



Digital Assets 101:

# A Beginner's Guide for Institutional Investors

Part III: The Crypto Capital Markets

# 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 the crypto capital markets and how a crypto transaction differs from a traditional financial services transaction. You can learn more on other topics at [www.fireblocks.com/academy](https://www.fireblocks.com/academy).

# What are the crypto capital markets?

The digital asset ecosystem is different from traditional financial markets, as everything and everyone is decentralized. Below is a graphical depiction of the major segments of the crypto capital markets and a short description of each segment.

## Crypto Capital Markets Ecosystem



## ▼ Ledger Layer

This is where transactions get recorded, and it involves three foundational parts:

### Blockchain Protocols

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These are the technology infrastructures used for logging transactions (e.g. Bitcoin, Ethereum, Solana, or Cardano).

### Blockchain Tokens (cryptocurrencies)

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These are the tokens that are used as the medium of exchange for transactions on the blockchain protocols (e.g. BTC, ETH, SOL, or ADA).

### Miners and Validators

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Institutions or people that mine the transactions and create new blocks on the blockchain.

## ▼ Transaction Execution Layer

These are venues and institutions that facilitate transactions and help provide liquidity to the market.

### Exchanges

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Marketplaces that facilitate the buying and selling of digital assets.

### Lending Desks

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Institutions that will lend to market participants taking digital assets as collateral.

### Liquidity Providers / Market Makers

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Institutions providing liquidity to markets to facilitate trading (e.g. OTC desks).

## ▼ End User Layer

These are the end users transacting in and with digital assets. These include both retail customers and institutions such as hedge funds, family offices, and asset and wealth managers.

## ▼ Decentralized Finance (“DeFi”) Layer

These are the decentralized applications that are built on top of blockchain protocols. There are two major components to the DeFi layer:

### DeFi Protocols

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Similar to blockchain protocols in that they act as the “venue” for you to interact with various aspects of DeFi (borrowing, lending, staking, etc.).

### DeFi Tokens

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Tokens of DeFi protocols that allow for governance of the protocol.

## ▼ Services Layer

These are institutional players that provide professional services to the digital asset ecosystem. These include:

### Compliance

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Blockchain compliance for anti-money laundering / know your transaction (KYT) and know your customer (KYC).

### Custodians

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Institutions that will hold your private keys (these can be dedicated custodians or exchanges).

### Administrative and Tax Providers

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Companies that provide crypto fund administrative and tax services.

### Infrastructure for Transfer and Settlement

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Companies that help facilitate the transfer and settlement of digital asset transactions.

### Fiat on and off-ramp

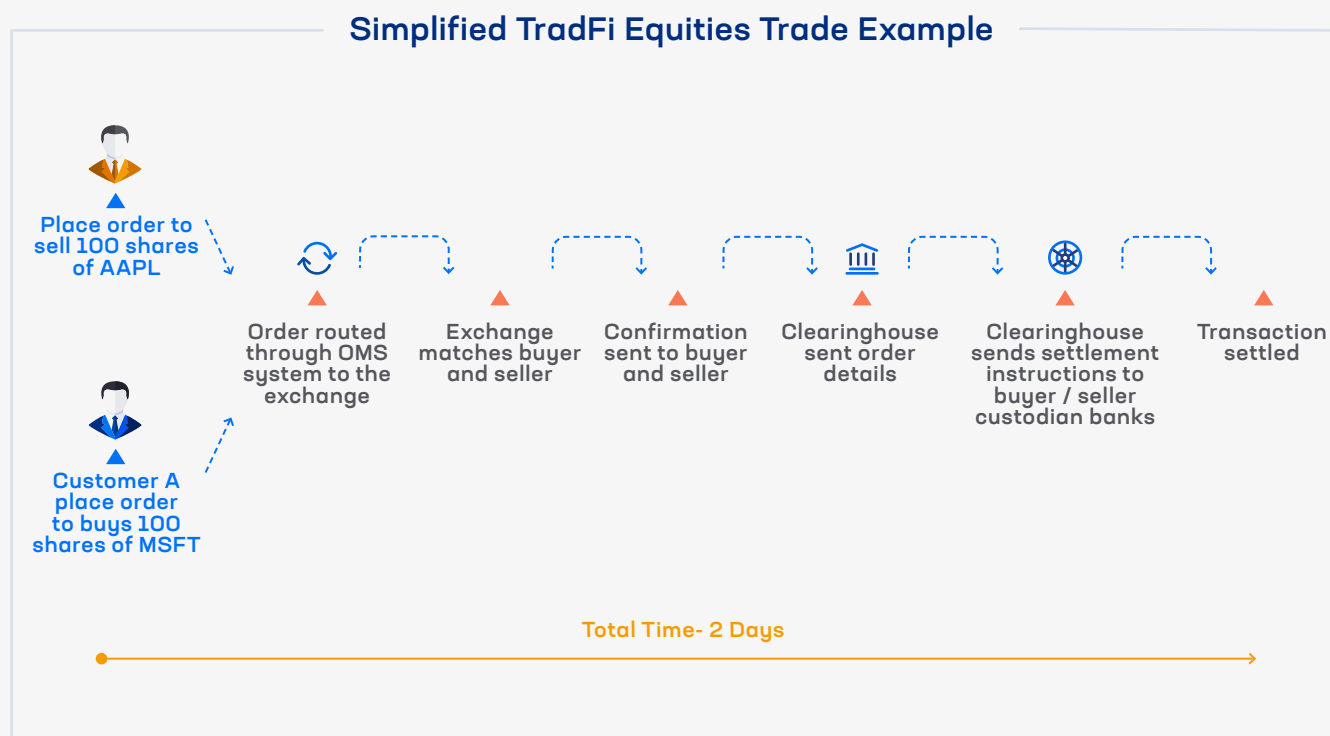
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Banks that facilitate the exchange of fiat currency into digital assets.

