



## **Fudan Fanhai FinTech Research Center and LUN Partners Group Completes Joint Research Project on New Financial Innovations: The Impact of Blockchain Technology on Asset Securitization**

Asset Securitization is a landmark innovation in the history of economy and society. Since the inception of modern securitization, world economies and capital markets have entered an unprecedented era of accelerated growth and prosperity. Whether the asset in question is an equity asset or a debt asset, securitization enables a broad range of benefits for issuers or investors throughout capital markets. At its core, securitization is the consolidation, then fractionalization of a single or set of assets. This consolidation and fractionalization allows the risk and reward of an asset or set of assets to be distributed to a greater number of participants throughout the full lifecycle of said assets. It also allows for lower barriers of entry, higher liquidity, and higher customizability for the issuers and investors of these assets.

From an asset issuer's standpoint, securitization greatly improves the liquidity of a certain asset, allowing for improved fundraising capability, greater visibility toward the valuation of an asset, and improved flexibility in customization and management.

From an investor's standpoint, securitization enables access to a greater variety of investments, improved diversification of investment portfolios, and significant cost savings when investing in specific assets that may require transaction & processing expenses otherwise.

Despite its many merits and benefits, securitization still faces many technological and operational challenges and inefficiencies. These challenges and inefficiencies stem from the complex procedures and layers of communication that exist between issuers, investors, and intermediaries and manifest in the form of weak data validation mechanisms, lack of transparency & trust, transaction inefficiency, and information asymmetry. These problems, on their own merits, hold capital markets back from achieving their full potential. Moreover, without the proper solutions to address these shortcomings, securitization can also lead to catastrophic incidents that may damage the global economy, such as the Global Financial Crisis of 2008-2010.

Asset digitalization, also known as asset tokenization, is defined as the process that converts the ownership of pre-existing real assets into highly liquid "digital tokens" with embedded blockchain technology, and such tokens serve as a digital representation of the asset. Asset digitalization is also the new, modern methodology of securitization that can address the existing issues with securitization.

Blockchain-enabled asset digitalization improves transactional cost and speed, increases liquidity, and brings transparency to securitized assets. It also allows for a high-level of data security, decreases due diligence burden, and simplifies regulatory procedures such as KYC / AML. Additionally, digital tokens can integrate blockchain-based smart contracts that can automatically verify and execute predetermined terms of contract, thereby removing the need for intermediaries and achieving greater efficiency while maintaining auditability of the transactions.

