FEBRUARY 2025

FOUNDATIONS OF DIGITAL ASSETS MARKET MAKING: AN IN-DEPTH INTRODUCTION

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ACKNOWLEDGEMENTS

We would like to thank Auros for commissioning this research report. We would also like to thank everyone at The Block who assisted with this report - design team: Michael Elshahat; research team: Edvin Memet and Rebecca Stevens. We are also grateful to the Auros team that shared their valuable perspectives through interviews for this report: Julien Achecorne, Jason Atkins, Stephen Chan, Mark Kligman, Ben Roth, and Ezra Wong.

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OVERVIEW

This report, the first in a series dedicated to exploring the complexities of market making in the digital assets space, aims to demystify this fundamental function by providing clarity on market making's role, strategies, as well as its broader implications for the digital assets ecosystem. Subsequent reports in this series will delve deeper into analysis that explores the critical role of liquidity in the digital assets market and provides guidance for others in assessing the quality of market making partnerships.

In the rapidly growing digital assets space, market making plays a pivotal role in reducing friction in market activities. Market makers facilitate trading by providing continuous order book liquidity for various digital assets, this liquidity is typically measured by the gap in price between buyers and sellers and is known as the quoted bid ask spread. This is important because quoted spread is one measure of illiquidity. The notion of illiquidity of a market is a way that we measure implicit trading costs (I.e., the gap between the execution price and the benchmark used as a proxy for the price of an asset in a perfectly liquid market). In a perfect world benevolent market markers bridge the gap between these buyers and sellers, lowering trading costs for liquidity makers and takers for a small fee.

Despite its significance, market making is often perceived, sometimes deservedly, as complex and opaque, leading to misconceptions about its practices and impact on the market. This opacity can be partially explained by various trading strategies of market participants such as hedging, portfolio rebalancing—erratically or periodically—and speculation. Additionally, some larger market participants go through steps to ensure their trades are more obfuscated via dark pools and dealer markets.

This lack of illumination of a market maker's role in the larger structure of capital markets has left the door open to undesirable practices, thereby perpetuating the distorted perception of entire segments of market participants. As a result, market makers are too often perceived as value extractive, rather than additive, in delivering on their primary role of providing liquidity. Market participants are faced with the challenging task of being discerning about which providers deliver the highest quality support. Still, participants lack clear guidance on how to select market makers. To address these challenges and reduce the impact of predatory practices, additional transparency and education is needed. This need for clarity and understanding is what has led to the creation of this report series.

To be clear this analysis will not be focused on automated market makers (AMMs). Throughout this series, we will be analyzing the dynamics between final investors and intermediaries (i.e., market makers or dealers). This can be observed through all-to-all trading platforms (i.e., exchanges both centralized and decentralized) as well as hybrid market structures. A hybrid market illustrates a more realistic picture of digital asset markets as there are elements of trading facilitated through an electronic order book (where buyers and sellers are matched based on best prices) or through human market makers or dealers, who provide liquidity by standing ready to buy or sell at quoted prices.

This introductory report delves into the core principles of market making, highlighting the differences between approaches in digital assets and traditional markets. It also offers an overview of the market making landscape and its key stakeholders within the digital assets ecosystem. Additionally, the report explores various business models employed by market makers. Finally, the report concludes by providing insights into the future outlook for market making in the digital assets space.

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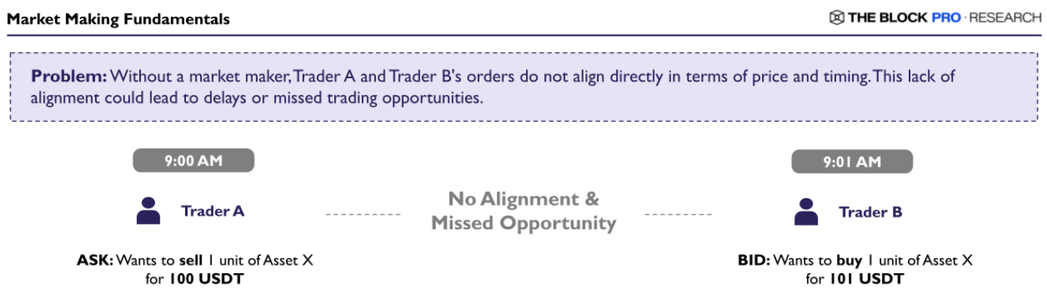
PART 1:

MODERN MARKETS – BUYERS & SELLERS VS TAKERS & MAKERS

1.1 MAKERS VS. TAKERS



Thinking about modern trading markets as makers vs. takers rather than buyers and sellers provides helpful foundations. In any order-driven market there are makers and takers. Makers place orders to provide liquidity, creating a pool of buy and sell orders that others can trade against, whilst takers take advantage of the available liquidity to fulfill their investment objectives. In today's financial markets, professional market makers play a key role in providing a constant flow of liquidity by quoting both buy and sell prices.

In modern financial marketplaces, two key participants drive market dynamics: makers and takers. These two categories offer a more nuanced contrast to the simple 'buyer vs. seller' dichotomy.

OTHER INTRODUCTORY CONCEPTS: LIQUIDITY & MARKET DYNAMICS

Liquidity can be defined as the degree to which an order can be executed in a short timeframe close to the asset's consensus value. It refers to the ease of buying or selling assets without causing substantial price movements. While the provision of liquidity is often emphasized as the primary role of makers, it can be more accurately understood as a byproduct, or first derivative, of their core function: facilitating efficient and stable price discovery–The speed and accuracy at which transactions incorporate all pertinent information into prices to participants. By consistently offering to buy and sell assets, market makers create a continuous, orderly market where prices can adjust smoothly to new information and trading activity. This process naturally enhances liquidity, as it ensures there are always willing counterparties for trades at prices close to the current market rate.

MARKET PRIORITIES

Market makers and market takers play distinct roles with differing priorities, yet they are interdependent, each relying on the other to facilitate trading. Takers seek to execute trades at prevailing market prices, balancing the need for immediacy to secure favorable terms by interacting with the supply of orders placed by makers. As individuals or entities seeking to acquire or dispose of assets, they range from professional traders, retail investors, and asset managers to banks and enterprises. Their goal is to own (or no longer own) the asset, whether for investment, risk management purposes, or operating needs.

Makers, by contrast, provide a critical market service rather than seeking asset ownership. Their primary function is to **facilitate price discovery and enhance market liquidity**. Makers take a relatively neutral view on the asset itself, outside of anticipating short

term price fluctuations. They focus instead on profiting from the **bid-ask spread** – the difference between the prices at which they're willing to buy and sell. Profiting as a maker requires significant trading expertise, as price differences in near-efficient markets are very marginal and volatile, exposing makers to unbalanced books and losses. This often means that only sophisticated professional trading firms can act as active market makers, as trading expertise is supplemented by technical sophistication and infrastructure conditional on operating at scale.

1.1.1 INSTITUTIONAL MARKET MAKERS

The term "market maker" today typically refers to sophisticated entities that engage in professional **market making**. These institutional market makers are typically specialised financial professionals with substantial capital and resources. Operating at scale means operating across multiple markets and asset classes, utilising advanced trading systems and algorithms, and maintaining direct access to exchanges and other pools of liquidity, whilst developing sophisticated risk management strategies.

Due to their pivotal role, market makers can be misunderstood as price manipulators who artificially drive market direction through volume creation. In reality, these entities capitalize on existing market inefficiencies rather than creating them. By managing supply and demand dynamics and addressing timing imbalances between buyers and sellers, market makers play a crucial role in facilitating smooth trading for all participants. Their true impact on market efficiency will be explored in greater detail in Section 1.3.

1.2 MARKET MAKING DEVELOPMENT

Market making has evolved from physical trading pits to sophisticated electronic systems, now dominated by algorithmic trading and advanced infrastructure. These technological advancements have had the benefit of making markets more efficient and liquid. But market makers heavily invest in proprietary trading and risk management technology to stay competitive, a costly and challenging moat for smaller firms.

