



Digital Assets 101:

A Beginner's Guide for Institutional Investors

Part IV: What is DeFi?

Overview

The world of digital assets is growing and changing very quickly. Your clients, customers, executive management, and board are likely all asking you about this space – and for good reason.

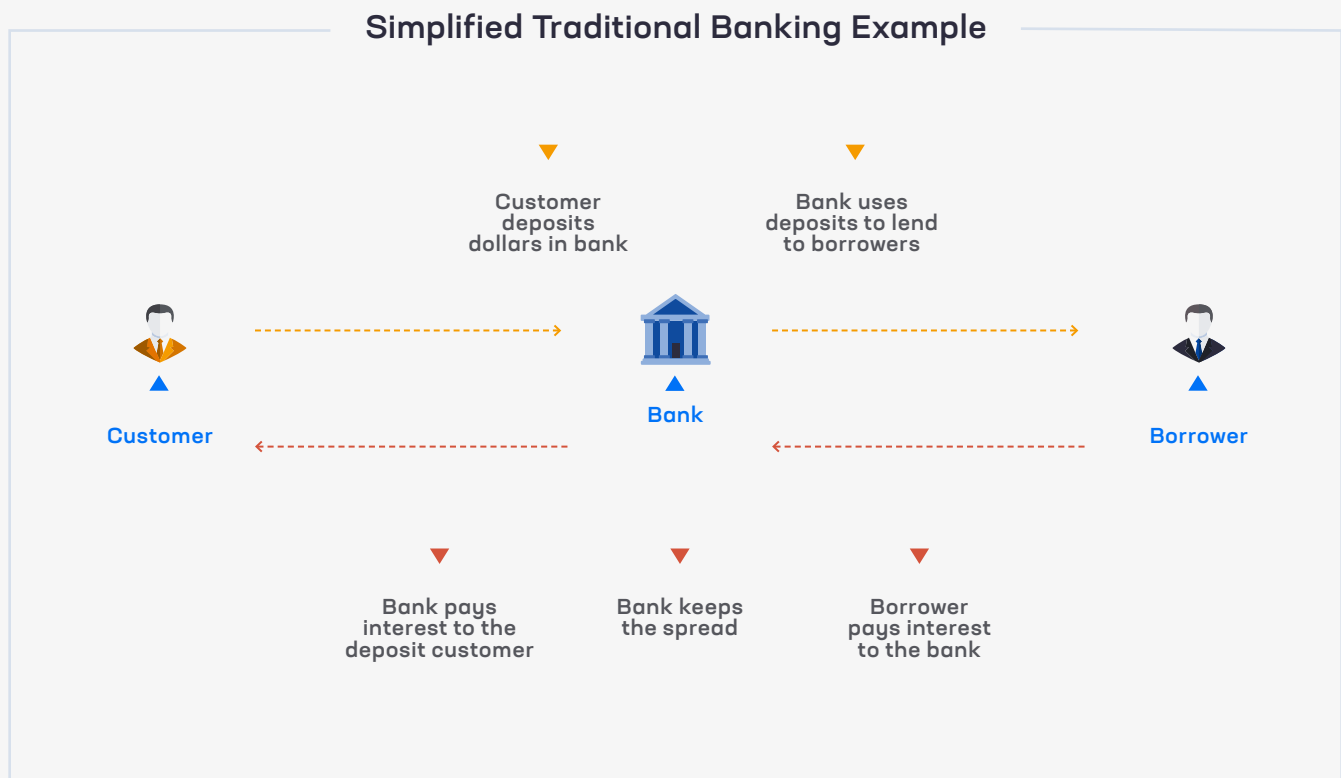
At the time of this writing, the crypto market now has a market cap of more than \$2 trillion and the number of crypto wallets has ballooned to more than 260 million. Meanwhile, money that is “locked” in decentralized finance (“DeFi”) pools has skyrocketed to more than \$80 billion in a matter of months, and there is now more than \$120 billion in stablecoins. Clearly, there is retail and institutional interest in this space, but the infrastructure and operational support models for digital assets differ from traditional assets, and understanding these differences is key to being able to deliver products and services to your customers.

Our purpose here is to help create the basic building blocks of knowledge on digital assets: touching on the foundational layers of how digital assets are built and work, what the market looks like, who the players are, how the capital markets work, and how to think about the impact it can have on your business. This paper will discuss the basics of Decentralized Finance (DeFi) and how it differs from traditional financial services. You can learn more on other topics at www.fireblocks.com/academy.