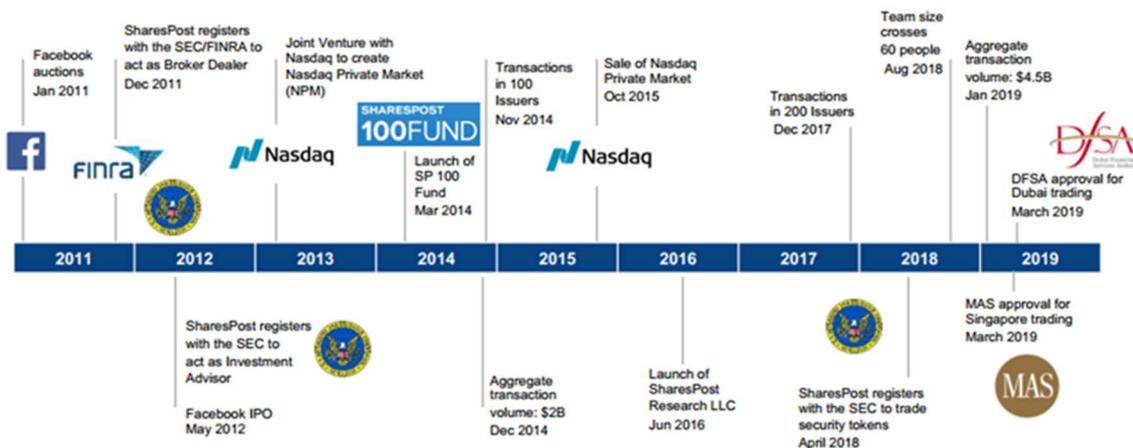
## Benefits of Asset Digitalization

Potential Benefits	Description / Example
Fractionalization	Assets such as real estate have high barriers of entry due to the large upfront capital required; fractionalizing such assets democratizes its access for smaller ticket investors.
Customizability	Tokenization enables exposure to more granular assets (i.e, instead of an entire real estate project, rights to specific buildings can be digitalized).
Liquidity	[Digital tokens are easily transferrable and there already exist exchanges and marketplaces where these tokens can be traded actively. The transact-ability of said assets can also yield a premium to the asset value, especially for those assets that are not traditionally liquid at an early stage (private equity, etc..)] Fractionalization increases the pool of potential investors and can unlock global investor base; secondary markets also facilitate additional liquidity; liquid assets command a premium and can increase asset value
Automation	Smart contracts can automate steps such as [KYC / AML] compliance, document verification, trading, [transaction, settlement, and even remove the need for escrow accounts]. Dividends, [interest,] and other cash flows can [also] be programmatically paid when due.
Cost Efficiency	By removing certain intermediaries and increasing efficiency of processes, costs [of issuing, investing, trading, and managing these assets] can be lowered.
Settlement Time	[Digital] token [transactions] can settle in [seconds,] minutes, or hours (depending on the underlying blockchain).This unlocks the capital that is tied-up in the market which currently settles at T+3/T+2. [private equity transactions can at times take months to fully settle].
Data Transparency	Secure and visible recordkeeping on blockchain can increase transparency of the underlying data; especially for complex derivative products, the ability to clearly link a security to its underlying value drivers [increases investor trust and availability of capital within the complex instruments markets].
Structured Products	Additional value can be realized once assets are tokenized and that enables the creation of additional layered financial products such as basket of digital tokens and token derivatives; since the underlying is tokenized, creating complex products becomes simpler through coded smart contracts.

Source: MIT (2019)

As asset digitalization is still in its nascent stage, there remains several drawbacks such as high costs associated with up-keeping blockchain infrastructure via “mining” or other methodologies and uncertainty of regulations regarding digital assets. From the perspective of regulatory agencies, digital tokens are commonly referred to as security tokens and often viewed as securities that require registration with local securities commissions. In response, certain service providers seeking to provide solutions within the digital assets space have already applied for and obtained the necessary regulatory licenses and approval from authorities to carry out relevant activities in a compliant way. Of the service providers, the first to acquire said regulatory approvals to transact asset-backed digital tokens was SharesPost Inc.

SharesPost was founded in 2009 with mission is to create liquidity for the private growth asset class. The company launched the first online secondary market for private technology company shares in the US. Since then, SharesPost has connected thousands of buyers and sellers in more than \$5 billion worth of transactions in the shares of more than 350 leading private technology companies (unicorns). In recognizing the benefits of asset digitalization and the coming trend of transacting digital assets, SharesPost applied for an approval to facilitate the secondary transaction of security tokens. In May 2018, the Company formally announced the launch of their alternative trading system for secondary trading of security tokens.



Shortly after the announcement, SharesPost began listing security tokens such as Blockchain Capital’s BCAP token and CityBlock Capital’s NYCQ Fund Tokens on its platform for accredited investors to invest and trade. SharesPost also began taking steps to secure regulatory licenses and approvals internationally in both Dubai and Singapore. Furthermore, in 2018, SharesPost and LUN Partners Group formed SharesPost China, a joint venture company dedicated to expanding SharesPost’s private securities trading business and digital assets into the Greater China Region.

In the US and Europe, prevalent examples of asset securitization utilizing blockchain technology have already appeared. These western nations have demonstrated a gradual growth of interest and acceptance towards the development of tools, technological solutions, distribution networks, and market infrastructure that can make the fully digitalized capital markets a reality in the near future. And while China has taken unprecedented steps integrating blockchain technology into the monetary system, such as the development and eventual adoption of Digital Currency Electronic Payment (DCEP), regulation around asset digitalization and securitization using blockchain technology has remained opaque or prohibitive.

In the end, the asset digitalization ecosystem in China requires the willing involvement of regulatory authorities that are ready to trial new innovations and the active participation of high quality issuers. Willingness to trial and adopt asset digitalization will bring China significant advantages over those countries still utilizing traditional securitization. To date, there are already formalised processes, procedures, and systems that can be utilized from successful cases overseas. Companies like SharesPost, SharesPost China, and other early pioneers in the space are worth following for years to come.

In all, securitization has afforded the modern economy an unprecedented amount of growth and abundance. However, its shortcomings have contributed to notable inefficiencies and even widespread crises. Compared to traditional securitization, the benefits of asset digitalization using blockchain are numerous and great. Blockchain enables fractionalization of large capital assets so individual investors can participate with smaller amounts of capital. It also provides enhanced security, data consistency, transaction transparency, and smart contract technology. For issuers, securitization via asset digitalization is a source of lower-cost investment capital with superior characteristics compared to traditional securities. A fully digitalized capital market is a vision not yet realized, but inevitable in its arrival given its many merits and rewards. It will be up to early pioneers and their continued ecosystem development to determine the speed of said arrival.

Please refer to the paper “The Impact of Blockchain Technology on Asset Securitization” by Fudan Fanhai Fintech Research Center and LUN Partners Group for more details and interviews with industry experts.