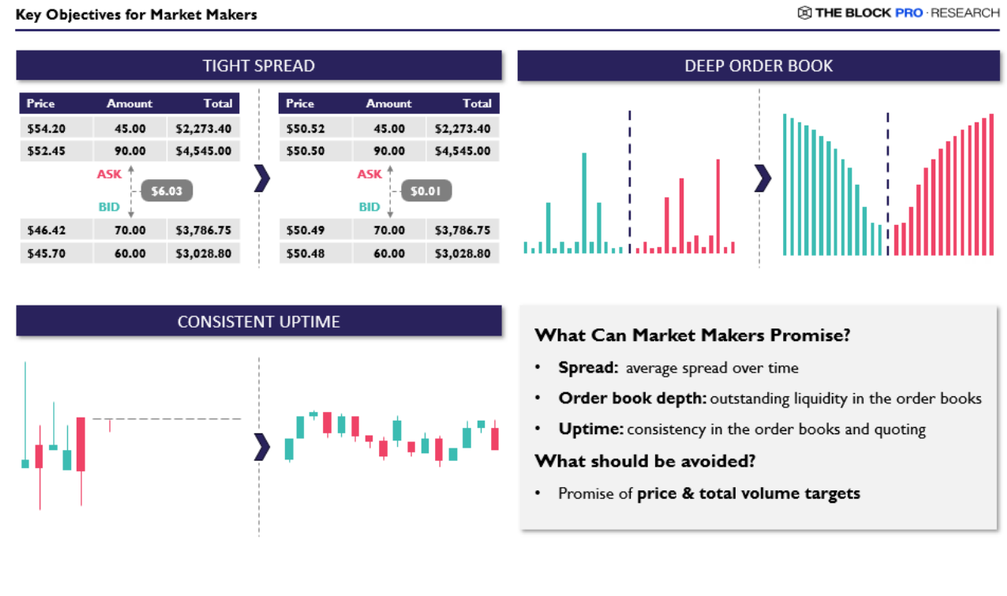
Market making, formalized as early as the 17th century Amsterdam Stock Exchange, initially involved designated individuals maintaining liquidity in physical trading pits. The modern form of market making began to take shape with the rise of electronic trading in the late 20th century. NASDAQ's 1971 launch as the first fully electronic stock exchange marked a significant shift. Today, market makers operate on a massive scale, handling billions in daily trading volume through high-speed data feeds and managing complex tooling across diverse markets:

- **Algorithmic Trading** uses computer programs to automate financial market decisions. It enables rapid data processing, opportunity identification, and efficient execution across markets. These systems manage risk automatically and range from simple orders to complex adaptive models, and crucially enable trading speed and volume that surpass human capabilities.
- **High-Frequency Trading (HFT)** is a subset of algorithmic trading that executes thousands of transactions within microseconds. HFT systems can generate significant returns from small margins through speed and scale – they are the technological arms race born out of algorithmic trading. This approach has contributed to tighter spreads and increased market liquidity, enhancing overall efficiency.

The evolution of trading technology has nevertheless intensified competition among top-tier market makers, who now depend on sophisticated algorithms and electronic connections for multi-exchange quoting. This necessitates continuous investment in low-latency infrastructure and advanced trading systems that form a significant portion of operational costs. Market makers unable to keep up with these technological and analytical advancements risk may struggle to attract sufficient order flow to remain competitive, and resultantly viable.

1.3 IMPACT OF MARKET MAKING

At a high level, market makers create a less volatile market environment where supply and demand can match smoothly. They narrow the bid-ask spread, optimize order books, and absorb large trades to prevent significant price disruptions. By ensuring consistent liquidity, market makers enhance market efficiency, reduce slippage, and support accurate price discovery, contributing to overall market stability.

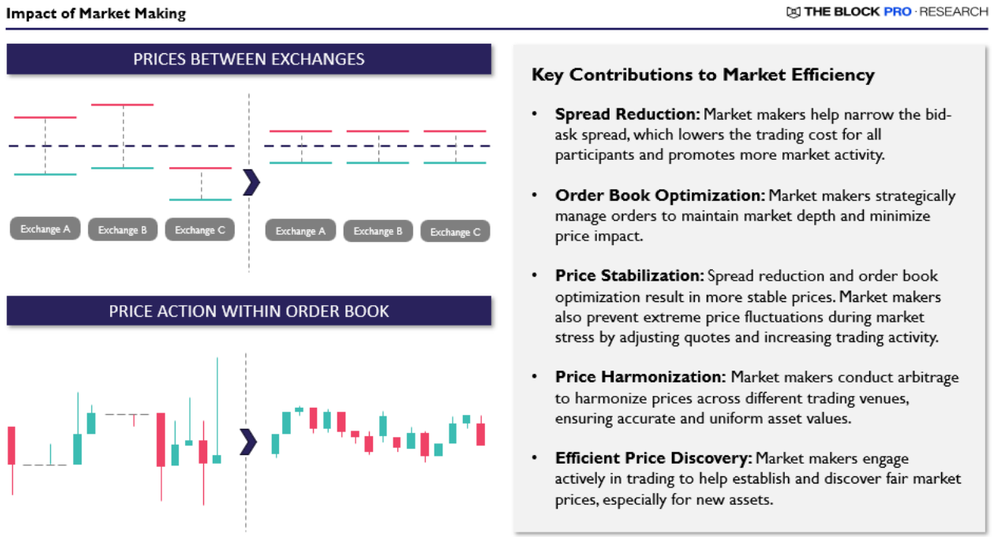


Market makers, contrary to common belief, cannot control prices and volumes. While they can influence trading volumes through liquidity provision, broader volume is influenced by taker demand, which is itself reactive to catalysts such as economic indicators, and newsflow, as well as overall sentiment. Market makers focus on facilitating trading rather than dictating market trends, and their impact on prices is temporary and localized. Ultimately, demand for a given asset determines prices, with market makers serving as facilitators in this process.

If market makers are not driving prices or volumes, what exactly is their impact? A market maker's primary contribution is to support efficient **price discovery**. This process allows buyers and sellers to converge on an asset's fair value, enabling transactions to occur. In today's complex financial landscape, this process fragments across multiple platforms, potentially delaying the establishment of true market prices.

Market makers play a pivotal role in addressing this by facilitating efficient price discovery through smoothing out volatility and reducing pricing fragmentation across multiple

trading venues. This is particularly crucial for illiquid assets or newly launched tokens in the digital assets space. This ultimately results in promoting **market efficiency** – an ideal state where prices fully reflect all available information, leaving no undervalued or overvalued instruments in the market.



SPREAD REDUCTION

Spread reduction involves narrowing the gap between bid and ask prices. Narrow spreads reflect a more unified market view of an asset's value and more accurate pricing. This improved price discovery benefits traders by allowing transactions closer to the asset's true market value and reducing the gap between buy and sell prices. Conversely, a wide bid-ask spread can make it challenging to execute trades at desired prices, creating a more difficult trading environment.

Consider asset X with a $0.10 spread. If a trader buys and immediately sells, they incur

a $0.10 loss per token, requiring the bid price to rise by $0.10 to break even. With a $0.01 spread, the trader needs only a $0.01 increase to break even. This tighter spread not only lowers trading costs and risks but also signals more efficient price discovery. As a result, market participants can confidently enter and exit positions with smaller price movements, assured that transaction prices accurately represent the asset's true market value.

ORDER BOOK OPTIMIZATION

Order book optimization involves strategically managing buy and sell orders at different price levels, trying to increase **market depth** and reduce market impact. Market depth can be thought of as the total value of orders within a specified range from the best bid/offer (commonly cited depth distances are 1% and 2% from the mid-price). Top tier market makers strive to create order books that are deep on both the bid and ask side, and will vary their order sizing and order placement as market conditions fluctuate. **Market impact** measures how far an asset price moves for a given size of trade. For example, one might wish to measure the market impact for a $100,000 transaction – such a measurement will be far greater for an instrument with shallow depth and wide spreads than it will be for an instrument that enjoys tight spreads and a deep order book. Market impact can therefore be thought of as the corollary to market depth; large depth = small impact, shallow depth = large impact.

PRICE STABILIZATION

Price stabilization efforts help prevent extreme price fluctuations resulting from large trades or sudden shifts in supply or demand, especially those that are a function of irrational behavior or human error. Market makers play a vital role in stabilization, helped by maintaining deep order books. During periods of market stress or abrupt swings in supply and demand, market makers adjust their quotes to manage the impact on prices. They can also increase their trading activity to balance supply and demand, acting as the buyer or seller of last resort when no other suitable counterparties are available. By closely monitoring market conditions, signs of manipulation, and news events, market makers can adapt their strategies to assist with price stability.

