ROSENBLATT SECURITIES

TOKENIZATION PART 2: SIZE AND TIMELINE

A Vast Range of Asset Possibilities: From Mundane to Maverick

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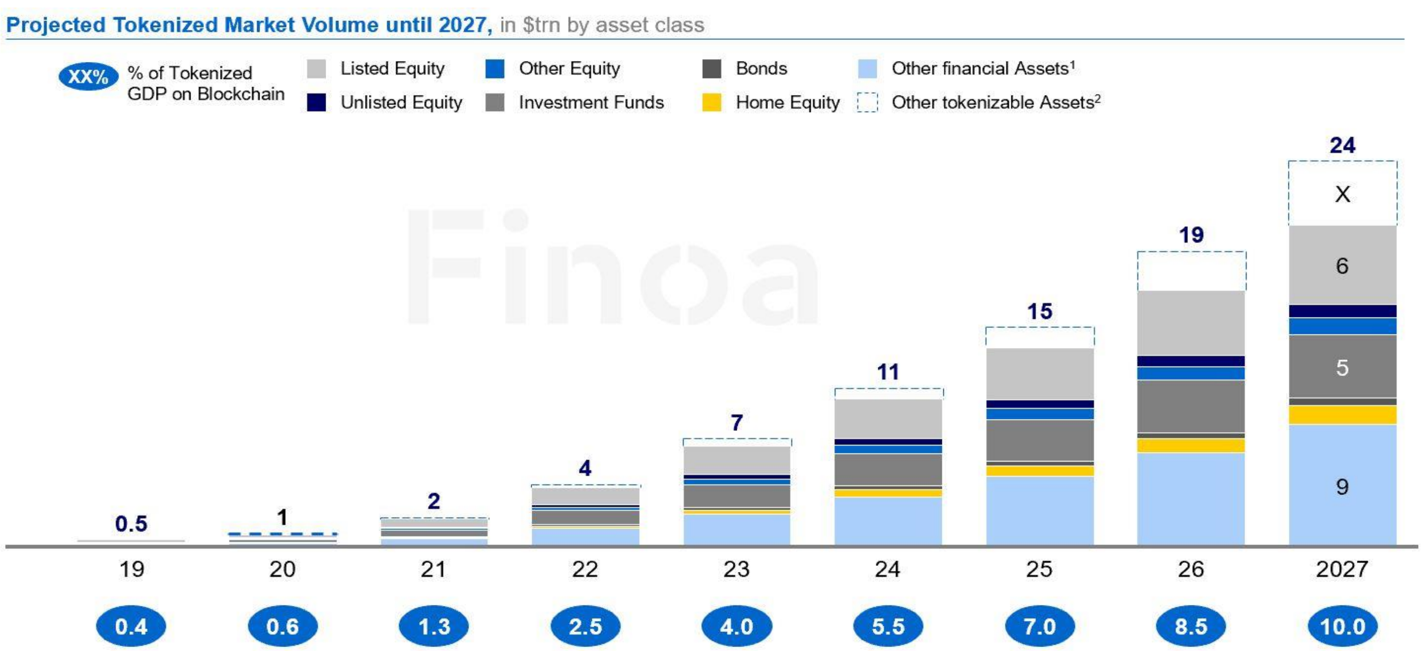
Tokenization part 1 presented the case for digitizing assets on the Blockchain, its immense promise, and the market participants developing solutions. Part 2 discusses the types of assets that can be digitized, and the timeline over which this could happen. The list of tokenizable assets is vast, and as the infrastructure and ecosystem grows, more assets will come into the fold. Real estate (home equity, new residential homes, commercial property), collectible art and exotic cars are already being tokenized. So is equity crowdfunding on the Blockchain (think *Circle's* acquisition of *Indiegogo*), and new reincarnations of equity funding (ICOs, now STOs). Longer-term opportunities include infrastructure, project finance, IP, trademarks and a whole host of other assets. The timeline of asset tokenization will depend on investor apatite, regulatory approvals, public confidence, and expected returns.

SIZING THE OPPORTUNITY

Theoretically, the size of the opportunity is huge, but it will require surmounting challenges: regulatory clarity, primary issuance and secondary trading platforms, effective custody and compliance solutions. One measure of the opportunity is as a percent of global GDP. Currently, the dollar value of tokenized assets is an estimated 0.4% of global GDP, growing to 10% by 2027. In the massive real estate market (residential homes - $135 trillion, commercial - $54 trillion), even if 0.5-1% is tokenized, that's a $2 trillion market opportunity. Collectibles and fine art is another $6 trillion worldwide, while private debt is $1 trillion. We don't need a large proportion of these markets to be tokenized, to be a massive opportunity.



