

Crypto OTC Trading Report 2024:

OTC Desks, Prime
Brokers, Centralized
and Decentralized
Exchanges

Market Structure, Trends,
and Regulations



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Introduction

Crypto is probably the most fragmented asset class in the history of electronic trading. Crypto markets facilitate interactions between traders by bringing them together through various electronic trading services, including on-exchange and off-exchange execution.

Each trading venue, centralized or decentralized, operates with a specific market structure (or trading mechanism), which is a set of trading rules that govern participant interactions.

It determines the actions they can take, their information about other market participants' actions, and the protocol for matching buy and sell orders. As reported by CoinMarketCap, there are now over 700 spot crypto venues worldwide, underscoring the extensive fragmentation within the crypto market landscape (as of November 2024).

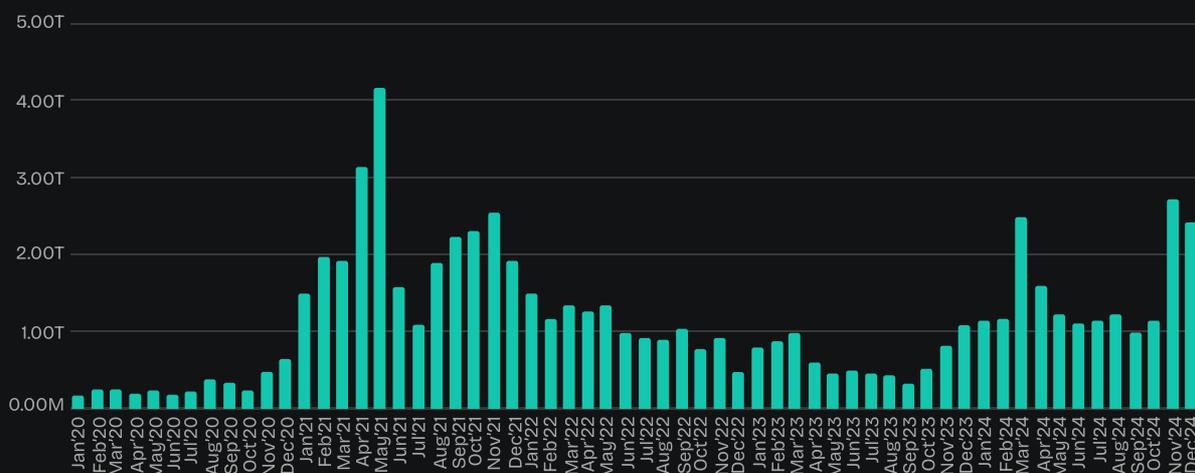
Market structures play a pivotal role in shaping various market characteristics, including:

- Liquidity
- Transaction costs
- Pricing dynamics
- Volatility
- Trading profitability

All of these parameters significantly impact trading strategies. Each market structure profoundly influences both market efficiency and quality.

In the crypto markets, both centralized on-exchange trading and decentralized exchange (DEX) trading offer valuable insights into market size through metrics like average daily trading volumes. However, the crypto Over-The-Counter (OTC) market poses a distinct challenge due to its lack of transparency and the absence of a centralized data repository.

Figure 1: CEXs Monthly Trading Volumes



Source: [Finery Markets](#)

This report delves deeply into the institutional OTC crypto market, aiming to quantify the level of activity within this segment.

Section 1: Market state— United in Fragmentation

Market fragmentation in the crypto space is a complex phenomenon driven by various factors, including technology, competition, regulatory landscapes, and evolving market structure. This fragmentation significantly impacts key market characteristics such as liquidity, transaction costs, pricing dynamics, and volatility.

A paradoxical situation arises when comparing consolidated and fragmented markets:

- Consolidated Markets: Foster competition among traders for optimal pricing.
- Fragmented Markets: Encourage competition among market venues and price discovery centers to offer low-cost services.

● Consolidated VS Fragmented Markets

This dichotomy creates a tension between two forms of competition. While competition among trading venues can drive innovation and potentially reduce service costs, these benefits might often be outweighed by increased complexities for traders, higher costs associated with seeking the best price across multiple venues, and challenges in navigating different execution types.

For instance, a study by Acuiti and BSO found that 57% of crypto trading firms were looking to increase the number of venues they trade on, indicating a trend toward further **fragmentation**. This can lead to liquidity being spread thin across multiple platforms, potentially impacting market efficiency.

● Fragmentation in Crypto Markets

The crypto market is already characterized by extreme fragmentation, with over 700 trading venues globally, as reported by **CoinMarketCap**. This proliferation of trading venues has several challenges, such as connectivity issues, where buyers and sellers often transact on different platforms, hindering efficient matching.

Competition in crypto markets happens on several levels, much like TradFi markets, but with some unique features. Just as in traditional markets, crypto trading includes:

- OTC (over-the-counter) versus on-exchange trading
- The differences between quote-driven and order-driven markets.

However, the crypto market also brings in new aspects, such as:

- Onchain versus offchain trading execution.
- The choice between centralized trading venues and decentralized exchanges (DEXs).

These factors add complexity and show how the crypto trading environment is constantly changing.

• Regulatory Frameworks

The regulatory landscape plays a crucial role in shaping market fragmentation and stimulating further division, as different jurisdictions are at various stages of implementing crypto regulations.

These regulations could influence where trading flows concentrate in the future. Regulatory developments may lead to a shift in trading volumes between offshore and onshore regulated markets, potentially altering the current landscape.

1. Centralizing web3: Bringing Order(s) to the Decentralized World

The foundational promise of blockchain finance revolves around the disintermediation of financial services, offering a decentralized and accessible platform that aims to eliminate traditional intermediaries. However, this vision faces significant challenges when confronted with the centralized nature of existing trading protocols and the demands of institutional players.

• Challenges in Replicating Centralized Efficiency

Blockchain's consensus-based validation processes struggle to match the efficiency and speed of traditional trading protocols such as Central Limit Order Books (CLOB), Request for Quote (RFQ), and Request for Stream (RFS).

These established protocols excel in the following:

- Continuous trading
- Transparency
- Low-latency order matching
- Efficient handling of high-volume requests

These features are essential for institutional players who require robust trading environments.

● Latency and Scalability Issues

Decentralized platforms face significant hurdles in providing the seamless trading experience expected by institutional investors:

- 1. Consensus Mechanisms:** While fully transparent, these can cause delays unsuitable for modern trading speeds.
- 2. Blockchain Validation Process:** Hosting CLOB, RFQ, or RFS on the blockchain leads to high latency and costs, as every order, cancellation, and modification must be validated and stored across all network nodes.
- 3. Competing Blocks:** This issue can result in some transactions not being recorded in all blockchain versions, necessitating retransmission and further validation, incurring extra costs and delays.

● Technological limitations

The decentralized nature of blockchain presents complex challenges in maintaining the balance between transparency and the privacy and cybersecurity needs of institutional investors.

These players must adhere to strict regulatory compliance and data protection standards, which can be difficult to achieve in a fully transparent system.

While the ambition to decentralize financial services is commendable, current technological limitations present significant obstacles in replicating the efficiency of centralized trading protocols.

As blockchain technology continues to mature, ongoing research and innovation will be crucial in bridging the gap between the decentralized vision and the practical requirements of institutional trading.

The evolution of blockchain technology may lead to hybrid solutions that combine the benefits of decentralization with the efficiency of centralized systems that satisfy both the ideological goals of blockchain and the practical needs of the financial industry.

2. Trading Execution: A Layered Cake

2.1 Centralized Exchanges (CEXs)

CEXs are trading platforms managed by a central authority that facilitate trading through offchain matching via a Central Limit Order Book (CLOB).

They offer a structured gateway to blockchain technology, enabling fund deposits, withdrawals, and final settlements.

CEXs typically manage post-trade settlements and are responsible for safeguarding crypto assets.

However, there is an increasing trend among institutional players to use specialized crypto custodians for settlements and enhanced asset protection.

2.2 OTC markets: Electronic Communication Networks (ECNs) and Smart Order Routers

● Electronic Communication Networks (ECNs)

ECNs are traditionally rooted in financial markets and are designed to connect buyers and sellers directly. In the crypto space, they efficiently link liquidity takers with liquidity providers in OTC markets to display, match, and execute buy and sell orders.

Both CEXs and ECNs leverage offchain matching engines, but ECNs may operate through various protocols such as the Central Limit Order Book (CLOB), Request for Quote (RFQ), Request for Stream (RFS), or hybrid models. These advanced systems ensure efficient trade execution, catering specifically to the needs of their clients.

