

## What is “DeFi” and how will it impact investment management?



Welcome to Invesco’s new series of blogs where we will be exploring evolving themes in digital assets and investment management. My name is Dave Dowsett and I am the Global Head of Innovation and Emerging Technology at Invesco.

You may have heard of decentralized finance or “DeFi” in the context of cryptocurrencies. You would be forgiven if your mind immediately went to crypto speculation and arcane workings of code. Yet what truly underlies DeFi is a trend that is reshaping how we think about and structure the financial economy more broadly. The idea is to take traditionally centralized aspects of traditional money management such as decision-making authority, settlement, and recordkeeping and to introduce a decentralized approach with the goal of reducing potential for fraud, abuse and corruption, and increasing efficiency and access. DeFi accomplishes this by using a decentralized database technology, commonly referred to as blockchain. This technology makes it possible for users to access different types of financial products and services without the need to go through an intermediary, such as a centralized institution.

In traditional finance (or “TradFi”), participants rely on institutions and intermediaries in our global financial markets for the issuance, trading, banking, and settlement of investments. DeFi introduces a shift in the trust mechanism to blockchain technology which introduces public verification of transactions, leading to greater transparency, efficiency and speed. In general terms, the advances in technology do not change what we are doing but how we are doing it. For example, research from major central banks has highlighted the potential for blockchain-based transactions to accelerate payments and security settlement. Another anticipated upside of decentralization is increased matching of buyers and sellers and greater depth and access to capital markets as new liquidity sources are opened in equally secure and trusted manners.

With all the buzz and recent headlines in this space, you may wonder what it means to participate in a so-called “trustless” system. Such systems achieve consensus through code and cryptography rather than relying on institutions to process and settle transactions. In other words, “trustless” systems disintermediate trust and distribute it across network participants. Without sacrificing data privacy, a single version of irrefutable truth is recorded that can be inspected by selected parties but cannot be controlled by any single authority. The ledger actually ensures traceability and the encryption layer has the promise of leading to better cybersecurity protections for capital markets participants.

Since the inception of stocks in the 1600s, advances in technology have progressively enabled the movement from paper shares to electronic trading to T+2 settlement. The 2000s saw an acceleration that reshaped the industry from trading floors to electronic trading portals, increased data frequency and availability, and high-frequency execution speeds.

Now in the 2020s, blockchain offers the ability to record the ownership of assets in a publicly accessible, decentralized record. This “tokenization” allows for the recording of ownership of any asset, whether it’s tangible/physical or intangible/non-physical. If an asset can be owned and has value to someone, it can be offered as a token and then be incorporated into the larger asset market.

In this article series, we will explore exactly how this is possible, and what the potential implications are for the asset management industry. The timeline below shows several notable recent developments highlighting the growing adoption of DeFi across the global asset management universe. In our next blog, we will take a deeper dive into tokenization.



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Arca Labs and Securitize partner on a tokenized US Treasury Fund using Ethereum<sup>1</sup>

## September, 2021

- International securities settlement system Euroclear invests in the regulated blockchain payments consortium Finality — formerly known as the Utility Settlement Coin (USC) — which is owned by 16 financial institutions, including Nasdaq, BNY Mellon, State Street, and UBS<sup>2</sup>
- Euroarea clears a pilot framework for testing DLT technology<sup>3</sup>

## March, 2022

KKR and Securitize launch the tokenized KKR Health Care Strategic Growth Fund II, the first private equity tokenized offering<sup>4</sup>

## September, 2022

WisdomTree prepares a fund whose recordkeeping takes place at both WisdomTree and on Ethereum and/or Stellar blockchains<sup>5</sup>

## September, 2022

Hamilton Lane prepares a tokenized private credit fund offerings with Securitize, along with 2 other funds<sup>6</sup>

## October, 2022

- Monetary Authority of Singapore (MAS), J.P. Morgan, DBS Bank and SBI Digital Asset Holdings execute trades of tokenized securities<sup>7</sup>
- Apollo explores tokenization of mortgage loans<sup>8</sup>

## November, 2022

1. Arca Labs and Securitize Partner on Tokenized US Treasury Fund - Blockworks
2. Euroclear Backs Blockchain Consortium Finality | PYMNTS.com
3. Carriages preview | Legislative Train Schedule (europa.eu)
4. KKR Rides the Blockchain to Expand Access to Private Equity | Barron's (barrons.com)
5. WTSY The Digital Fund Opportunity | WisdomTree
6. Hamilton Lane Prepares Tokenized Funds for Individual Investors - Bloomberg
7. Singapore Tests Institutional DeFi on Ethereum, Welcomes USDC Issuer - Decrypt
8. Figure and Apollo Execute Mortgage Transactions Using Blockchain Technology to Transfer Ownership (prnewswire.com)

Companies engaged in the development, enablement and acquisition of blockchain technologies are subject to a number of risks. Blockchain technology is new and many of its uses may be untested. There is no assurance that widespread adoption will occur. The extent to which companies held by the Fund utilize blockchain technology may vary. As blockchain technology is new, there is a risk that companies developing applications of this technology may be subject to additional risks including, but not limited to, intellectual property claims and legal action. Furthermore, blockchain technology may be subject to future law and regulation that may adversely impact adoption. Companies transacting on the blockchain are required to manage a user's account (or "wallet") which is accessed via cryptographic keys. Mismanagement, theft, or loss of the keys can adversely affect the companies' operations on the blockchain. Blockchain technology relies on the internet, the disruption of which may adversely affect companies involved with the technology or even the blockchain itself.