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Digital Assets: Emerging Opportunities and Challenges

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Abstract

As more people and organisations acknowledge the potential advantages and opportunities of digital assets, their use is increasing. Digital assets are gaining popularity due to increasing interest in blockchain technology, which is characterised as decentralised, efficient, and safe, and offers a transparent and immutable record of transactions. The introduction of new clearing techniques, including central bank digital currencies, is expected to increase the credibility and stability of the digital assets market, so attracting more participants. In the cryptocurrency field, the Bitcoin halving represented a noteworthy and an increasingly expected event, its effects being the halving of the reward for new bitcoin mining, the admittance of spot Bitcoin exchange-traded funds (ETFs) in the US and the initiation of spot Bitcoin and Ethereum ETFs in Hong Kong standing as happenings which are able to shape the global trust in cryptocurrencies, in their capacity as exchange and value storage instruments.

Despite these matters, there is no harmonisation at worldwide level regarding the jurisdictional landscape, and the utilisation of digital assets is, at times, slowed down or propelled by the regulatory structures. In addition, regulatory and surveillance systems have been launched by some jurisdictions, for example MiCA in the European Union, whereas other jurisdictions conduct fewer steps in this sense. The research aims to assess the manner in which market capitalisation is shaped by funds' inflow coming from private and institutional investors in the novel Bitcoin ETFs at the US scale and how consumer behaviour is altered by these market participants.

Keywords: digital assets, cryptocurrencies, bitcoin.

JEL Classification: E42, E58, F31.

1. Introduction

The evolving environment of cryptocurrency banking, combining digital currencies with traditional money, contributes to Bitcoin's rise in value, which

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reached 70,000 US dollars in March 2024. Bitcoin spot ETFs were allowed in the United States in January 2024, further diversifying the investor pool.

In the last 15 years, there has been an upward attention allocated to digital assets, this type of assets also reflecting altered volume and typology. Factors such as the technological progress and innovation, consumer attention, and novel financial structures determined the growth process.

Cryptocurrency banking, as a changing environment that links digital currencies and the usual form of money, plays its role in the value rise of Bitcoin, that amounted to USD 70,000 in March 2024. In January 2024, Bitcoin spot ETFs were permitted in the United States, and thus developed the investor pool. Major banks and financial institutions are integrating stablecoins and researching tokenisation using blockchain technology and decentralised finance solutions in order to improve consumer happiness and cost effectiveness.

In March 2024, the entire market capitalisation is 2.6 trillion USD based on the Trading View index TotalCryptoMarketCap. There were 700 exchanges and more than 2.2 million cryptocurrencies, with a daily volume exceeding 50 billion USD, and Bitcoin holding a dominance around 50%. However, Bitcoin's market capitalisation of 1.4 trillion USD was only half that of Microsoft Corporation, which was standing at 3.1 trillion USD.

The growth of the cryptocurrency market has also been influenced by factors such as the increasing adoption of technology, the attraction of cryptocurrencies global and decentralised features, and the attraction of promising financial opportunities in mainstream society (Meister & Price, 2022).

Studies suggest that investor attitudes, macroeconomic concerns, and technological and financial considerations influence the cryptocurrency market. One study highlights how investors emotions play a role in the cryptocurrency field during times of extreme market conditions. This emotional aspect can lead to fluctuations in assets values, irregularities, and speculative behaviours (Lin et al., 2023).

Stablecoins represent a solution that combines the benefits of the cryptocurrencies with the stability tied to currencies or other assets. Moving forward, these digital assets could offer a ground for investors seeking to leverage blockchain and distributed leger technologies while mitigating volatility.

Some of the capabilities posed by stablecoins are transaction development, liquidity management enhancement, and border settlement simplification. Despite these aspects, stablecoins face processes of evaluation and risk management. Furthermore, users' trust in stablecoins decreased along with the non-achievements of stablecoins, for instance Unified Stablecoin USTC in 2022 and 2023.