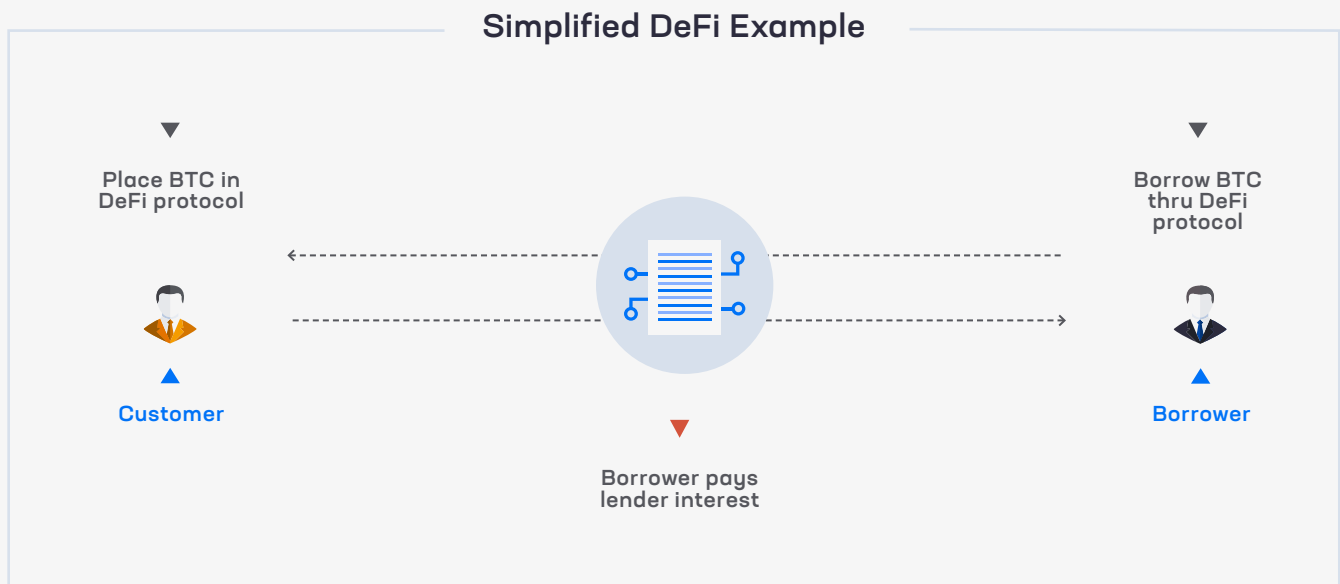
Decentralized Finance (DeFi)

DeFi stands for Decentralized Finance, which means that there is no one central party facilitating or controlling financial transactions – it’s almost entirely peer-to-peer based.

How does DeFi work in practice? Within traditional financial markets, customers put money into a savings or checking account and it earns a yield. The bank then takes that money and lends it out to retail or corporate clients at a higher yield and keeps the difference (traditional spread lending).



In a DeFi scenario, instead of a customer giving their money to a bank, they pledge their digital asset (Bitcoin, Ethereum, etc.) into a pool (e.g. smart contract) that any borrower can access (borrower positions are typically well over-collateralized) and are paid interest in the token that has been pledged (e.g. if Bitcoin is pledged, interest will be earned in Bitcoin). This is all done in a peer-to-peer format, and is relatively frictionless as it is all executed through smart contracts and rates are set based on supply and demand. Proponents of DeFi will also point out that institutions or individuals have complete control of their money at all times.



There are four main areas of DeFi:

Lending

Taking digital assets and pledging them as assets that can be borrowed by someone else (earning a yield on those assets).

Borrowing

Pledging collateral and taking someone else's digital assets (paying interest on those assets).

Staking

Pledging or locking up digital assets to take part in transaction validation to earn transaction fees.

Liquidator

Providing liquidity to DeFi protocols for positions that become undercollateralized.