PRICE HARMONIZATION

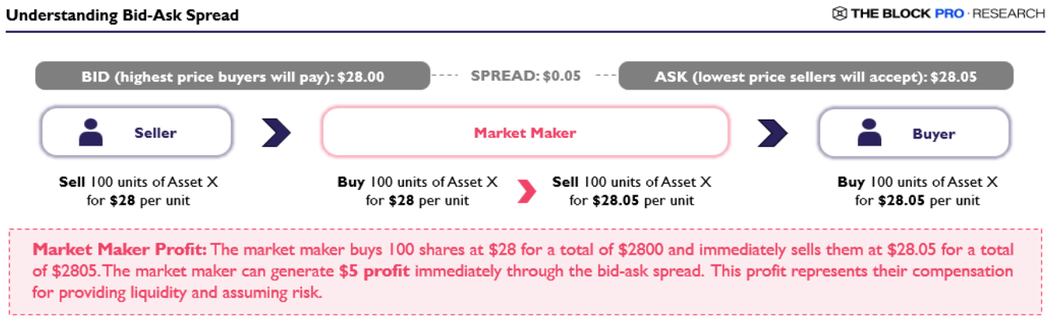
Market makers are crucial in both stabilizing prices within a single venue and harmonizing price discrepancies across different trading platforms through arbitrage and cross-market activities. **Arbitrage** involves exploiting price differences for the same asset across different markets or exchanges to generate profit. This practice ensures that all participants, regardless of the venue, receive similar prices. By aligning prices across platforms, market makers ensure that an asset's value is accurately and consistently reflected.

1.4 MARKET MAKER REVENUE MODEL

Market makers profit from the bid-ask spread by buying at lower bid prices and selling at higher ask prices. Market makers use market-neutral strategies; they do not rely on the directional movement of asset's price, but rather capitalize on market inefficiencies, which differ between asset classes as each have unique market structures and trading characteristics.

Market makers in financial markets profit from trading strategies that capitalize on market imbalances. Unlike market takers who seek to profit from price movements, market makers earn from the bid-ask spread and other market inefficiencies, operating without a bias on price direction.

BID-ASK SPREAD



Market makers essentially buy when the market wants to sell and sell when the market wants to buy, earning revenue by buying at the lower bid price and selling at the higher ask price. The bid and ask prices are set by the market maker; with the bid price being the highest price it is willing to buy shares, and the ask price being the lowest they are willing to sell shares. For instance, consider a security with a bid price of $28.00 and an ask price of $28.05. Let's assume that there are buy and sell orders for the security at 100 shares each. The market maker buys 100 shares at $28.00 for a total of $2800 and immediately sells them at $28.05 for a total of $2805 The market maker can generate a $5 profit immediately through the bid-ask spread. This profit represents their compensation for providing liquidity and assuming risk. Although spreads are usually very small, the high volume of trading can amplify profits from these small spreads.

MARKET NEUTRAL STRATEGY

Trading on both sides of the spread exposes market makers to the risk of the market moving in an unfavorable direction, potentially leading to losses if one side of the order book gets hit continually and the market maker is unable to hedge those positions on other venues or in other similar products.

ARBITRAGE

Market makers also utilize versions of arbitrage, capitalizing on price differences between various trading venues. This strategy, also referred to as Cross-Exchange Liquidity Mirroring, involves buying assets at a lower price on one exchange and simultaneously selling them at a higher price on another exchange. To implement this strategy effectively, market makers need a deep understanding of exchange nuances like trading fees, order types, and market depth, along with a robust trading infrastructure and access to real-time market data.

PAYMENT FOR ORDER FLOW (PFOF) MODELS

Payment for Order Flow (PFOF) involves market makers compensating brokers for routing retail client orders to them. Market makers often match or improve upon national best bid and offer prices, generating revenue that outweighs costs from broker payments and price improvements. This arrangement provides market makers with a consistent stream of tradable volume and resulting revenue.

1.5 DIVERSIFIED STRATEGIES & REGULATIONS

Market making practices vary across asset classes, each with unique characteristics and regulatory frameworks. In digital assets, evolving structures blend traditional finance with new approaches, while regulations and best practices are still maturing. Recent developments in best practices advocate for contractual KPIs and increased transparency in market making agreements, aiming to align with standards seen in traditional finance.

Market-making activities vary significantly across asset classes, each with its own characteristics and structures. In exchange-traded markets, such as equities and ETFs, market makers primarily use a combination of algorithmic and human-overseen trading strategies. These markets feature high liquidity, public order books, and electronic platforms enabling near-continuous price discovery.

In Over-the-Counter (OTC) markets, such as fixed income and foreign exchange, market-making practices are more diverse. Traditionally less transparent and liquid, many OTC markets now use electronic platforms for better price transparency. Market makers

in these environments often combine technological solutions with human expertise, particularly for less liquid assets or complex transactions. They frequently use request-for-quote (RFQ) systems for standardized products, while voice trading remains relevant for non-standard or illiquid instruments.

Market making firms may specialize in specific markets or operate across multiple asset classes, adapting their approaches to meet diverse market demands. This flexibility allows firms to capitalize on their strengths while navigating various trading environments. Regardless of the specific strategies employed, the fundamental role of market makers remains consistent: providing liquidity, facilitating price discovery, and enhancing market efficiency.

MARKET REGULATIONS

Market making regulations vary across different asset classes in traditional finance. The spectrum ranges from highly regulated equity markets with strict quoting requirements to more flexible over-the-counter (OTC) markets in foreign exchange and certain fixed income products. Those differences in norms and regulatory frameworks reflect the unique characteristics and investor protection requirements for each of those asset classes, and the jurisdictions where those assets are available to investors. Regulations can affect everything from capital requirements to reporting obligations, with the operating implications this imposes on market makers in those markets.

In contrast, the digital asset space generally offers market makers greater flexibility. Regulations are typically less stringent, resulting in diverse approaches to market making. Recent developments in best practices advocate for contractual KPIs and increased transparency in market making agreements, aiming to align with standards seen in traditional finance. However, the industry still exhibits considerable variation in market making quality and reliability. This diversity reflects the sector's ongoing maturation, as it balances the drive for increased professionalism and consistency with the innovative spirit characteristic of digital assets.

Market Maker Regulations Comparison THE BLOCK PRO · RESEARCH

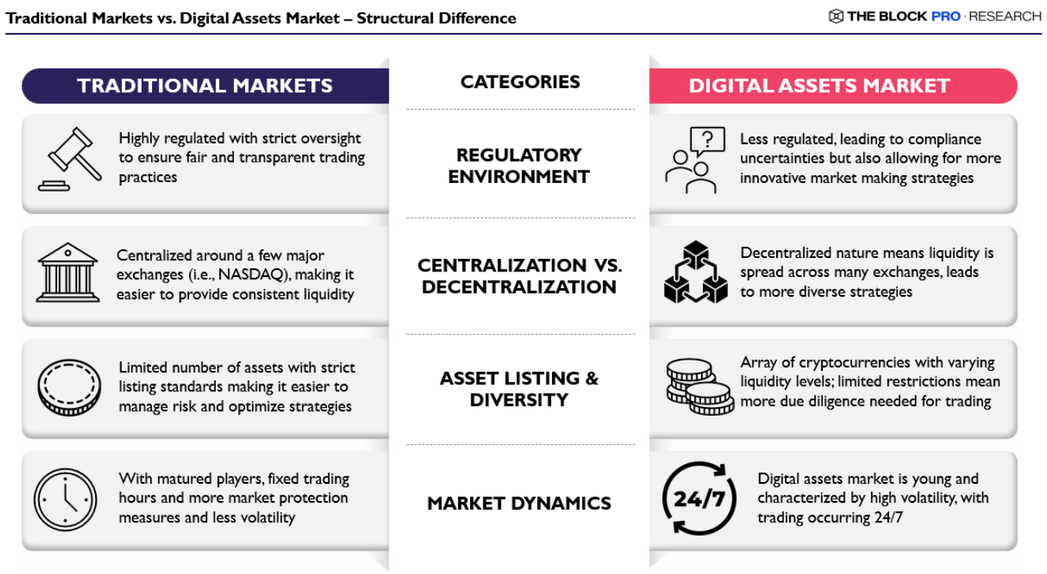
Regulatory Aspects	Equities Market	Digital Assets
Two-sided Quotes	Required to maintain continuous quotes within a specified % of the national best bid or offer (NBBO)	No universal mandates; depends on contractual agreements or exchange incentives
Quote Rules	Public display of best bids, offers, and sizes required (Rule 602)	No uniform regulations; transparency varies by jurisdiction
Distribution Compliance	Restricted from purchasing/bidding during distribution periods (Rule 101 M)	Generally no specific restrictions; some frameworks (e.g., MiCA) prohibit market manipulation

1.5.1 DIGITAL ASSETS: THE NEXT FRONTIER

Digital asset market making adapts traditional finance principles to a unique 24/7, global, and volatile landscape, requiring innovative strategies for continuous liquidity, cross-platform arbitrage, and risk management. The advent of blockchain technology has introduced new concepts like automated market makers (AMMs) in decentralized finance (DeFi), further expanding the scope of market making. As the digital asset space matures, market makers navigate an evolving regulatory landscape, balancing innovation with compliance. This ongoing evolution is expected to refine market making practices, gradually converging with traditional methods while maintaining the distinct characteristics of the digital asset ecosystem.