Furthermore, different blockchains are employed to store transaction data and settlement records across user nodes, ensuring transparency and security in every transaction.

● Smart Order Routers (SORs)

Smart Order Routers (SORs) are sophisticated tools designed to enhance trade execution in the crypto markets.

These systems simultaneously analyze multiple exchanges and over-the-counter (OTC) trading venues to identify the best available indicative prices and liquidity for a given order. The primary goal of SORs is to secure the most favorable execution route for traders by distributing large orders across different liquidity pools.

SORs function as intelligent routing systems rather than trading venues, meaning they primarily deal with indicative liquidity. SORs focus on minimizing costs and maximizing returns for users, and they also adapt to market conditions in real time.

However, it is important to note that liquidity providers connected to SORs have the right to reject a trade ("last look") after the trader has placed the order through the SOR. This may lead to a deterioration in execution quality, especially in fast markets.

2.3 Decentralized Exchanges (DEXs)

Unlike their centralized counterparts, DEXs operate without a central authority. Participants have direct control over their assets on the blockchain, with trading, execution, settlement, and record-keeping all occurring onchain. These exchanges often utilize Automated Market Maker (AMM) protocols.

In crypto, CEXs, ECNs and DEXs are built following a layered architecture (Figure 2):

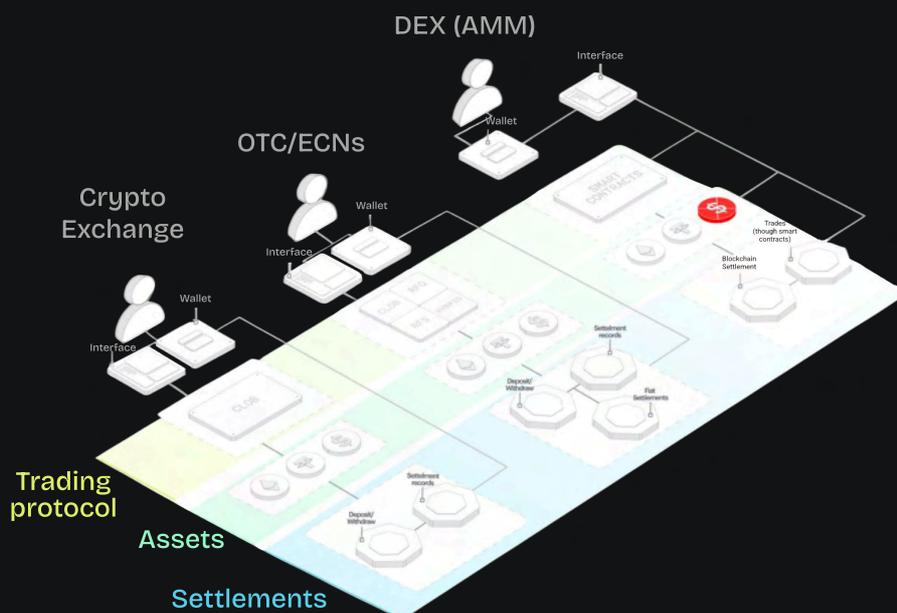
- 1. Settlement Layer:** This blockchain layer (L1 or L2) is essential as it houses the native crypto assets and records settlement and ownership details.
- 2. Asset Layer:** The second layer comprises the asset layer, which includes various coins and tokens issued atop the settlement layer.

3. Trading Protocol Management (CEXs and ECNs): For CEXs and ECNs, a distinct entity is required to manage the trading protocols and facilitate access to the blockchain.

3.1 Smart Contracts (DEXs): In DEXs, a third layer is introduced, which is dedicated to smart contracts. Here, Automated Market Makers (AMMs) or other trading protocols operate, offering a decentralized alternative for order matching.

4. Off-Chain Interaction and User Interface: The final layer is responsible for managing interactions with offchain data and providing UI.

Figure 2: Overview of Crypto Trading and Settlement Infrastructure



Source: [Finery Markets](#)

In general, CEXs and ECNs allow fiat-to-crypto and crypto-to-crypto transactions, while DEXs only enable crypto-to-crypto transactions.

3. Order or Quote? Markets Can't Decide!

The traditional financial markets operate primarily through two distinct execution models: order-driven and quote-driven markets.

Each model presents unique characteristics that cater to different market needs and participant preferences.

3.1 Order-Driven Markets: Transparency and Participant-Led Liquidity

Order-driven markets are characterized by their open and transparent nature, where market participants can submit market or limit orders at any time.

The system distinguishes between liquidity demand (market orders and marketable limit orders) and liquidity supply (non-marketable limit orders).

This system is exemplified by the Central Limit Order Book (CLOB) used in centralized exchanges (CEXs).

Market orders and marketable limit orders are executed immediately against the existing limit order book, thereby demanding liquidity. Conversely, non-marketable limit orders are added to the order book, supplying liquidity. Market makers profit from the bid-ask spread after accounting for market-making costs by executing round-trip trades.

Key Features:

- Full transparency of order book
- Liquidity provided by aggregated participant orders
- Price-time priority for order matching

In a CLOB, liquidity is generated through the continuous interaction of buyers and sellers submitting various order types.

3.2 Quote-Driven Markets: Liquidity Provider-Centric Approach

Quote-driven markets operate on a different principle, where liquidity providers offer quotes (prices) through protocols such as Request for Quote (RFQ) or Request for Stream (RFS).

Key Features:

- Quotes provided by designated liquidity providers
- Significant role of liquidity aggregators and smart order routers
- “Last look” process for trade acceptance

A notable aspect of quote-driven markets is the “last look” process, where trade requests are momentarily held—ranging from milliseconds to hundreds of milliseconds— which allows liquidity providers a brief window to accept, reject, or requote trades. While this offers flexibility and protection for liquidity providers, it can introduce uncertainty for liquidity takers, potentially affecting execution quality in volatile markets.

The crypto market has given rise to hybrid models that combine elements of both order-driven and quote-driven systems. The choice between order-driven and quote-driven markets or the implementation of a hybrid model depends on various factors, including market structure, participant needs, and technological capabilities.

As the financial landscape continues to evolve, particularly with the growth of crypto markets, we may see further innovations in market models that aim to optimize liquidity, transparency, and execution quality.

4. Liquidity Providers (LPs): Crypto Thirst

In crypto markets, liquidity providers (LPs) are like profit-motivated intermediaries who aim to profit by buying low and selling high.

Their primary function is to supply the necessary liquidity for client trades, essentially acting as counterparties in transactions.

Key Functions:

- Buy when clients want to sell
- Sell when clients want to buy
- Maintain a two-sided market by quoting both buying and selling prices

The goal for LPs is to earn by purchasing at lower prices and selling at higher prices. However, they can incur losses if market conditions force them to sell at low prices or buy at high prices.

When LPs make a purchase, they usually don't know who will buy it from them or at what price. Similarly, when they sell, they don't know the price they'll pay to buy it back.

4.1 Market Makers

In traditional finance, particularly in equities and derivatives markets, "market makers" are a specialized form of liquidity providers. These entities often have specific obligations and regulatory responsibilities:

- Maintaining certain spread sizes
- Keeping orders in the order book for designated durations
- Continuously providing both buy (bid) and sell (ask) prices for guaranteed quantities of specific assets

Market makers are required to continuously provide both buy (bid) and sell (ask) prices for a guaranteed number of shares of specific assets.

LPs are passive traders, meaning they trade based on their client's needs rather than their own timing. This requires them to be cautious about how and to whom they offer trades, ensuring that their trades are beneficial not just to clients but also to themselves.

LPs often quote both a buying and selling price, creating a two-sided market. However, they usually focus on the side they prefer to trade. To deter unwanted trades, they might set high ask prices to discourage buyers or low bid prices to discourage sellers.

Their primary role is to ensure liquidity and facilitate smooth trading by being ready to buy or sell assets, even when there are few other buyers or sellers. In the crypto markets, the term "liquidity provider" is more frequently used, though "market maker" is also applicable.