Permissioned DeFi

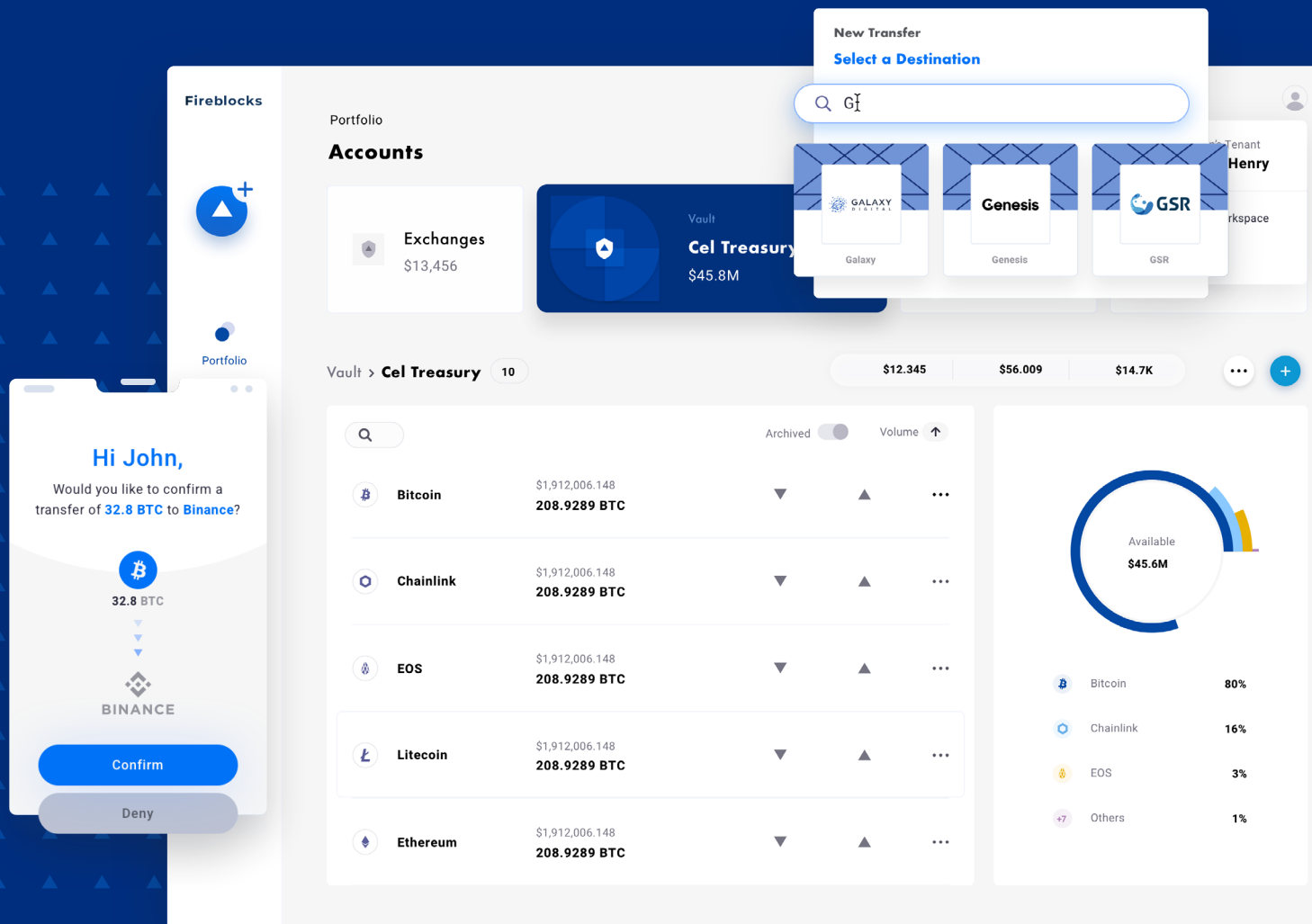
Today, DeFi liquidity pools are mainly permissionless. This means that anyone, including individuals or institutions, can access these pools and participate as a lender, borrower, staker, or liquidator. For regulated financial services institutions, this can present potential problems from a KYC (Know Your Customer) and AML (Anti-Money Laundering) perspective.

To solve these KYC and AML-specific issues, some DeFi protocols are launching Permissioned DeFi pools. Permissioned pools are separate liquidity pools where the participants are “whitelisted” (e.g., a KYC check has been performed). Anonymity of the participants is still preserved, but participants can now have confidence that they are transacting with counterparties that have been vetted by the DeFi protocol or their whitelisting service.

About Fireblocks

Fireblocks is an enterprise-grade platform delivering a secure infrastructure for moving, storing, and issuing digital assets. Fireblocks enables exchanges, lending desks, custodians, banks, trading desks, and hedge funds to securely scale digital asset operations through the Fireblocks Network and MPC-based Wallet Infrastructure. Fireblocks serves over 800 financial institutions, has secured the transfer of over \$2 trillion in digital assets, and has a unique insurance policy that covers assets in storage & transit.

For more information, please visit www.fireblocks.com.



The screenshot displays the Fireblocks user interface. On the left, a mobile-style confirmation modal is shown with the text: "Hi John, Would you like to confirm a transfer of 32.8 BTC to Binance?". Below this, it shows a Bitcoin icon with "32.8 BTC" and the Binance logo. At the bottom of the modal are "Confirm" and "Deny" buttons.

The main dashboard area shows a "Portfolio" section with "Accounts" including "Exchanges" (\$13,456) and "Vault" (Cel Treasury, \$45.8M). A "New Transfer" modal is open, titled "Select a Destination", showing search results for "Galaxy", "Genesis", and "GSR".

Below the accounts, the "Vault > Cel Treasury" section is visible, showing a list of assets with their balances and a "Volume" sort option. The assets listed are:

Asset	Balance	Volume
Bitcoin	\$1,912,006.148 208.9289 BTC	▲
Chainlink	\$1,912,006.148 208.9289 BTC	▲
EOS	\$1,912,006.148 208.9289 BTC	▲
Litecoin	\$1,912,006.148 208.9289 BTC	▲
Ethereum	\$1,912,006.148 208.9289 BTC	▲

To the right of the asset list is a circular gauge chart showing "Available \$45.6M" and a breakdown of asset types: Bitcoin (80%), Chainlink (16%), EOS (3%), and Others (1%).