2.1 MARKET STRUCTURE & DYNAMICS

Market making in digital assets is especially challenging due to the 24/7 trading environment, the absence of traditional stabilizing mechanisms, and the added complexity involved with DeFi integrations. The market's volatility and unpredictability increase the risk of losses, rendered particularly sensitive as digital assets are bearer assets, demanding that market makers possess a high level of security expertise and the ability to rapidly adjust strategies, particularly during extreme price fluctuations.



Traditional financial markets, like the NYSE and NASDAQ, operate under strict regulations, set trading hours, centralized clearinghouses, and stabilizing mechanisms such as circuit breakers. These features aim at investor protection and more stable trading environments. In contrast, the digital assets market operates 24/7 and is decentralized, lacking many traditional safeguards and regulatory measures. Trading occurs on both centralized exchanges and decentralized platforms, with the latter having minimal oversight by design, as the market is 'permissionless' and accessible to all participants.

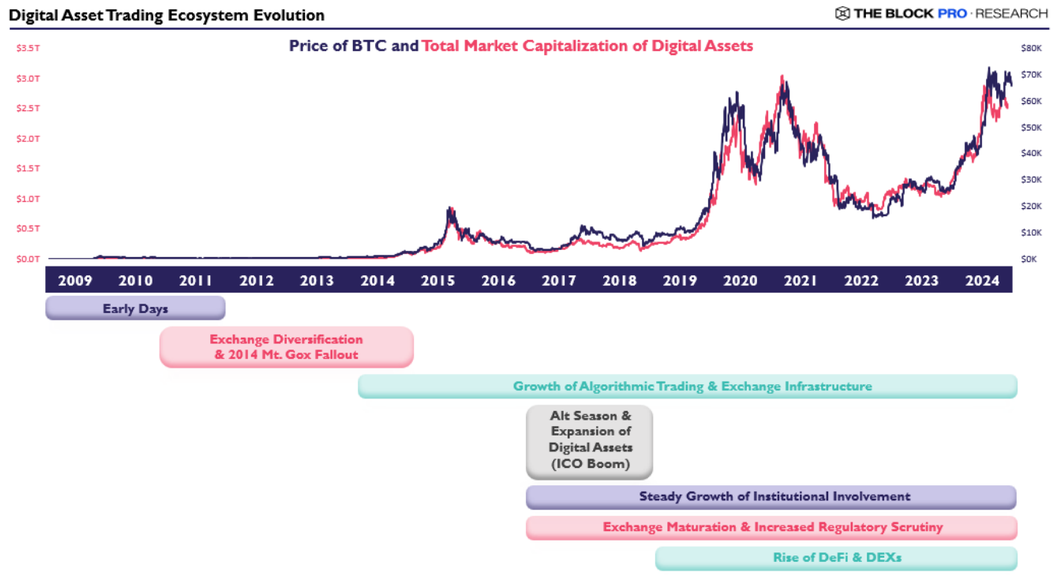
The status of digital assets as a relatively new asset class also contributes to less established markets and greater price fluctuations. Its global market capitalization is around $2.5 trillion, significantly smaller than the over $100 trillion capitalization of the global equities market. A smaller market capitalization is made all the more complex by a long tail of investable assets (over 15k cryptocurrencies) and trading venues (over 600 active exchanges), resulting in high levels of fragmentation. Additionally, high leverage offered by many trading platforms amplifies price movements and increases volatility. Unlike stocks, which typically offer lower maximum leverage, around 2:1 or 4:1, digital assets can provide leverage of 100:1 or higher in some venues.

High volatility in the digital assets market is further fueled by speculative asset valuation and the relative immaturity of blockchain technologies. Traditional markets impose strict financial requirements for listing and require continued public financial reporting. In contrast, the digital assets space is by essence permissionless, allowing potentially anyone to create and trade assets, leading to diverse offerings with varying levels of maturity and trustworthiness. Listing on exchanges does not guarantee the digital asset's quality, as the criteria, and transparency of those criteria, can vary greatly between exchanges.

2.2 DIGITAL ASSETS MARKET MAKING EVOLUTION

Digital asset market making has evolved from escrows facilitating transactions on webforums to the present landscape dominated by sophisticated trading platforms and institutional participants. Market makers have adapted to support the growth of both centralized

exchanges (CEXs) and decentralized exchanges (DEXs), navigating challenges such as exchange failures, regulatory changes, and the entry of institutional investors.



EARLY DAYS

In 2009, Bitcoin could only be obtained through mining or risky P2P trades via online forums. As demand grew, the need for secure exchanges emerged. The first Bitcoin exchange, proposed on BitcoinTalk in January 2010, was launched using PayPal along with an escrow system. That same year, Mt. Gox emerged, quickly dominating with 70% of all Bitcoin transactions at its peak through an automated order book system. Early 2011 saw the rise of new exchanges like VirWoX and Tradehill, all featuring rudimentary market-making via order matching systems. This era was marked by significant market inefficiencies, including large inter-exchange price discrepancies and friction in on/off ramps. Early market makers provided liquidity mainly through arbitrage trades aimed at rectifying these price dislocations, often relying on loans directly from exchange balance sheets to facilitate these transactions.

MT. GOX FALLOUT AND EXCHANGE DIVERSIFICATION

Professional digital asset market makers emerged in 2013, providing liquidity and stabilizing prices as exchanges and trading volumes increased. In 2014, Mt. Gox's collapse due to a major hack (losing 850,000 bitcoins worth $480 million) led to a re-evaluation of exchange practices and pushed for more secure, decentralized solutions.

Since 2011, the number of digital asset exchanges has grown to over 600 active platforms today. New exchanges like Coinbase, Kraken, Poloniex, and others quickly filled the void left by Mt. Gox, introducing improved technology and security measures. This growth was driven by the rising popularity of altcoins and demand for Bitcoin-fiat trading pairs. On-chain transaction volumes also rebounded after a year of stagnation, soon exceeding double its pre-crisis levels.

GROWTH OF ALGORITHMIC TRADING & EXCHANGE INFRASTRUCTURE

Algorithmic trading in the digital assets space evolved from individual trading bots in the Mt. Gox era to more sophisticated systems by 2014. Trade automation software and API integrations made high-frequency trading more accessible on major exchanges.

The market landscape shifted dramatically in 2017 with unprecedented volatility, attracting HFT firms and institutional investors. Initially not equipped to handle such an influx, exchanges quickly adapted by introducing low latency capabilities, colocation services, advanced APIs, and institutional accounts to accommodate this new demand. These changes ushered in a new era of sophistication in algorithmic trading, allowing market makers and arbitrageurs to deploy more efficient trading strategies with improved exchange connections.

GROWTH OF DECENTRALIZED FINANCE (DEFI)

DeFi's rise, which began in 2019 and surged in 2020 and 2021, has expanded market making to both centralized (CEXs) and decentralized exchanges (DEXs). However, DEX trading volumes remain modest, typically at 5-10% of CEX volumes, as DEX trade execution quality still lags behind off-chain alternatives. This has led to limited integration by market makers due to on-chain complexities and lower volumes.

CEXs use central limit order books (CLOBs) for near-continuous trading and efficient quote updates. In contrast, DEXs often rely on automated market makers (AMMs) that use algorithmic mechanisms and liquidity pools with deterministic pricing to facilitate trades. Market makers in AMM-based DEXs typically serve as liquidity providers by depositing assets into these pools. However, blockchain-induced latency in AMMs can lead to off-chain price discovery and potential adverse selection, deterring sophisticated market makers.