• Liquidity Provision in DeFi vs. Centralized Systems

The method of liquidity provision significantly differs between DeFi AMMs and centralized systems with different trading protocols (CLOB, RFQ, RFS):

DeFi AMMs:

- Liquidity depends on providers contributing to liquidity pools
- Providers must own both tokens in a trading pair
- Risk of impermanent loss
- Potential for liquidity shortages in less popular pairs
- Inherent slippage in token exchanges

Centralized Systems (CLOB, RFQ, RFS):

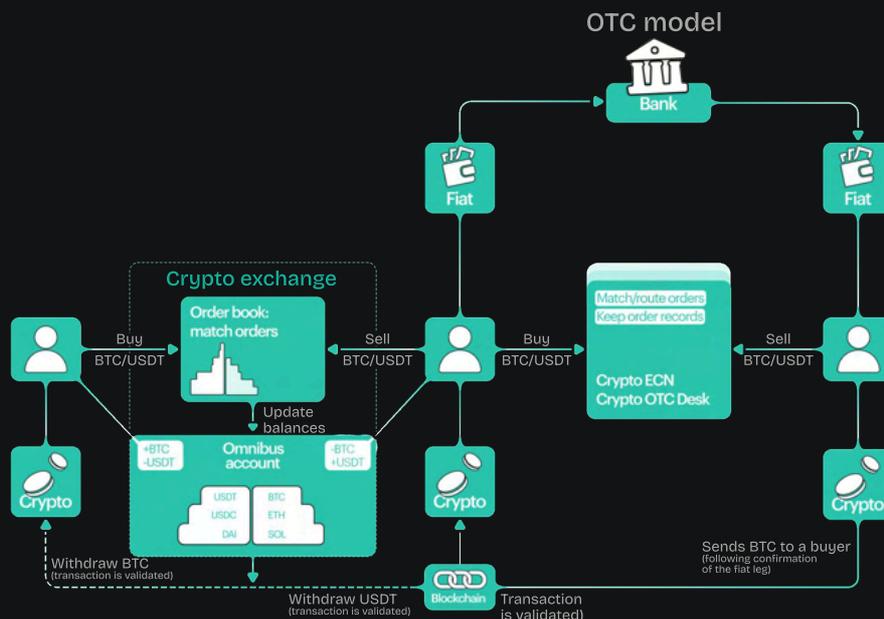
- Typically experience minimal or no slippage (excluding price impact)
- More efficient for popular trading pairs
- Potential for rejections by liquidity providers in quote-driven markets

The role of liquidity providers in cryptocurrency markets is multifaceted and crucial for market efficiency. As the crypto ecosystem continues to evolve, the strategies and mechanisms for liquidity provision are likely to adapt, potentially bridging the gap between traditional finance models and innovative DeFi approaches.

The ongoing development of hybrid models and improved liquidity provision methods will be key to addressing current limitations and enhancing overall market performance.

5. Navigating Post-Trade Complexity: On-exchange vs OTC

Figure 3: Comparison of Crypto Exchange and OTC Trading Models



Source: [Finery Markets](#)

5.1 Centralized Clearing in Web3: The Plot Twist No One Saw Coming

Clearing in crypto markets represents a significant departure from TradFi, potentially transforming the role of intermediaries. In TradFi, central clearing counterparties (CCPs) play a crucial role in managing counterparty risk and netting transactions.

Blockchain technology in crypto markets can automate many of these functions, potentially reducing the need for centralized clearing houses.

The concept of atomic swaps in crypto markets introduces a new paradigm in clearing. These smart contract-based exchanges allow for trustless, peer-to-peer transactions without intermediaries. This contrasts with traditional markets, where trades always pass through a series of intermediaries before final settlement.

Interoperability in crypto clearing presents both opportunities and challenges. Advanced blockchain platforms facilitate seamless cross-border and cross-asset transactions, potentially surpassing the capabilities of traditional clearing systems. However, this also introduces complexities in terms of regulatory compliance across different jurisdictions.

Risk management in crypto clearing differs from traditional markets. While traditional CCPs use complex models to assess and manage risk, blockchain-based systems often rely on overcollateralization and real-time settlement to mitigate risks.

This approach can be more transparent but may also be less flexible in times of market stress.

● Clearing Processes: OTC vs. On-Exchange

The clearing process differs significantly between OTC and on-exchange crypto transactions. On-exchange clearing typically occurs within the exchange's ecosystem, often utilizing internal netting mechanisms to reduce the number of onchain transactions. These exchanges may also implement their own risk management systems, similar to traditional CCPs.

For OTC transactions, clearing is often more straightforward but potentially riskier. Many OTC trades are executed and settled bilaterally without a central clearing mechanism. This can lead to diversification of counterparty risk but less efficient netting of exposures.

To address these challenges, some institutional OTC platforms (ECNs) are developing clearing solutions that aggregate and net OTC trades across multiple counterparties, similar to traditional OTC derivatives markets. These solutions aim to reduce settlement risk and improve capital efficiency for OTC crypto trading while maintaining the flexibility and privacy benefits of OTC markets.

Despite these differences, there's a growing trend of institutional adoption in crypto markets, leading to the development of hybrid clearing models. Some venues are introducing CCP-like entities for crypto trading, combining the benefits of blockchain technology with the risk management practices of traditional finance.

This evolution suggests a potential future where crypto and traditional clearing mechanisms coexist and complement each other.

5.2 Custody in Crypto Markets: From DIY to VIP

In the early days of crypto, people and even organizations stored their private keys themselves. However, as the value of digital assets grew, there was a demand for more secure and compliant ways to manage these keys.

This demand was fueled by the rising worth of digital assets, regulatory requirements, and notable security breaches at exchanges and personal storage setups. To tackle these issues, institutional-grade custody solutions were developed.

These solutions provide enhanced security, distributed storage locations across different areas, and offer advanced systems for managing keys. Custody in crypto markets shares similarities with traditional financial custody but introduces unique challenges and solutions due to the digital nature of assets.

In traditional markets, custodians safeguard physical certificates or maintain electronic records of ownership. Crypto custodians, however, must secure cryptographic private keys that control access to digital assets on the blockchain.

The regulatory landscape for crypto custody is evolving to align more closely with traditional financial regulations. For instance, the European Union's Market in Crypto-assets Regulation (MiCA) establishes crypto custodians as fiduciaries, subject to governance, conflicts of interest, asset segregation, and operational risk requirements, similar to traditional custodians.

- **Custody in OTC and On-Exchange Transactions**

The distinction between OTC and on-exchange transactions significantly impacts custody arrangements in crypto markets. For on-exchange trading, custody is often provided by the exchange itself or a closely partnered third-party custodian. Users typically deposit their assets into the exchange's wallets (pre-trade), which are then used for trading.

This model allows for rapid trading but introduces counterparty risk with the exchange.

In contrast, OTC transactions often involve self-custody or independent third-party custodians. Institutional OTC traders frequently use segregated custody solutions where assets remain in secure cold storage even during trading.

This approach offers enhanced security. Some advanced custody solutions are bridging this gap by offering “custody-integrated” OTC trading, where assets remain in third-party custody but can be quickly deployed for OTC trades through secure APIs and multiparty computation (MPC) technology. This level of integration is less common in traditional markets, where custody and trading functions are often more separated.

● Security in Crypto Custody

Security measures in crypto custody often exceed those in traditional finance due to the irreversible nature of blockchain transactions. While traditional custodians rely on physical vaults and cybersecurity measures, crypto custodians employ cryptographic techniques like multisignature wallets and geographically distributed cold storage. These measures aim to prevent unauthorized access while maintaining operational efficiency.

Insurance plays a crucial role in both traditional and crypto custody. However, the crypto insurance market is less mature, with policies often having lower coverage limits and higher premiums due to the perceived higher risk.

This contrasts with the well-established insurance frameworks in traditional finance.

5.3 Post-trade Settlement in Crypto Markets

To make trades on crypto platforms or crypto settlements on blockchains, users need crypto wallets to “store” their crypto assets. Technically, crypto assets are not stored in the crypto wallets but instead saved on the blockchain in the form of a wallet address. The crypto wallets contain the user’s public and private keys needed to store and transact with the crypto assets.

Post-trade settlement in crypto markets differs significantly from TradFi systems, offering both advantages and challenges. In TradFi markets, settlement typically occurs on a T+ basis (several business

days after the transaction) and involves multiple intermediaries and clearing houses.

In contrast, many crypto venues offer near-instantaneous settlement, leveraging blockchain technology to enable direct asset transfers with integrated payment mechanisms.

● How Settlements Work in Crypto

This rapid settlement in crypto markets somewhat eliminates counterparty risk and reduces the need for complex reconciliation processes that are common in TradFi.

However, it also introduces new considerations. For instance, the finality of blockchain transactions can vary depending on the consensus mechanism and network congestion, which is not a concern in traditional markets with centralized settlement systems.

Some practices in crypto settlement mirror those in traditional markets. For example, some crypto venues use internal ledgers for offchain settlements between users, similar to how traditional brokers might net trades before final settlement. This approach helps reduce onchain transactions and associated costs.

