The fast pace of technological advances is increasing the risk of social inequality and, at the same time, the opportunity to solve this gap and address climate change at scale. A deliberate and responsible approach towards the use of technology is not a nice to have, it's imperative to build an inclusive digital society and achieve sustainable growth.

The author's views are her own and do not reflect those of the company or its staff.

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