Despite these challenges, market makers play a crucial role in enhancing market connectivity between CEXs and DEXs. As decentralized platforms become more user-friendly, more market participants and liquidity are expected to enter, potentially reshaping the landscape for market makers. The increasing parity between CEXs and DEXs will likely boost demand for professional market makers capable of navigating both environments, especially during bull cycles when new token appearances on DEXs peak.

2017 ALT SEASON & EXPANSION OF DIGITAL ASSETS

The 2017 alt season and ICO boom drove significant exchange market growth, with Binance quickly rising to prominence due to its diverse altcoin offerings and rapid integration of new assets. Other exchanges followed suit, expanding their token offerings. This increased variety of digital assets heightened the importance of market makers in providing liquidity, especially during volatile periods.

The 2018 digital asset market crash led to the bankruptcy of numerous exchanges and market makers. As trading volumes gradually recovered, surviving market makers revamped their strategies. Many adopted a new business model known as the Loan & Call Option Model, which improved the alignment between token projects and market makers. By 2019, Initial Exchange Offerings (IEOs) replaced ICOs, with Binance leading the trend through its Launchpad. Market makers supported these offerings, providing liquidity for the new tokens once they were listed.

EXCHANGE MATURATION & REGULATORY SCRUTINY

Despite the growth of DEXs in 2019 and 2020, CEXs have not experienced comparable

expansion, indicating a level of maturity. The monthly exchange volume market share also indicates a consolidation trend, with a few top exchanges now accounting for a significant (and growing) proportion of trading volume, as compared to the multitude of venues in prior cycles. This consolidation trend has been driven in part by the increasing regulatory scrutiny.

However, the slow migration of trading flows to DeFi, which would in itself be a great illustration of the adoption of the technology, has also had its own hurdles. Beyond the $6 billion funds hacked on average since 2016 in DeFi alone, some very high-profile blow-outs have played a major role in slowing adoption to date. A notable example is when Terra-Luna collapsed in May 2022, which erased $50 billion in valuation and severely impacted confidence in the DeFi sector.

Since the introduction of regional licensing in 2015, expanding regulatory efforts have limited arbitrage opportunities and pushed centralized players towards jurisdiction-compliant platforms. Concurrently, DEXs have flourished outside this regulatory purview due to their decentralized nature. Such global regulatory efforts accelerated following the 2022 digital asset collapses, particularly the FTX bankruptcy. This catalyzed a renewed regulatory focus, prompting service providers to prioritize compliance or cease operations where licensing is unattainable.

Market makers, predominantly proprietary trading firms, have historically been somewhat insulated from the more complex aspects of regulation, often adhering to informal 'best effort' commitments. While current regulations often overlook liquidity providers and market makers, future changes could lead to more conservative strategies. Some market makers today are proactively obtaining licenses and regulatory clearances in available jurisdictions, while others are voluntarily adopting practices that align with the traditional financial markets standards.

INSTITUTIONAL INVOLVEMENT

Institutional involvement in digital assets has surged since 2017, propelled by the introduction of Bitcoin futures and, more recently, spot ETFs for Bitcoin and Ethereum

in 2024. This trend has drawn a diverse array of players, including hedge funds, family offices, asset managers, pension funds, and traditional banks, marking a significant step towards market institutionalization.

The approval of these ETFs extends far beyond market maker partnerships, potentially reigniting institutional interest across the digital asset spectrum. This regulatory endorsement effectively mitigates concerns about market uncertainty and perceived risks, attracting a broader pool of institutional investors previously hesitant to enter the space. Consequently, these approvals are poised to enhance market liquidity, stability, and overall credibility.

As institutional involvement in digital assets grows, market makers are adapting to higher standards. They're expanding liquidity provision, improving execution quality, and developing customized solutions with direct API access. This evolution includes enhanced compliance measures and infrastructure upgrades. Some market makers are diversifying their offerings to include OTC trading and tailored algorithms, aiming to capture more institutional business.

2.3 KEY STAKEHOLDERS

Market makers form key relationships primarily with token issuers and exchanges to foster an interconnected market environment. They work with exchanges to enhance liquidity and optimize order book efficiency. Simultaneously, they collaborate closely with token issuers to provide liquidity during token launches and beyond.

Digital asset market making encompasses both electronic and project-focused activities. Electronic market making utilizes sophisticated infrastructure and algorithms for continuous spread revenue generation, while project-focused efforts support token launches and maintain liquidity. Acting as a linchpin in the digital assets trading ecosystem, market makers connect various participants and enhance overall market efficiency. They

primarily partner with exchanges and token projects, while internally collaborating with lenders and custody partners to establish operations and secure the capital necessary for their market making activities.

Token Project / Issuers – Token projects collaborate with market makers to bootstrap liquidity and enhance investor confidence. Market makers are crucial during the launch The token launch phase is especially critical given the high level of interest from buyers is also balanced by tokens vesting for early stage investors and contributors that may intend to crystallize the gains resulting from their commitment to the project. Market makers play a vital role in facilitating these transactions.

Market makers draft commercial contracts to underwrite these partnerships, some of the key variables being token inventory ownership, trading strategy flexibility, and fee structures. These contracts lead to commercial agreements that generally follow either Retainer-based, Loan-Call Option, or Self-serving models, detailed in Section 4. Token liquidity is sourced from the token projects, and depending on the tokenomics and infrastructure support, the issuer may either hold the inventory in their own wallets and provide API access to market makers, or transfer the inventory to the market maker through a loan. In the latter scenario, the issuer lends the market maker the token, and the market maker uses its balance sheet of stablecoins/BTC/ETH to meet its liquidity commitments.

Beyond the launch phase, Market Maker support aims to stabilize the asset's price and provide more compelling entry points for investors, who are reassured by the frictionless execution that sufficient liquidity provides. Moreover, market makers are essential for attracting institutional participants, who often require significant liquidity for large trades to avoid slippage and significant price swings. Collaborating with a reputable market maker signals ample liquidity, attracting institutional players and facilitating over-the-counter (OTC) trades.

Market maker supported liquidity also reduces the risk of price manipulation, as higher liquidity levels make it more challenging for malicious actors to manipulate prices. To

maintain long-term stability and credibility, projects must avoid artificial volume, such as wash trading, which exchanges track and penalize, and focus on building organic volume. Yet again, the positive externalities of a liquid market come into play here – as it impacts investor confidence.

Lastly, having a market maker does enhance a token's probability of a primary and secondary listing on exchanges (in fact, it is often a listing requirement for tier 1 and tier 2 exchanges that projects must use high quality market makers) as it signals to exchanges and other market participants that there is robust support for the token's liquidity past the listing. Given that Market maker KPIs are tied to market depth, these requirements inherently align with exchanges' own priorities when listing new tokens. Clients can also benefit from the market maker's guidance on navigating complex conversations with exchange listing teams.

Exchanges – Market makers and exchanges establish strategic partnerships to enhance the attractiveness of their order book. These collaborations track liquidity, aim to reduce arbitrage, and often involve incentives like trading fee rebates based on trade volume. In principle, this results in a 'symbiotic relationship' that boosts market efficiency, increases trading volume for exchanges, and enhances capital efficiency for market makers.

Before entering a partnership, market makers carefully select trading venues based on their assessment of counterparty risk and available trading opportunities. They prioritize trading against real organic volume and users, seeking reliable order books. These partnerships typically involve major spot and perpetual futures exchanges, and various DeFi protocols.

While some newer exchanges may offer commercial agreements to bootstrap liquidity, established exchanges will typically have the lion's share of organic users and therefore will provide significantly greater trading opportunities. Market makers assume the role of risk-takers and liquidity providers, while exchanges focus on attracting and onboarding new users to the digital assets space. Long-term relationships benefit both parties, with exchanges valuing market makers who consistently provide liquidity across all market

environments.

Exchanges value partnerships between projects and reputable market makers for the latter's crucial role in ensuring smooth trading, especially beneficial for new tokens or during volatile market conditions. Apart from enhancing trading volume and price stability, market makers also serve as third-party validators for projects seeking exchange listings. This association with reputable market makers significantly boosts exchanges' confidence in listing the assets associated with these projects.

Capital Lenders & Custody Partners – The operational landscape for market makers has shifted in the aftermath of digital asset market upheavals in 2022. Market makers have had to adapt to new norms and explore additional partnership directions to navigate these changes.