In traditional markets, settlement cycles are fixed and uniform. In crypto, users can influence onchain settlement speed by adjusting transaction fees, creating a market-driven approach to settlement prioritization. This can lead to more efficient allocation of network resources but also introduces potential inequalities in settlement speed.

In the context of remittance transactions, this complexity is further compounded by the involvement of two settlement legs: the crypto leg and the fiat inter-bank leg.

The crypto leg typically benefits from the flexibility and speed of blockchain technology, where transactions can be processed 24/7. On the other hand, the fiat inter-bank leg is often constrained by traditional banking hours and regulatory frameworks, which can lead to delays.

● Aligning Crypto and Traditional Settlement Mechanisms

This combination of two worlds—blockchain’s decentralized, always-on nature and the centralized, time-restricted operations of traditional banking—creates a scenario where the overall settlement process is only as strong as its weakest link. While the crypto leg can offer rapid transactions, the fiat leg may slow down the entire process due to limited operating hours and inter-bank settlement cycles.

Despite these differences, there’s a growing trend of convergence between crypto and traditional settlement systems.

Some institutional-focused crypto platforms are introducing features like prime brokerage (PBs) or central counterparties (CCPs) to manage counterparty risk, mirroring structures in traditional financial markets.

In the context of post-trade settlement, there’s a notable distinction between OTC and on-exchange crypto transactions. On-exchange settlements typically leverage the exchange’s infrastructure, often utilizing internal ledgers for offchain settlements and periodic onchain reconciliations. This allows for near-instantaneous trading and efficient netting of transactions.

In contrast, OTC transactions in crypto markets often involve direct wallet-to-wallet transfers, which are settled onchain. These settlements can be slower and more expensive due to blockchain network fees, but they offer greater transparency and don't rely on the creditworthiness of an exchange.

Some crypto ECNs have developed hybrid models, using internal ledgers for immediate trading but settling onchain at certain intervals, combining the speed of centralized systems with the security of blockchain settlements.

Section 2: What's next?

1. Key Trends

While these crypto markets are traded primarily by retail traders, a growing focus on regulating financial risks has resulted in a greater rate of adoption by proprietary trading groups, hedge funds, and asset managers.

Through their participation, the market has expanded further, providing additional financial instrument offerings and sophisticated market protocols in line with the more complex trading preferences and strategies of these user groups.

1.1 TradFi Meets Crypto

- **The Transition of TradFi Professionals into the Crypto Space**

Previously, we saw a big wave of professionals from traditional finance (TradFi) diving into the world of digital assets. These folks brought along their deep knowledge of risk management, compliance, and financial operations, which they used to build more sophisticated ways to handle digital assets.

Their skills were crucial in shaping the foundational infrastructure of the crypto market, leading to improvements in digital asset management, prime brokerage, and the creation of electronic communication networks (ECNs).

With these TradFi veterans on board, the crypto space saw a diversification of trade cycles and the introduction of stronger risk distribution techniques. This helped boost the overall integrity and reliability of the crypto ecosystem.

- **Returning to TradFi to Integrate Crypto Solutions**

As the crypto industry matures, we're seeing a new trend: those crypto-savvy professionals, including the seasoned TradFi experts, are heading back to traditional financial institutions. Their mission is to weave crypto solutions into the established frameworks of banks and financial service providers. Big names like BlackRock, HSBC, Nomura, and BNY Mellon are tapping into the expertise of these professionals to roll out crypto-centric ventures.

This shift signifies an intriguing moment for the financial industry as traditional institutions begin to genuinely embrace the potential of digital assets and strive to offer their clients comprehensive crypto services in a secure and regulated environment.

2. Buy vs. Build: Trading Technology for Crypto Markets

The growing institutional adoption of crypto has led to an increase in demand for trading technology and infrastructure. As both crypto-native and traditional financial institutions enter the market, there is a critical need for institutional-grade solutions that can manage high-volume transactions, offer robust security, and ensure regulatory compliance.

This technological evolution is crucial in bridging the gap between traditional finance and the crypto ecosystem, facilitating smoother integration of digital assets among institutional players.

A key decision for these institutions is whether to buy or build their trading technology. This dilemma mirrors the challenges faced in traditional financial markets over the past decades, particularly in foreign exchange (FX) and equities trading. According to a Coalition Greenwich report¹, the “buy, build, and integrate” strategy is gaining popularity, with firms combining pre-built platforms with proprietary systems.

● Trends in Crypto Trading Technology

Research indicates a growing trend toward utilizing third-party solutions, driven by the increasing quality and sophistication of available products, with institutions increasingly opting for off-the-shelf products to meet their trading needs.

The FX market’s evolution offers valuable insights. In the 1980s and 1990s, the introduction of electronic trading systems revolutionized FX trading, increasing efficiency and reducing transaction costs. Similarly, the equities market has seen a transition to a fully electronified state, largely dependent on low-touch business models. These historical examples suggest that the crypto market may follow a similar path of technological adoption and standardization.

● Advantages of Buying Technology

Purchasing or licensing technology can provide a faster route to market entry. This approach offers several benefits:

1. Rapid time-to-market: Off-the-shelf solutions allow firms to quickly implement trading systems, similar to how FX electronic communication networks (ECNs) provided efficient market access in the 1990s.

2. Regulatory Compliance: With the increasing regulatory scrutiny, using established solutions can help ensure compliance, much like how regulated status became a key factor for FX trading partners.

3. Access to Advanced Features: Third-party solutions often incorporate sophisticated features for pre-trade, trade and post-trade stages of the cycle.

¹ <https://www.tradersmagazine.com/departments/trading-reimagined/buy-build-and-integrate-cited-as-2024-market-structure-trend/2t>

● Benefits of Building In-House

Despite the trend toward buying, some institutions may still opt to build their own systems:

- 1. Customization:** In-house development allows for tailored solutions that precisely meet an institution's specific needs.
- 2. Competitive Advantage:** Proprietary systems can provide a unique edge, similar to how high-frequency trading firms in equities markets developed custom systems and algorithms.
- 3. Control:** Building in-house offers greater control over the technology stack, which can be crucial for risk management and strategy implementation.

● Hybrid Approach

Many institutions are adopting a hybrid approach, purchasing off-the-shelf products and customizing them to their specific needs. This strategy balances the benefits of rapid deployment with the advantages of tailored solutions. For example, in the equities market, some firms leverage vendor solutions for low-touch trading while maintaining separate systems for high-touch client services.

3. VC flows: Following the Money

The shift in mainstream acceptance of crypto as a legitimate asset class has been propelled by institutions that were initially expected to be disrupted by crypto innovations. This transformation is evident in the changing patterns of venture capital funding and institutional involvement in the crypto space.

Overall, VC activity has remained subdued in 2024. As [Galaxy's](#) report coined, the past year reflected a 'barbell market,' with Bitcoin leading on one end and memecoin activity driving the other, while large allocators and generalist venture funds showed minimal interest in the space.

According to [CoinCarp](#), the CeFi segment underperformed even further. In total, CeFi crypto companies secured \$980.49 million in funding—a notable 39.48% decline YoY from \$1.62 billion in 2023. None of the dominant themes in 2024—Bitcoin, memecoins, or AI agents—proved particularly conducive to venture capital investment. Total capital allocated to VC funds during the year amounted to \$11.5 billion, marking a decline from 2023 levels.

● Stablecoins Dominate Market and VC Trends

Meanwhile, much of the foundational infrastructure for the crypto market has already been developed, with many players now operating at later-stage maturity.

Anticipated regulatory shifts under the current US administration are expected to intensify competition from established traditional financial intermediaries, further pressuring the sector.

This discrepancy suggests that while the market value of crypto has rebounded, venture capital has not kept pace with previous bull market trends. The institutional embrace of cryptocurrencies is further evidenced by the surge in Bitcoin ETF inflows.

By the end of 2024, the top 15 Bitcoin ETFs combined were responsible for over five percent of Bitcoin's total circulating supply. Major financial institutions like **BlackRock**, **Fidelity**, and **JPMorgan Chase** have launched crypto-related services, with BlackRock's entry into digital assets, including BTC and ETH ETPs, as well as tokenization efforts.

This institutional involvement has brought legitimacy to the crypto market, with over 70% of institutional investors indicating plans to invest in digital assets in 2024.

Despite the growing institutional interest, the flow of venture capital into the crypto space has altered significantly.