## How does a transaction work in Traditional Finance vs. Digital Assets?

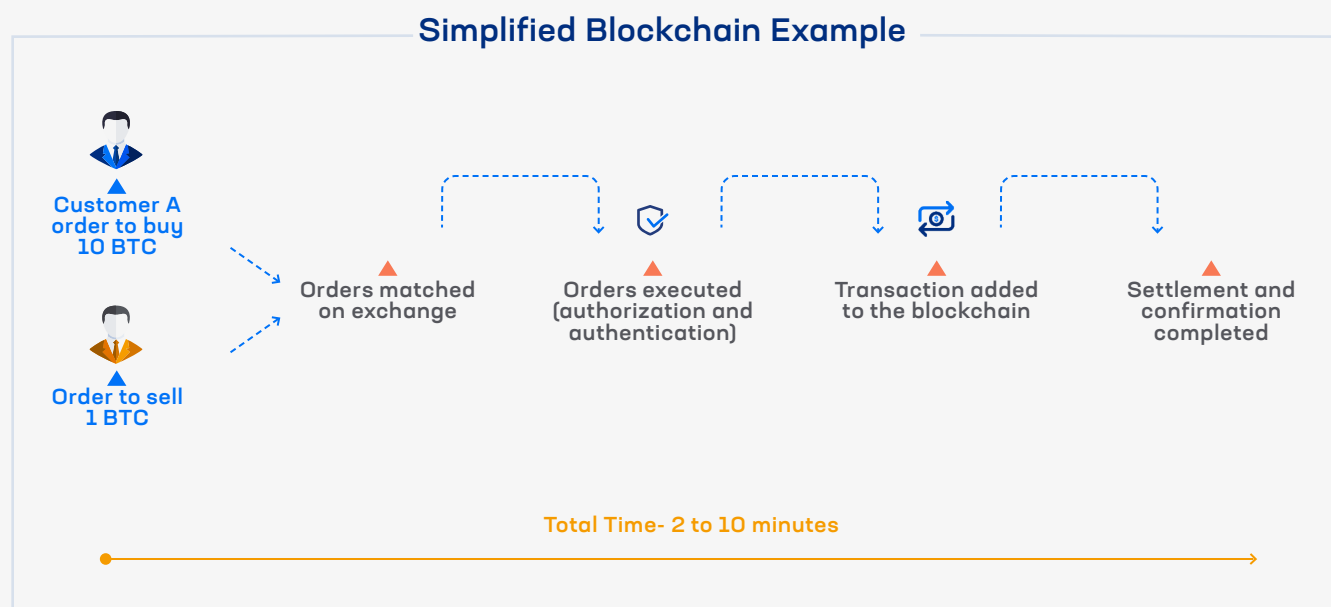
Transactions are executed differently in the digital asset space than in traditional financial markets. To illustrate this, let's review two examples.

The first is a simplified traditional equities trade where a user wants to buy 100 shares of AAPL. This person will enter their order into their portal of choice. The order will then be routed to a trading desk and sent to an exchange where it will be matched with a seller order. Confirmations will be sent to the buyer and seller that the trade has been executed, and the Clearinghouse will be sent the order details. The Clearinghouse will then send settlement instructions to the respective custodial banks, and the transaction will eventually be settled. This process typically takes 2 days.





The second example is a simplified Bitcoin transaction. A user wants to buy 1 BTC. They can go directly to an exchange and place their buy order. The order is matched and executed. The transaction is then added to the blockchain, and settlement and confirmation is complete. This process typically takes 2 to 10 minutes.