In prior market cycles, most large market makers sourced a significant amount of their trading leverage from centralized finance (CeFi) lenders like BlockFi, Celsius, and Genesis. However, the collapse of these lending platforms in 2022 prompted market makers to reassess their capital sourcing strategies. In response, many market makers have shifted towards DeFi lending protocols or sought alternative funding options, including tokenized bonds, private credit from family offices and direct lending from exchanges themselves. This change reflects a broader trend within the industry to diversify funding sources.

2.4 RISK & OPERATING CONSTRAINTS

Digital asset market makers face unique challenges including limited access to capital, liquidity fragmentation across multiple exchanges, and significant counterparty risks. Unlike traditional finance, digital assets require pre-funding and efficient inventory management across various platforms, while also dealing with the complexities of on-chain trading and blockchain-specific issues.

ACCESS TO CAPITAL

In the digital assets space, market makers face challenges sourcing inventories due to the lack of an established capital funding model such as prime brokerage. While some prime brokerage services are emerging, they are not as developed as in traditional finance. Market makers often need to directly engage with projects to borrow tokens, as purchasing tokens exposes them to long-term project risks, contradicting the delta neutral strategy many employ.

This complexity contrasts with traditional finance, which offers more developed systems for inventory sourcing through lending and borrowing desks, banks, and prime brokerage models. Furthermore, the pre-funding nature of the digital assets market means that inventory must be allocated across all trading venues and then rebalanced efficiently across and between venues as trading occurs. This is a huge undertaking and is further frustrated by relatively slow on-chain Transactions Per Second (or block confirmation frequency) and delayed withdrawal/deposit recognition at exchanges. Contrast this with traditional finance, where settlement typically occurs at one time (end of day or the following day) and in one place (at your prime broker) – inventory does not need to be sourced in advance and there is no need to balance it across multiple venues, since it will all just be net settled at the end of the day.

Challenges in inventory sourcing reflect a key limitation in the digital assets space: capital efficiency. This underscores the ongoing need for innovative solutions and partnerships to effectively scale this evolving landscape.

Liquidity Fragmentation

In traditional financial markets, such as those for stocks, multiple listings for a specific stock is a rare occurrence relative to the digital assets market. While some stocks may be dual-listed on multiple exchanges, the majority are typically listed on a single primary exchange. This primary listing serves as the main venue for trading, setting the standard for price discovery and liquidity. The concentration of market making activity around this primary exchange contributes to a more centralized and efficient trading environment for traditional stocks.

In contrast, digital assets can be traded across numerous CEXs and DEXs, with a single asset often listed on multiple platforms simultaneously. This decentralized nature leads to fragmentation of liquidity, pricing, and trading volume across exchanges, posing challenges for market makers striving to offer consistent liquidity for a specific digital asset. Effective and uninterrupted inventory rebalancing across different exchanges also requires significant operational expertise.

The fragmented digital asset market, while challenging, enhances global accessibility and inclusivity by allowing participation from diverse regions and regulatory environments. In this landscape, market makers serve as crucial bridges, harmonizing liquidity across venues and reducing inefficiencies. Although market makers can benefit from arbitrage opportunities, their primary function is to foster a more cohesive and efficient market structure, making it more attractive and accessible for all participants.

COUNTERPARTY RISKS

Exchange counterparty risk is a significant concern for digital asset market makers. Digital asset services are susceptible to attacks and bad actors due to the bearer nature of digital assets, where holding the asset is proof of ownership. This characteristic not only introduces additional risks but also provides incentives for bad behavior, creating opportunities for theft and fraud without a central authority to verify ownership.

Unlike traditional finance, where settlement occurs at the end of the day, the digital assets market operates on a pre-funded basis. This means that in order to transact, participants must have the assets available in their exchange account beforehand. This exposes participants to counterparty risk, as they rely on the exchange to hold their assets securely until the trade is executed. Market makers, in particular, must maintain material balances at all exchanges to provide 24/7 liquidity, making them especially vulnerable. This risk can manifest in various ways, including exchange insolvency, operational issues, regulatory restrictions, and security breaches or hacks.

Established exchanges in traditional finance, such as NASDAQ, benefit from regulatory oversight, which helps mitigate the exchange's risks. Additionally, these exchanges work

in tandem with clearing houses, which play a crucial role in ensuring orderly post-trade settlement. The digital assets space, in comparison, is characterized by numerous, often less regulated exchanges. In principle, diversification is a risk mitigant. However, in the context of exchange counterparty risk, it is less effective as it results in a multiplication of insolvency risks and operational challenges, such as outages and processing delays.

The 2022 bankruptcy of FTX, formerly the second-largest exchange, highlighted the potential risk of storing assets on exchanges and highlighted the need for a proper regulatory framework to protect investors, leading many jurisdictions to focus on this issue and digital asset service providers looking for ways to strengthen their compliance efforts. In response to incidents like the FTX bankruptcy, some exchanges have implemented additional verification layers, such as Proof of Reserves, to transparently report their assets in reserve. Another development is the emergence of hybrid exchanges, which aim to mitigate counterparty risk by combining the regulatory oversight and liquidity of CEXs with the self-custody and security of DEXs. This approach allows users to custody their funds while trading on a centralized platform, reducing the risk of loss due to exchange failure or malfeasance.

On the market-making front, managing inventory risk and mitigating counterparty risk have become more pressing concerns for digital market makers. To address these issues, some market makers are increasingly storing their spare inventory in secure off-exchange custody solutions and diversifying their assets and trading platforms. While this strategy enhances protection against exchange failures, it also entails increased costs and limits on leverage compared to directly depositing and leveraging digital assets on exchanges.

Digital asset market making, unlike its traditional counterpart, extends beyond simply quoting an order book. At scale and to remain competitive, it involves dynamic asset reallocation across multiple venues. Market makers address issues like exchange outages and latency spikes by ensuring their trading infrastructure and algorithms meet exceptional standards. This helps avoid material losses from overlooked edge cases, crucial given the lower quality of digital asset exchange infrastructure compared to regulated traditional finance exchanges. They also handle delays in exchange withdrawals and deposits by analyzing blockchains and measuring withdrawal and deposit patterns from known

exchange wallets. This allows them to adjust their quotes to reflect the likelihood of being caught short on inventory at specific exchanges. As such, continual technological development and strategic decision-making are vital to minimize potential losses in digital asset market making.

ON-CHAIN TRADING & ROLE OF ASSETS

A significant difference between traditional finance and the digital asset space lies in the fundamental role of assets within each ecosystem. In traditional stock markets, the primary focus is on trading shares of publicly listed companies, representing ownership in those entities. In contrast, the digital assets market deals with assets that often have a deeper integration within on-chain ecosystems. These assets are typically decentralized and serve various functions within blockchain networks, such as providing access to services, voting rights, or other utilities.

Take Ethereum as an example. It's a decentralized platform for smart contracts and decentralized applications (dApps), where its native digital asset, Ether (ETH), plays a central role. ETH serves as both a digital asset, akin to a traditional currency, and as the means to pay for transaction fees and computational services on the Ethereum network. This dual role gives ETH intrinsic value within the Ethereum ecosystem, beyond just a medium of exchange.

Trading activity in digital assets differs significantly from traditional markets. In traditional markets, a company can operate and generate revenue regardless of its stock's trading activity. However, in the digital asset space, trading can have a more direct impact on the ecosystem. For instance, minimal trading activity on the Ethereum network could signal a lack of interest or confidence, potentially hindering ecosystem growth and innovation. This difference underscores the unique dynamics of the digital asset space, where trading activity is not just a reflection of market sentiment but also a potential driver of ecosystem development and vitality.

Digital asset market makers play a crucial role in ensuring sufficient trading activity and liquidity on the network. Unlike traditional market makers, digital asset market makers

can establish strategic relationships with token issuers and provide additional support for projects by offering liquidity solutions, participating in token distribution events, and collaborating on market development initiatives. In doing so, they help maintain the functionality of the network, support ecosystem growth, and provide confidence to users and investors.

However, on-chain trading introduces complexities such as direct integration with different blockchains, on-chain token custody, smart contract vulnerabilities, MEV (Miner Extractable Value) protection, gas fee estimation, and the risk of uncertain transaction finality. As alluded to above, digital asset market making requires constant rebalancing of assets between venues. Inconsistent block times and transfer fees add another layer of difficulty, especially during busy periods when chains are congested and fees spike. This adds uncertainty to trade execution, as transactions may not always be confirmed immediately, unlike in centralized exchanges.