In Q4, early-stage deals dominated capital investment, capturing 60% of the total, while later-stage deals accounted for 40%, a notable increase from Q3's 15%. It is worth highlighting that in Q3, later-stage deals represented just 15% of capital invested—the lowest share recorded since Q1 2020.

This shift toward early-stage investments suggests a focus on long-term innovation rather than immediate market gains.

VC activity often serves as a flagship indicator of broader market trends. In 2024, stablecoin companies attracted the largest share of capital, underscoring investors' strong confidence in their ascent to market dominance as the primary bridge between traditional and digital finance. Stablecoins have demonstrated clear market fit and utility within the fast-paced global business environment, highlighting the shortcomings of legacy banking infrastructure in addressing evolving market needs.

● VC Shifts Focus to Foundational Technologies

Venture capital investments in crypto trading infrastructure have remained robust throughout 2024, reflecting the sector's critical role in the ecosystem. In Q3 2024 alone, the "Trading/Exchange/Investing/Lending" category captured the largest share of crypto VC capital, totaling \$462.3 million or 18.43% of all investments.

This trend underscores the continued importance of building robust trading platforms and financial services infrastructure in the crypto space. The sustained interest in trading infrastructure aligns with the broader focus on enhancing market efficiency, liquidity, and accessibility for both retail and institutional investors.

As the crypto market matures, VCs appear to be prioritizing projects that can provide sophisticated trading tools, improved market access, and innovative financial products, recognizing their potential to drive wider adoption and market growth.

These trends demonstrate that while institutions are embracing crypto, the venture capital landscape has evolved, prioritizing foundational technologies and early-stage innovations over speculative investments in more mature companies.

As crypto continues to benefit from strong post-election tailwinds—evidenced by Bitcoin's price rallies and a surge in spot trading volumes in Q4 2024—analysts at Galaxy Research and PitchBook forecast significant growth in 2025. Funding is expected to surpass \$18 billion, driven by declining interest rates, enhanced regulatory clarity, and renewed interest from generalist investors.

4. Market Consolidation (M&A): It's Inevitable

We anticipate a significant increase in mergers and acquisitions (M&A) activity within the crypto market's trading infrastructure, indicating a maturing industry landscape that mirrors the earlier consolidation phases seen in traditional financial markets. In Q1 2024, announced M&A deal activity in the crypto sector increased by 22% compared to the previous quarter, outpacing the overall tech sector's growth.²

This trend is expected to continue in 2025, reflecting the positive momentum built up from the events of 2024.

The motivations behind crypto M&A deals are multifaceted, ranging from acquiring technological expertise to expanding geographical reach.

This may mirror the evolution observed in the foreign exchange (FX) market during the 1980s and 1990s, where the introduction of electronic trading systems led to significant industry consolidation. The initial post-crypto-winter wave of crypto M&A is characterized by a focus on specific subsectors, with 45% of deals in Q1 2024 occurring in the Brokers and Exchanges or Investing and Trading Infrastructure segments.

² <https://architectpartners.com/q1-2024-crypto-ma-and-financing-report/?t>

The consolidation of the crypto industry will be driven by the need for scale, operational synergies, and improved market infrastructure to support institutional adoption.

● **Non-Crypto Firms Go for Crypto-Natives**

Interestingly, the crypto M&A landscape is witnessing an increase in “bridge transactions,” where non-crypto-native firms acquire crypto-native companies. This trend, accounting for 25% of deals in Q1 2024, indicates growing comfort with the sector among traditional financial institutions.

This parallels the historical pattern in FX markets, where large banks acquired electronic communication networks (ECNs) to enhance their electronic trading capabilities and market share.

Despite the positive momentum, the crypto M&A market is still recovering from the downturn experienced in 2023. The first half of 2024 saw 95 announced transactions, a significant improvement from the 148 deals announced in the entirety of 2023. This recovery pattern is similar to the cyclical nature of M&A activity observed in traditional financial markets, where periods of consolidation often follow market downturns.

5. AI in Trading

AI is undoubtedly a hot topic these days, as it is set to transform many areas of life, including institutional crypto trading, by enhancing efficiency, accuracy, and strategic decision-making. AI-driven systems are now integrated into front, middle, and back-office operations, reshaping institutional interactions with crypto markets.

Utilizing machine learning, natural language processing, and predictive analytics, these technologies process

large data sets, identify patterns, and execute trades with minimal human involvement.

AI integration in crypto trading has enhanced trade execution, risk management, and operational efficiency. Major exchanges like Binance and Coinbase use AI algorithms for rapid market analysis and trade execution, while institutions like Fidelity Digital Assets employ AI for improved security and fraud detection in crypto custody.

5.1 Front-Office

a. Market Data and Trading

Machine learning algorithms can now sift through enormous volumes of data from multiple sources, including order books,

social media sentiment, and onchain metrics, to provide real-time insights and trading signals.

These AI-driven systems can detect market anomalies, to some extent, predict price movements, and identify trading opportunities faster than human traders.

AI-powered platforms from market data vendors use artificial intelligence to provide real-time order book data, trade execution analysis, and insights into market microstructure. This helps traders make better decisions and improve their trading strategies.

AI has enabled more sophisticated cross-asset trading strategies in the crypto space. Execution-focused AI-driven systems can execute complex arbitrage strategies across multiple exchanges and asset classes with minimal latency, including market-making strategies to provide liquidity across various crypto assets and exchanges

5.2 Mid-Office

a. Risk Management

Machine learning models can analyze historical data to identify potential risk factors and predict market volatility. These systems can also perform real-time portfolio stress testing and scenario analysis, allowing institutions to better manage their exposure to market risks.

Digital asset custody platforms use AI-powered risk management tools to monitor and analyze transaction

b. Research and Analytics

Natural Language Processing (NLP) algorithms can analyze news articles, social media posts, and regulatory announcements to gauge market sentiment and predict potential market movements. Machine learning models can also be trained on historical data to forecast future trends and identify potential arbitrage opportunities across different crypto assets and exchanges.

Crypto analytics firms announced they are using AI-powered analytics to provide institutional clients with insights into blockchain transactions, helping them assess counterparty risk and comply with regulatory requirements.

patterns, helping institutional clients detect and prevent fraudulent activities, flag potential compliance issues, enhance their multisignature wallet security and provide real-time risk assessments for institutional crypto holdings. Natural Language Processing (NLP) can also be used to stay up-to-date with rapidly evolving regulatory requirements across different jurisdictions.

5.3 Back-Office

a. Settlements

Machine learning algorithms can automate the reconciliation of trades across multiple exchanges and counterparties, ensuring accurate and timely settlements. These systems can also predict and prevent potential settlement failures by analyzing historical data and identifying patterns.

b. Reporting

AI has greatly enhanced reporting capabilities in the crypto trading space. Machine learning algorithms can automatically generate comprehensive trading reports, including performance analytics, risk metrics, regulatory compliance data, and tax liabilities. Natural Language Generation (NLG) technology can even produce human-readable summaries of complex trading data, making it easier for institutional clients to interpret and act on the information.

Section 3: Crypto OTC Markets in the Mirror of Institutions

About Survey

Finery Markets conducted an in-depth survey targeting key industry stakeholders, including liquidity providers (LPs), market makers and prime- brokers.

The survey employed a combination of methodologies, including single-answer questions, multiple-choice questions, and open-ended responses. For open-ended responses, answers were summarized to accurately reflect the key points.