1 e.g. Insurance Policies, Pensions, Alternative Investments 2 e.g. Infrastructure Projects, Car Fleets, Patents
SOURCE: Finoa (www.finoa.io), World Economic Forum - Global Agenda Council 2015; Deloitte Research; BCG - Global Wealth Report; Oliver Wyman - Personal Financial Assets Report

TIMELINE

Short-term (2019-2020): Already Happening

- We have already seen ICOs and STOs emerge as tokenized funding structures for businesses. While such early attempts were rife with fraud, regulatory uncertainty, and confusion whether they were simply a replacement of traditional securities, think of these as interim steps in the evolution of tokenized ownership. In short order, more of such structures will emerge that are blessed by regulators, well understood by investors, and which better utilize Blockchain's potential. The market will recognize that they are not pure replacements of traditional stocks and bonds, but a new investment structure that complements, not substitutes regular securities
- A medium-term opportunity is tokenizing private shares (equity in Unicorns) and unlocking their value for shareholders by listing them on Blockchain-based private exchanges. Nasdaq (via its 2015 Second Markets acquisition), London Stock Exchange, Singapore Stock Exchange and the SIX Swiss Exchange are betting future growth on private security tokenizing platforms. Exchanges realize they must get in early on the private token opportunity, instead of waiting for IPOs to rebound
- If you are waiting for Real Estate to get tokenized, you overslept. It's happening. A $270 trillion market with massive opportunity to monetize home equity, fund residential homes and commercial property. We are witnessing VCs lining up to fund real estate platforms (*Unison, Harbor, Home Tap*), that are two-sided marketplaces connecting investors with real estate suppliers seeking funding. Real estate is tokenizing from Switzerland to Singapore.
- Other assets being tokenized include collectible art (platforms like *Maecenas* enable fractional ownership of a Monet or a Picasso), exotic cars (*Rally Road* allows fractional ownership of Lamborghinis and Ferraris), carbon credits and regular commodities like gold or wheat.

Long-term (2020-2025): Time to Dream

Entire investment structures (investment funds) can be digitally tokenized and offered to a wide range of investors. Alternative assets (PE, VC, Hedge Funds) can go the same way, and be made more accessible to investors. Infrastructure projects and project financing are the next big opportunity, with revenues from toll roads or utility plants paid to investors, via smart tokens. Ask *Bankex,* which is helping central Asian republics privatize state assets and avoid what transpired in Russian privatization in the 90s. Next up is funding new drugs for chronic diseases (cancer, diabetes), for too long a problem because investors were gun shy of the decade-long FDA process to approve such drugs. Apparently, VC's are not *that* patient. But new healthcare token funding structures will mean more investors (Gen X do-gooders) will be able to fund specific drug discovery in $50 increments. Check out GAVI (Geneva-based vaccine alliance) and WHO, that are evaluating digital tokens to solve global healthcare challenges.

Tokenization Gone Mad: Privacy, Customer Data, Health Records

Investors love getting in on edge cases, because they make money. Edge case today, mainstream tomorrow. So think about tokenizing intangible assets - customer data, health records, even your reputation. These are intangible assets with enormous economic value. Consider the billions that FANGs make by monetizing customer data. What's lacking is a framework to digitize such 'assets', securitize them, and a legal structure to put these into a digital lockbox whose keys are handed to individuals. Once that happens, the rightful owners can offer data on two sided marketplaces to be traded, or rented out to bidders for a fee. Of course, BigTech will fight tooth and nail against granting consumers rights to this data, with their entire business model resting on monetizing user content. Their argument is that consumer data is collected on their platforms, as a *quid pro quo* arrangement for 'free' services they provide consumers.

But this argument is unraveling, in Courts and in public opinion. Consider the multi-billion dollar fines imposed on Facebook/Google in Europe for unfairly using consumer data, shutting out competition, or not compensating consumers for data. BigTechs would be smart to tokenize data and 'share' some of the massive economic value they derive from it, or risk long-term viability of their entire business model. Consider *Steem*, an early stage, VC funded, social media platform that invites users to contribute content and develop apps, then digitally licenses it to other firms.

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