Additionally, the risk of private key loss or theft is significant and can be extremely costly if not managed properly, especially as trading activity increasingly migrates on-chain. Market makers must balance the absolute security of funds with the need to move capital quickly to where it is needed most.

Despite these challenges, investing in DeFi integration can provide market makers with a competitive advantage. This capability is an additional barrier to entry for non-specialists, which adds to the market makers' moat. This has resulted in market makers outright investing in various projects, leveraging their operational and trading experience to conduct technical due diligence for investments in DeFi protocols.

As discussed in Part 2, project/token market making is a crucial activity for digital asset market makers, often incentivized through commercial contracts with specific projects. This section will delve into the commercial aspects of project market making, comparing the various business models available. Additionally, it will explore the supplementary services offered by market makers, providing a comprehensive overview of their business operations.

3.1 COMMERCIAL CONTRACTS WITH TOKEN ISSUERS

Project market making contracts have two common models: Retainer-based Model and Loan-Call Option Model. Under the Retainer-based Model, market makers receive a fixed fee for their services, using the token issuer's inventory for trading activities. The Loan-Call Option Model, on the other hand, involves market makers receiving a loan from the token issuer's treasury and token call options. Token issuers should carefully evaluate the opportunities and challenges of each model to determine which is best suited to their needs.

Digital Assets Market Maker Business Model Comparison — THE BLOCK PRO · RESEARCH

	Loan-Call Option Model	Retainer-based Model
FEE STRUCTURE	**No recurring fee –** market maker receives **token loan and token call options.** Contract structure can be more complex.	**Clear and transparent fee structure** – monthly fee structure provides predictable costs for clients.
INVENTORY	Clients provide market makers with **a loan from the token treasury**.	The **token inventory** remains in **client's custody,** with the market maker managing the account through an API connection.
KPI MANAGEMENT	Clients can receive **periodic reports** from the market maker to assess KPIs. Level of transparency may vary by market maker.	**Clients can manage KPIs more directly** since they provide the inventory.
CAPITAL RISK	**Market makers bear the capital risk** associated with inventory price fluctuations.	**Clients bear the capital risk** associated with inventory price fluctuations.

3.1.1 RETAINER-BASED MODEL

In the Retainer-based Model, market makers receive a fixed fee for their services, typically based on a set fee per trading pair per exchange, with potential discounts for more pairs. Token issuers provide blended inventory (native token and stablecoin) for the market makers' activities. The client's inventory remains in custody on their account, with the market maker managing the account through an API connection. The market maker monitors inventory, executes trades, and ensures regulatory compliance, providing regular reports to maintain transparency.

KEY CHARACTERISTICS

- Allows for better budgeting and financial planning with predetermined fixed costs.
- Utilizes the token issuer's inventory for trades, allowing the issuer to manage KPIs more directly than the Loan-Call Option Model.
- Clients bear the capital risk associated with the inventory, enjoying the upside of price appreciation but also bearing the downside price risk.
- Potential lack of long-term alignment between the token issuer and the market maker – the market maker receives a fixed monthly fee regardless of the token's performance, which may reduce their incentive to perform at their best.

To improve alignment, some firms use controversial profit-sharing arrangements, giving market makers a trading profit fee in addition to their monthly fixed fee. This practice raises ethical concerns, as it can incentivize market makers to prioritize their own profits over fair market practices. Token issuers should be aware that such arrangements can create conflicts of interest, tempting market makers to manipulate markets through artificially inflated volumes and prices or engage in predatory trading behaviors to boost profit. Such actions can compromise market integrity, harm investors, and undermine trust in the broader digital asset ecosystem.

3.1.2 LOAN-CALL OPTION MODEL

The Loan-Call Option Model introduces a unique approach to market making that benefits both market makers and token projects. This model comprises two primary components: a loan from the token treasury and token call options. Through this structure, market makers have the opportunity to earn profits through trading activities, while token issuers can benefit from increased liquidity and market participation. There is no monthly fee charged, and the market maker bears the risk due to the loan structure. The engagement's key performance indicators (KPIs) are mutually agreed upon by the project and the market maker during initial negotiations.

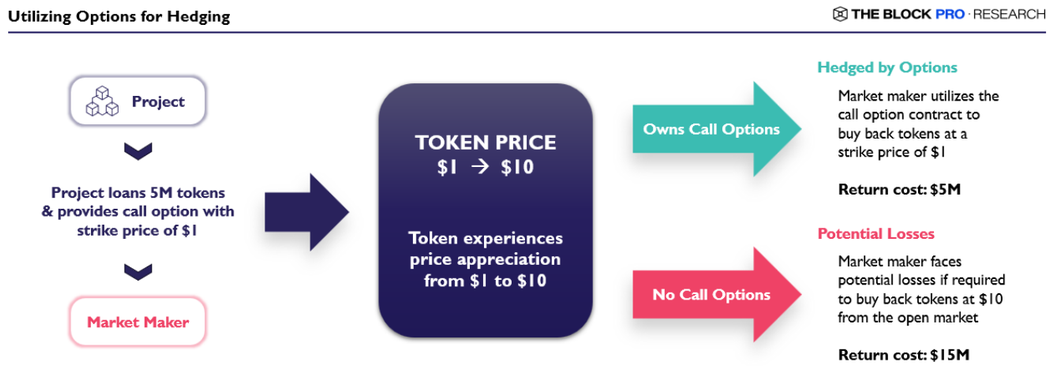
In contrast to Retainer-based Models, where market makers directly leverage the issuer's token inventory for trading, the loan-call option model involves token issuers providing market makers with a loan from the token treasury. Usually, the loans are specified either as a certain dollar value of the client's native token or as a percentage of the token's total supply. Occasionally, a cash element may be added, but it's more typical for the market maker to use their own funds to provide liquidity for the other side of the trading pair.

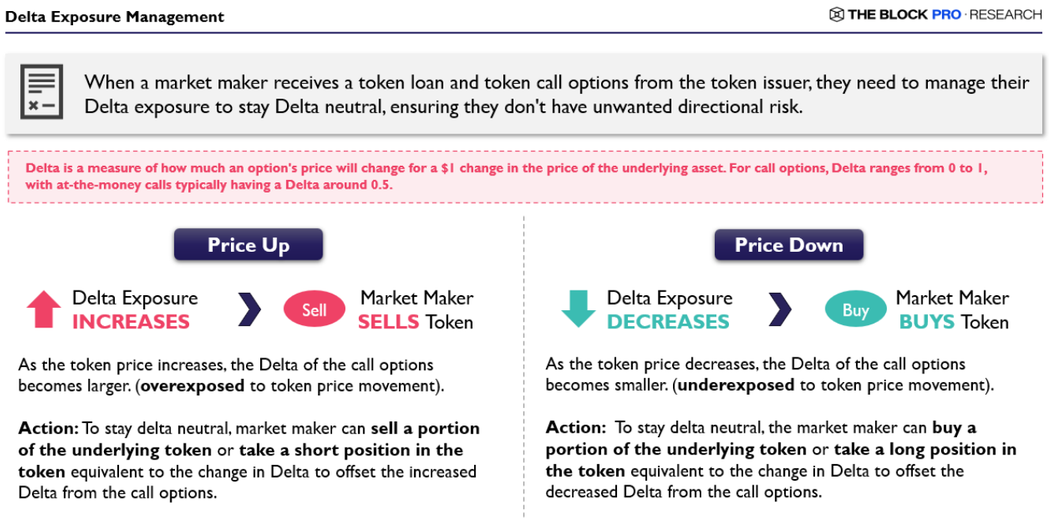
Additionally, market makers receive token call options from the projects, which enable them to repurchase the borrowed digital assets at a predetermined price and time in the future. Project market making often may not be profitable on its own, but this option component helps balance the equation – market makers use the call option as a hedge and a tool for effective market-making, especially in volatile markets.

This model suits projects that prioritize liquidity and seek professional firms to manage their token's liquidity while assuming all the price risk. It allows issuers to mitigate capital losses on the downside and enables market makers to engage in gamma trading, a strategy where traders profit from large price movements in any direction by constantly adjusting their positions based on changes in an option's sensitivity to price movements of the underlying asset.