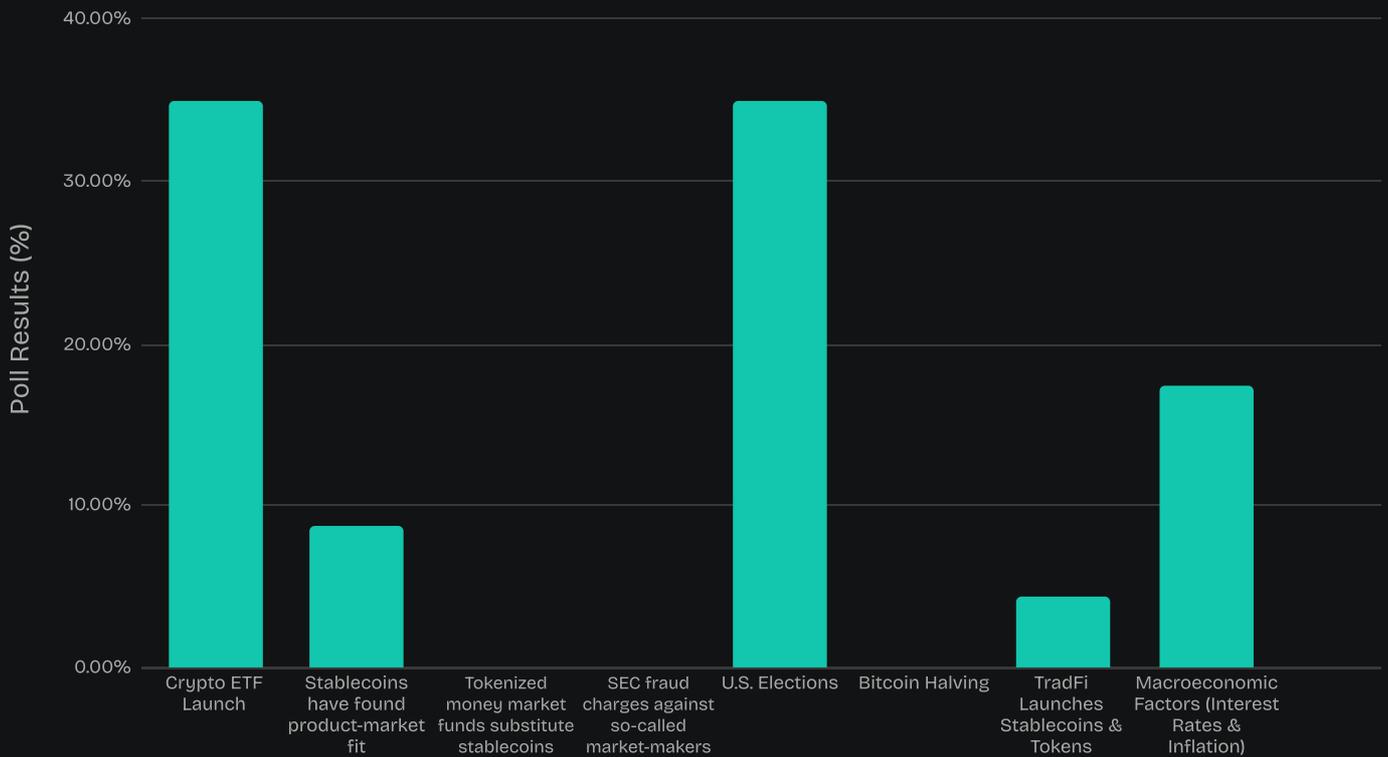
The survey was conducted on a voluntary and anonymous basis under strict non-disclosure agreements. Its primary objective was to gather expert-level assessments from industry leaders on external factors and trade dynamics anticipated to shape the institutional crypto trading landscape in 2025.

1. 2024 Outcomes

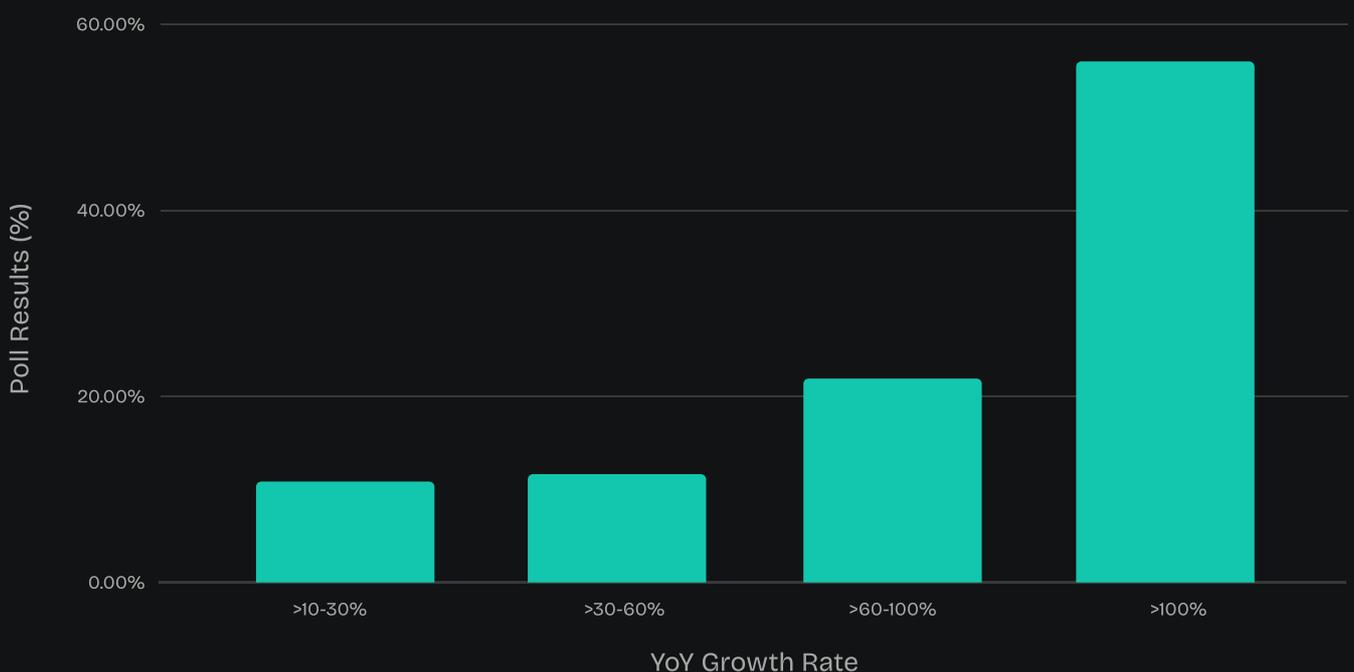
Record Growth: Fifty percent of industry experts reported that over-the-counter (OTC) cryptocurrency trading volumes experienced a year-over-year growth rate exceeding 100% in 2024.

Crypto ETFs and US Elections have been identified as the two most influential factors driving institutional crypto adoption, with $\sim\frac{2}{3}$ participants selecting each. Interestingly, topics such as SEC charges against market makers, tokenized money market funds, and Bitcoin halving were not chosen as influential events.

1. What do you consider the most influential factors for the institutional crypto market this year?



2. How would you evaluate the increase in crypto spot OTC trading volumes in 2024, expressed as a percentage of year-over-year growth?



3. Which five cryptocurrencies have been the most traded in your OTC operations this year?



1-2. BTC



1-2. ETH



3. USDT



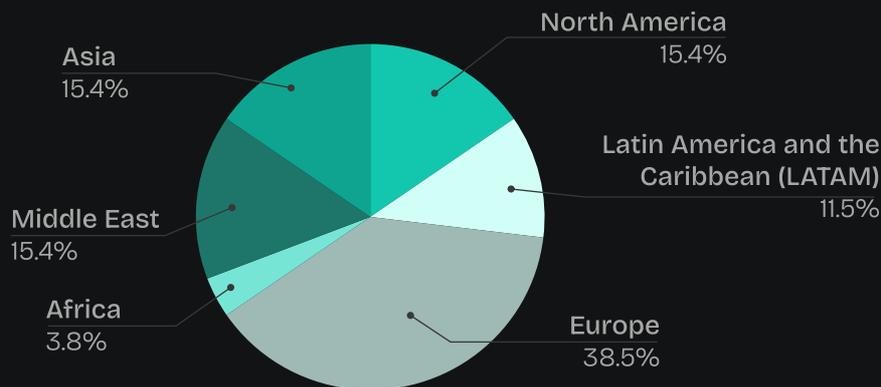
4-5. USDC



4-5. SOL

Respondents also named: LTC, DOGE, POL, ADA, and XRP

4. In which region have you observed the greatest increase in demand for crypto spot OTC trading this year?

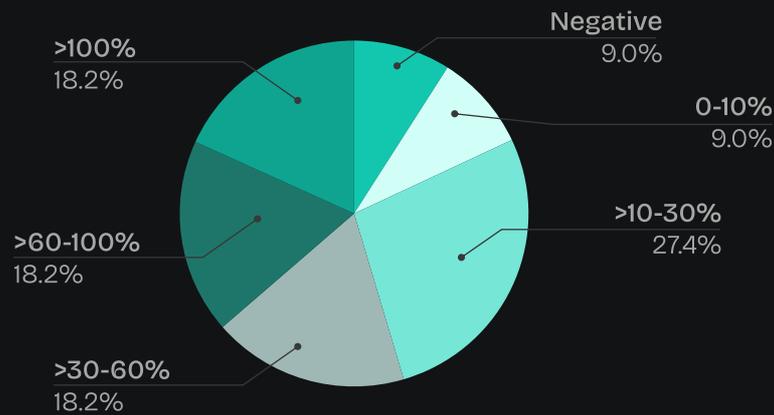


2. Market Dynamics and 2025 Expectations

Growth Projections: 18% expect a 100% + YoY increase, while the majority anticipate growth between 10% and 60%.