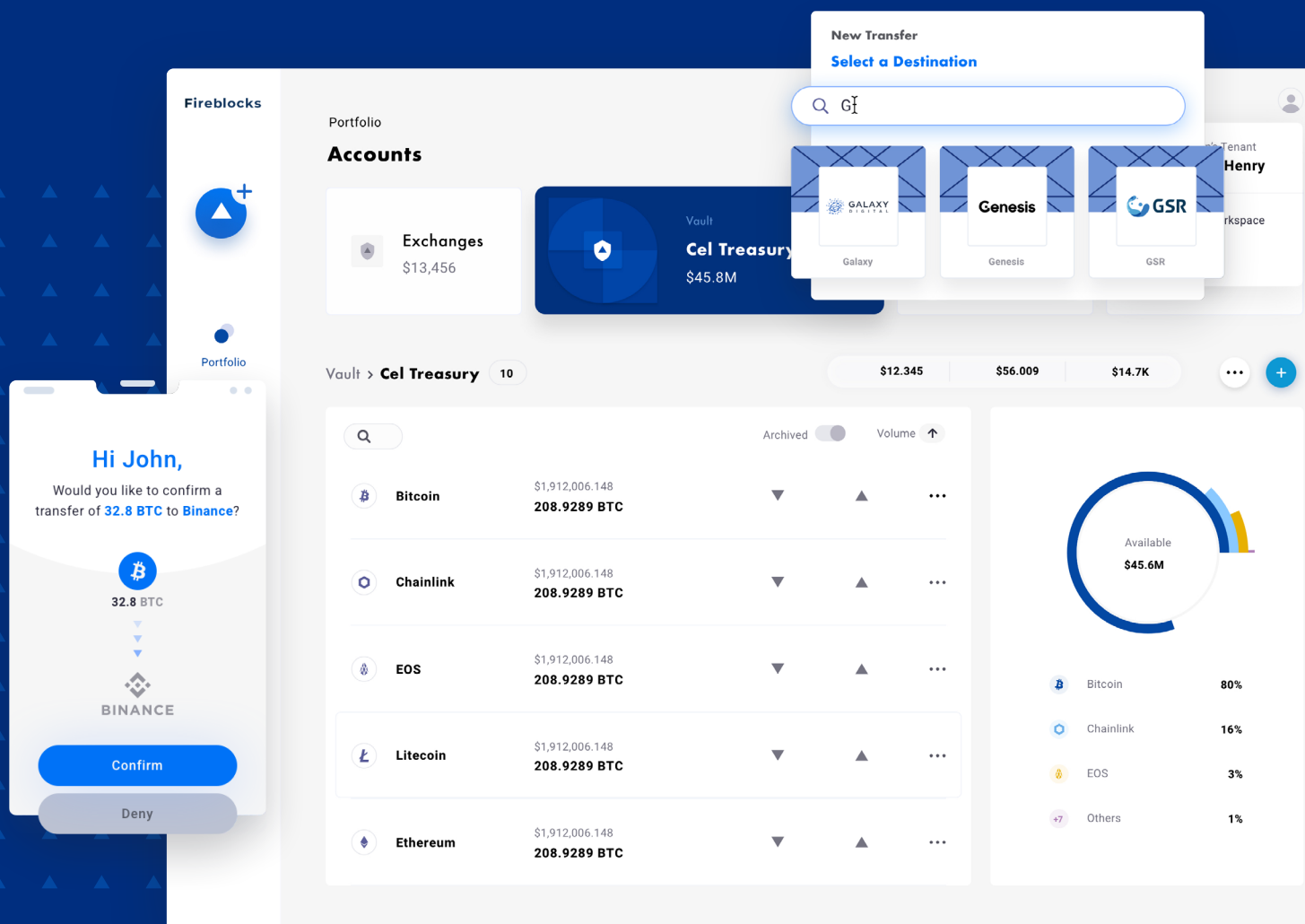


In a blockchain-based transaction the clearing and settlement timelines are greatly reduced given the lack of third parties involved, the peer-to-peer nature of how blockchain networks work, and how transactions are stored on the blockchain itself.

# 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](https://www.fireblocks.com).



The screenshot displays the Fireblocks user interface. On the left, a mobile device shows a confirmation screen for a transfer of 32.8 BTC to Binance. In the center, a 'New Transfer' modal is open, showing a search bar with 'G' and three destination options: Galaxy, Genesis, and GSR. The main dashboard shows the 'Accounts' section with 'Exchanges' at \$13,456 and 'Vault' at \$45.8M. Below this, the 'Vault > Cel Treasury' section displays a table of assets:

Asset	Balance	Archived	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	▼	▲

On the right, a donut chart shows the available balance of \$45.6M, with a breakdown by asset:

Asset	Percentage
Bitcoin	80%
Chainlink	16%
EOS	3%
Others	1%