By using these options, market makers can engage in spot trading against underlying positions, managing their risk by securing a fixed return price and hedging against significant price fluctuations. This incentivizes market makers to provide more liquidity at

a reduced risk. At the end of a loan term, market makers can either exercise their options or return the loaned tokens. This introduces a trade-off for issuers: they may miss out on potential gains if token values rise and the tokens are sold back at a pre-agreed price. However, the increased liquidity from such arrangements can enhance market stability and trading volumes. Projects must consider both the opportunity cost of possible price appreciation and the market benefits derived from enhanced liquidity when evaluating this type of arrangement. The relative importance of these factors can vary depending on the specific circumstances and goals of the project.





For the Loan-Call Option Model, contract duration can have a wide range from 6 months to 3 years, with the average being around 1 year. The decision between short and long-term deals depends on various factors including the market maker's risk, the value of the call option, project's life stage, project's preference, and more. For instance, a token project that already has significant liquidity but aims to build it further may offer a more valuable call option over two years compared to a newer project.

The Loan-Call Option Model's contract structure is more nuanced than other fixed-cost models, which affects token issuers in multiple ways. On one hand, it introduces complexity in understanding financial commitments and repayment terms. On the other, it offers potential for customization to specific needs and market conditions. Token issuers need to thoroughly comprehend the agreement's terms and conditions to navigate both the challenges and opportunities this model presents.

Compared to the Retainer-based Model, the Loan-Call Option Model may exhibit less transparency and issuer involvement. Market makers often have more autonomy in determining the overall trading strategy and engagement KPIs for the loaned tokens. This autonomy can result in a potential lack of transparency, as token issuers may have

limited visibility into the specific trading activities and strategies employed by market makers. Additionally, since market makers have greater control over the trading strategy, there may be less direct involvement or oversight from the issuer in day-to-day trading operations.

While the loan-call option model offers market makers more trading autonomy and improved economic alignment, it also introduces concerns about potential extractive behaviors. Some market makers might adopt aggressive trading strategies to maximize returns, potentially increasing volatility or facilitating market manipulation. For new tokens, market makers with a loan may control a significant share of the initial market, raising concerns about influence and manipulation. Additionally, market makers receiving call options might not commit to providing expected liquidity. In previous bull market cycles, the lack of contractual obligations may have allowed certain market makers to secure a long delta position (long the calls of the tokens) and ride those on the positive market sentiment, massively benefiting asymmetrically to the upside without delivering the product itself.

As such, the model can be both extractive and non-extractive, depending on the market maker's adherence to their commitments. To address concerns about potentially exploitative practices, some market makers have adopted a contractual framework that guarantees specific KPIs for spread, depth, and uptime. This approach underscores the non-extractive nature of their activities by holding them accountable to strict performance metrics, regardless of market conditions.

These contractual obligations ensure market makers' active participation in providing liquidity across various scenarios. During rallies, they must sell into strength, while in periods of weakness, they are compelled to buy, maintaining consistent liquidity. This involvement helps stabilize markets and mitigates the risk of extreme price swings or liquidity shortages. By committing to these KPIs, market makers demonstrate their dedication to maintaining market efficiency and fairness, even when it might conflict with short-term profit opportunities.

The contractual KPI approach strikes a balance between profitability and broader market

health concerns. It demands sophisticated risk management strategies and advanced trading algorithms to meet KPI targets while adapting to dynamic market conditions. Furthermore, the transparency afforded by these contractual frameworks fosters trust among market participants, contributing to a more stable and efficient market environment.

3.1.3. LESS COMMONLY USED MODELS

- **Profit-Sharing Model:** In this model, market makers aim to profit from both the bid-ask spread and trading token loans. This model raises ethical and regulatory concerns, as losses fall solely on token issuers while gains are shared. Such practices are typically prohibited by reputable exchanges as they undermine retail investors and market health. Caution is advised, as some bad actors may use this model or similar schemes to artificially inflate token prices for profit, mimicking pump and dump schemes.

- **Self-serving Model:** Some market makers provide self-service platforms where token issuers pay a recurring fee to access the market maker's infrastructure and expertise, allowing them to manage their own market-making activities. These platforms offer autonomy, scalability across exchanges and blockchains, and real-time monitoring tools. However, this approach shifts trading risk to the issuer, requiring expertise and diligent oversight. Without it, issuers may face increased operational losses and resource strain compared to fully outsourcing market making.

3.2 ADDITIONAL REVENUE STREAMS

Beyond commercial project market making contracts, market makers explore additional revenue streams such as OTC trading, DeFi support, options trading, and venture capital investments to enhance overall liquidity in the digital asset ecosystem.

As market making remains fundamental for digital asset market makers, many are exploring additional revenue streams in non-market making verticals to boost profitability and competitive edge. That said, when a project partners with a market maker incentivized to provide liquidity, it can access a range of additional services beyond basic market making. These services are often restricted by the availability of hedges, access to inventory, and other economic incentives:

- **OTC Solutions:** In OTC trades, market makers facilitate large transactions outside traditional exchanges by providing buy and sell quotes, ensuring efficient execution with minimal price impact. For the digital assets space, OTC trading typically involves more customized, one-off trades rather than the continuous price streaming seen in traditional OTC services. This service benefits token projects by allowing substantial trades with VCs and large investors without affecting market prices. OTC trading offers privacy, competitive pricing, and tailored solutions, particularly from firms with sophisticated execution abilities. Market makers also provide additional services like market analysis, trade execution advice, and risk management strategies to OTC clients.

- **DeFi Support:** Digital asset market makers deliver a suite of essential services for the DeFi ecosystem. They offer liquidity, liquidation, and arbitrage for DEXs and DeFi applications, and also provide market access infrastructure for institutional investors entering DeFi. Additionally, they support treasuries with asset management, including diversification and hedging strategies. For early-stage DeFi projects, market makers contribute strategic advice on product design and help bootstrap liquidity and traction.

- **Options Trading**: Some market makers offer specialized digital asset options desks, providing trading services for contracts that grant rights to buy or sell digital assets at preset prices and dates. These desks cater to investors and institutions seeking flexibility in hedging, treasury management, yield improvement, and diversification. They serve as risk management tools for various entities, helping them navigate market volatility through expert guidance and customized solutions.

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- **Algorithmic Trade Executions:** Digital asset market makers may offer customized algorithmic trade executions, utilizing proprietary technology and partnerships for competitive pricing and efficient settlements. This service benefits large-scale buyers and sellers by reducing average costs, maximizing gains, and minimizing price impact through strategic order execution across venues. Market makers earn fees for providing this specialized infrastructure, expertise, and technology, enabling efficient and effective trade executions for their clients.

- **Venture Capital:** Some digital asset market makers operate venture arms, investing in projects to diversify their business, manage risks, and foster ecosystem growth. These ventures provide resources like funding, regulatory advice, networking, and liquidity solutions. Such partnerships can enhance market liquidity, facilitate product testing, support OTC and treasury operations, and guide project development, benefiting both the market maker and the broader digital asset ecosystem.

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PART 4:

CONCLUDING THOUGHTS

The digital asset market making industry has faced challenges related to transparency, which has led to some misconceptions. The use of sophisticated strategies, coupled with the evolving nature of regulatory oversight, has at times made it difficult to distinguish between legitimate practices and potential market manipulation. This situation highlights the importance of developing clearer industry standards and encouraging more open dialogue among market participants. Such efforts could foster a better shared understanding of market making practices in the digital asset space.

As this report has detailed, genuine digital asset market making requires sophisticated liquidity provisioning. To differentiate themselves, reputable market makers are now prioritizing transparency and trust-building measures. This is reflected during commercial negotiations by clear explanations of their business models, key KPIs, and risk management strategies. Contracts should now stipulate a requirement for detailed trading reports, even enforceable KPI obligations.

This shift towards transparency aims to reduce predatory practices and unethical behavior in the digital assets market. It enables clients to make informed decisions about operations, pricing strategies, and potential conflicts of interest, thereby reducing exploitation risks and enhancing market integrity. The resulting fairer environment bolsters the market's long-term credibility.

For clients seeking market makers, prioritizing open communication and conducting thorough due diligence is crucial. Legitimate providers will openly discuss realistic partnership benefits and limitations. Future discussions will explore market makers' realistic promises and key selection criteria, emphasizing the importance of partnering with legitimate players in the digital assets space.

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Beginning in 2021, Michael McCaffrey, the former CEO and majority owner of The Block, took a series of loans from founder and former FTX and Alameda CEO Sam Bankman-Fried. McCaffrey resigned from the company in December 2022 after failing to disclose those transactions.

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