Survey participants noted that the fragmented market structure hinders the ability to accurately assess market volumes. As a result, estimates of the total market size varied by more than tenfold, with some LPs' estimates exceeding USD 100 billion. The average daily volume is estimated at USD 39 billion.

5. What are your expectations for the growth of trading volumes in the spot OTC market in 2025, in % YoY?

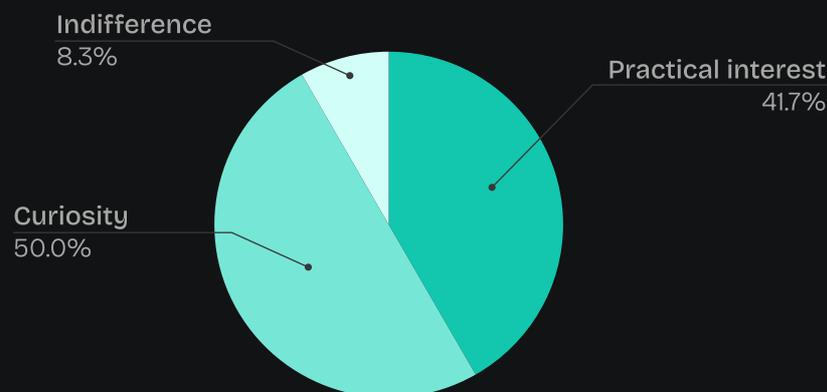


3. Institutional Adoption

Institutional involvement: No longer just a promise from crypto founders' pitch decks to investors, 42% have shown a practical interest in digital assets, meaning they incorporate digital assets into their day-to-day business activities.

Pro-Crypto US Administration: The Trump administration's supportive stance on crypto is considered a significant factor in accelerating institutional adoption.

6. How would you rate the sentiment of institutional investors regarding cryptocurrencies?



7. Which event do you anticipate will most significantly drive institutional crypto adoption?

Respondents identified Donald Trump's presidency and regulatory clarity in the US as the main factors expected to facilitate wider adoption.

Other anticipated drivers include MiCA, expanded crypto offerings from TradFi institutions, spot Bitcoin and potential Solana ETFs, and Direct Public Investments (DPI) in venture funds.

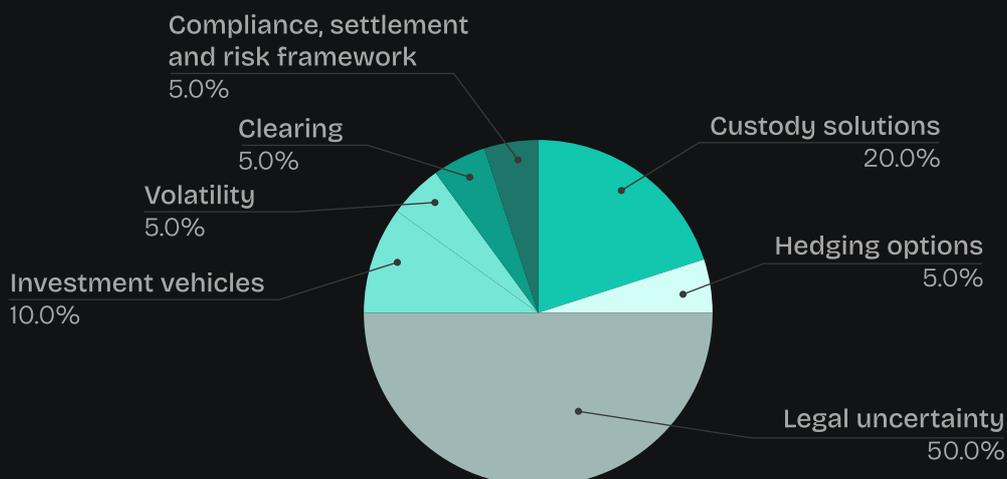
8. How do you evaluate the competitive landscape of OTC crypto trading, and do you foresee any major shifts?

Respondents noted that the market is experiencing tighter spreads and a competitive shift toward more regulated and transparent operations.

Amid these trends, respondents highlighted several key dynamics shaping the future of OTC crypto trading:

- The competitive landscape of OTC crypto trading is evolving rapidly, marked by increasing sophistication and a focus on liquidity, compliance, technology, and service quality. While crypto-to-crypto transactions may shift toward decentralized exchange (DEX) solutions, the crypto-to-fiat OTC market remains stable.
- The market is currently saturated, with a power curve favoring a few dominant players, making it increasingly challenging for gray area OTC brokers due to tighter regulations and heightened client price sensitivity.
- The role of Central Clearing Houses (CCHs) is becoming crucial in mitigating counterparty risks and enhancing transparency, thereby boosting the confidence of larger institutions to participate in the crypto space.
- The introduction of Delivery versus Payment (DvP) netting and the integration of decentralized solutions into OTC trading could drive major shifts, especially as regulatory clarity and approvals become more pronounced.

9. Which part(s) of infrastructure is perceived as the biggest barrier to institutional crypto adoption?

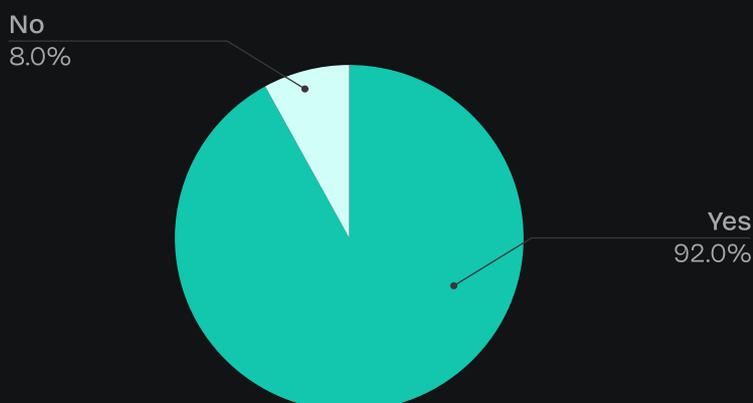


4. Regulatory Issues

Compliance on the Rise: Crypto businesses are increasingly open to operating within regulatory frameworks, with the majority planning to obtain additional licenses in 2025.

Crypto-Friendly Destinations: Singapore, Switzerland, and the UAE continue to be the top choices for institutions seeking favorable regulatory environments.

10. Do you plan to obtain additional crypto licenses next year?



11. Which top 3 countries do you consider to have the most crypto-friendly regulations for institutions involved in digital asset trading?



1. Singapore



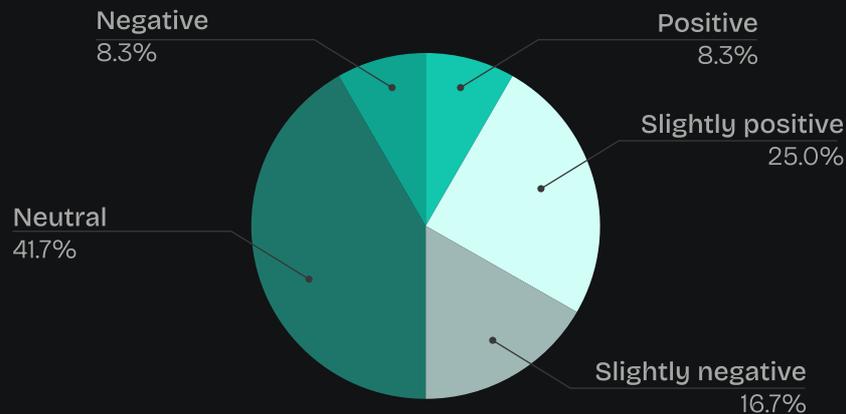
2. Switzerland



3. UAE

Respondents also named Lithuania, Panama, Costa Rica, Malta, Canada, the British Virgin Islands, Hong Kong, Cyprus, and the United Kingdom (UK)

12. How have regulatory developments impacted your OTC trading activities in the past year?

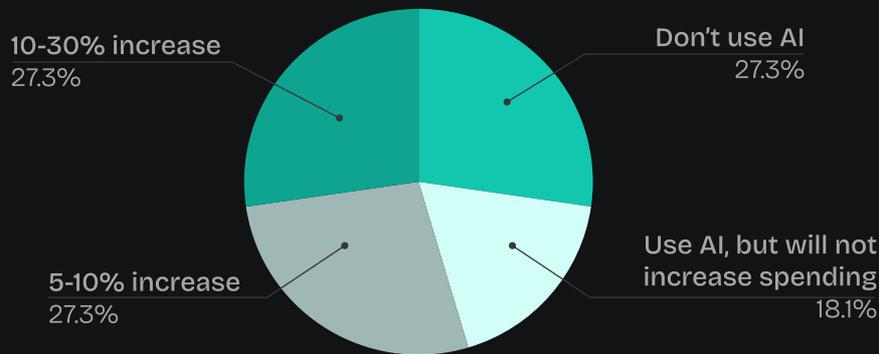


5. AI meets Crypto

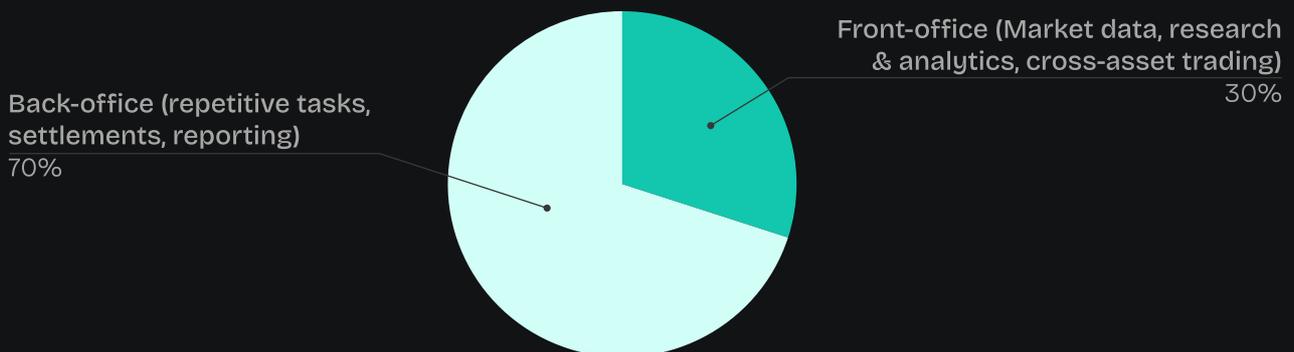
AI Adoption: More than 70% of firms have adopted AI-powered technologies, while 27% report not utilizing AI in their daily operations.

Planned Investment: 54.6% of firms plan to increase their AI spending by 5-30% in 2025.

13. Do you utilize AI in your operations? If yes, by how much do you expect your expenditures on AI-backed solutions to increase in 2025?



14. In your view, which AI use cases hold the most promise for application in trading?

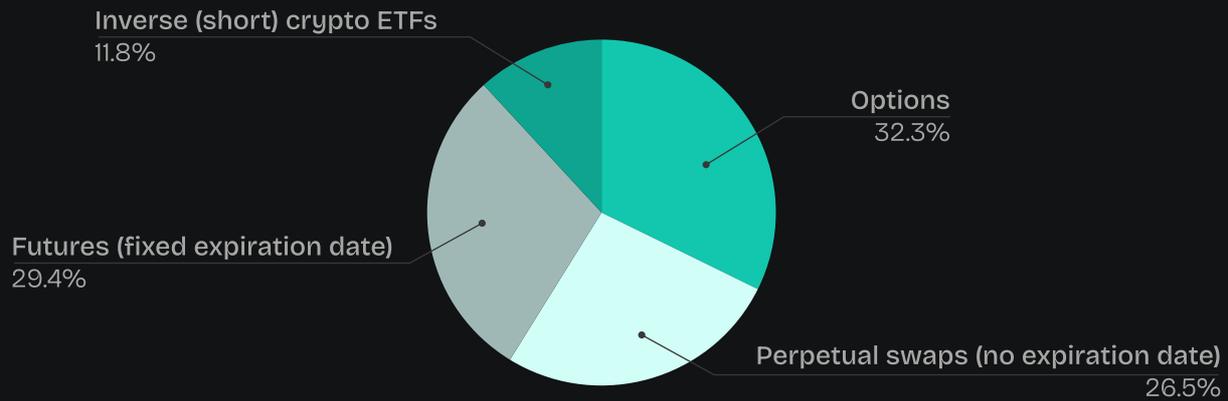


6. Hedging Strategies

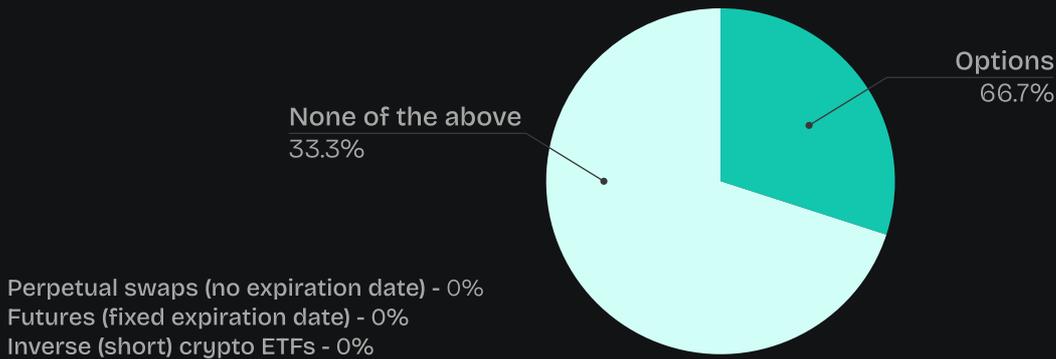
Options and futures continue to be the primary tools for hedging over-the-counter (OTC) crypto exposure, with 66.7% of respondents considering option-based strategies as the most viable hedges for institutional players.

Liquidity Challenges: 36.8% still identify low liquidity as the key barrier preventing wider institutional adoption of crypto derivatives.

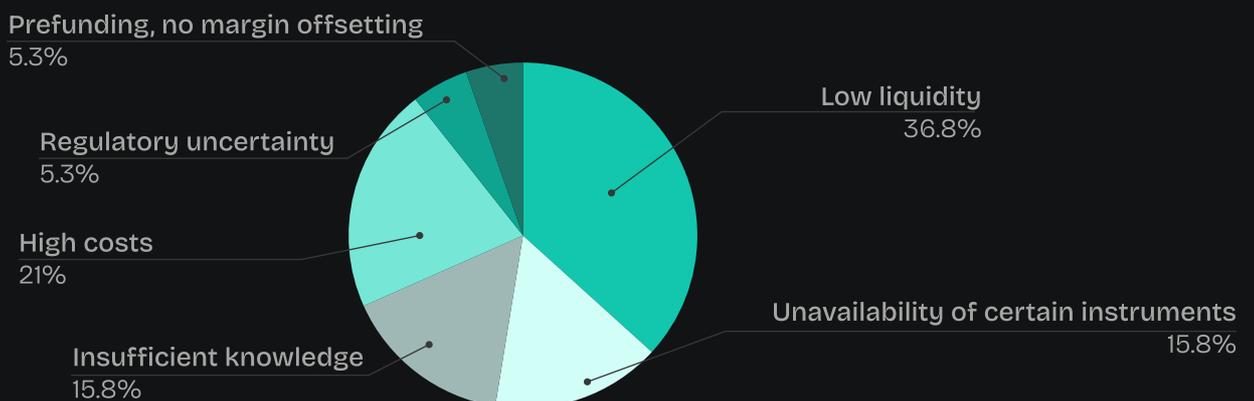
15. What instruments can institutional investors use to hedge their cryptocurrency exposure?



16. What would you say is the key hedging instrument which could be widely adopted by institutional and traditional investors?



17. What factors are currently impeding the adoption of cryptocurrency derivative instruments among institutional investors?



What exotic crypto derivatives are not yet available on the crypto market but could get significant adoption if released?

Respondents suggest that exotic crypto derivatives, such as options and futures tailored for specific crypto assets or indexes, could see significant adoption if introduced to the market.

A particularly promising solution is a derivative product for miners and stakers that allows them to sell their rewards daily at the volume-weighted average price (VWAP), with settlement occurring after the actual rewards are received.

This would offer a more predictable and stable income stream for those involved in mining and staking, aligning with traditional financial instruments that provide hedging opportunities.

Additionally, the creation of crypto indexes could facilitate diversified investment strategies, attracting institutional investors seeking exposure to the broader crypto market without the volatility of individual assets.

These innovations could enhance market maturity and liquidity, appealing to a wider range of participants.

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