2. Problem Statement

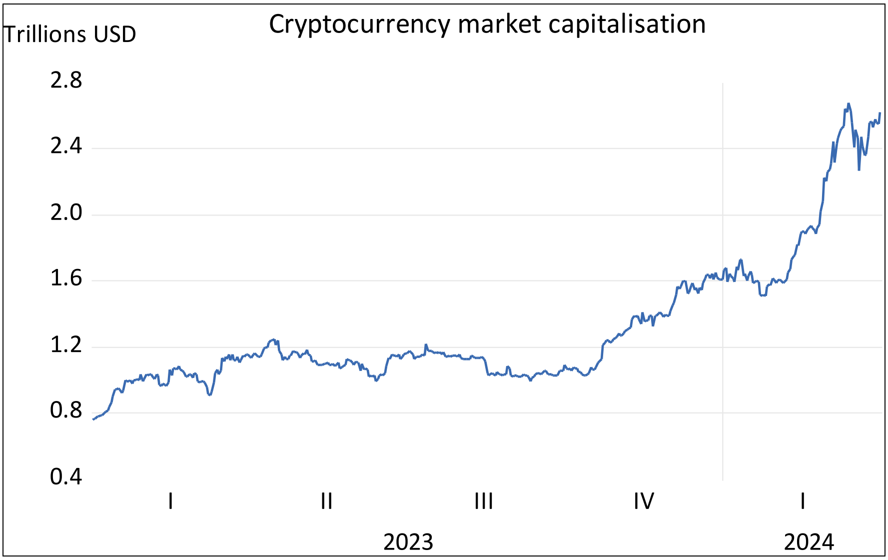
In 2024, there was a net increase of approximately 1 billion USD in the cryptocurrency market, indicating significant changes in the structure that could impact existing relationships on the market.

The year 2024 brought a net increase of approximately 1 billion USD in the cryptocurrency market, pointing out to major structural modifications which could influence market interactions. Around 62 billion USD flowed into the market solely from new Bitcoin ETFs (statista.com, 2024). However, the rise in cryptocurrency prices may also affect the market index.

Early 2024 saw two significant events with an important expected impact on the market: the approval of the Bitcoin ETFs in the US in early January and the Bitcoin halving event in April.

The Bitcoin halving takes place in every four years, as it is scheduled, and generated a 50% decrease in the mining rewards per block, which are reduced to 3.125 Bitcoins per block from a value of 6.25. Bitcoin is intrinsically defined by scarcity, the total volume being caped at 21 million coins. Given their reduced availability, it is highly possible for the value of Bitcoins and the demand for them to become augmented.

Figure 1. The capitalisation of the cryptocurrency market



Source: tradingview.com, TotalCryptoMarketCap 1Dindex.

The upturn taking place in the capitalisation of the cryptocurrency market can also be explained by incoming investments, for instance gold, stocks, or commodities, from other markets. In addition, the cryptocurrency trading price underwent a raise, this process being correlated with a bull cycle.

The approval of regulatory authorities regarding Bitcoin exchange-traded funds generated a strong impact on the cryptocurrency industry. For investors, this process ensured an enhanced and monitored manner of retrieving and investing in the digital asset market. Along with the presence of these investment instruments, investors started to prove interest to become involved in the Bitcoin market.

3. Research Questions / Aims of the Research

The paper aims to study the factors which shape the increase of the cryptocurrency market capitalisation, placing emphasis on the first quarter of 2024, as well as the primary events which determined its development. Whether we are talking about technological advancements, innovation, increased consumer interest, or changes in the legislation of the ETFs in the US allowing Bitcoin investments, all these factors have contributed to the spike in the market capitalisation. In early 2024, it reached 2.53 trillion USD, while the all-time high was 3 trillion USD in November 2021.

Research question 1: Is the rise in market capitalisation related to the inflow of funds from institutional investors in the cryptocurrency market, which in turn have been generated by the approval in the US of the new Bitcoin ETFs?

Research question 2: How does the entrance of new players into the cryptocurrency market impact investor behaviour?

4. Research Methods

We performed an examination of recent academic literature regarding cryptocurrency, maintaining the emphasis on keywords such as bitcoin, cryptocurrency, consumer habits, market volatility, and market liquidity. These terms were selected for their impact on the value of the market and the volume of transactions in the cryptocurrency industry.

Our review of literature sought to showcase an array of perspectives discoveries from recent research, on different facets of cryptocurrency markets. Focusing on Bitcoin and cryptocurrency as topics, we made sure to incorporate a range of virtual currencies and their market behaviours. By examining consumer actions our goal was to delve into how user acceptance, choices, and psychological aspects influence market activity.

We also investigated volatility to gain an understanding of the reasons behind the frequent and notable price fluctuations in the cryptocurrency markets.

This aspect is particularly meaningful for investors and policymakers, given that it directs investment strategies and regulatory procedures. In addition, we conducted a study on liquidity with the aim to determine the degree of ease with which asset trading can be operated without triggering major changes in prices, an element that is essential to maintain the steadiness of markets and the trust of investors.

Afterwards, we performed an assessment through the help of EViews software and data obtained from tradingview.com. The focus points of the analysis were the price and the trading volume posed by the cryptocurrencies Bitcoin (BTC), Ethereum (ETC), and Solana (SOL), in the timeframe January 2023-March 2024, namely 15 months.

Additionally, the paper performs an evaluation of the volume of new Bitcoin investments conducted through top exchange-traded funds (ETFs) in the United States, based on data retrieved from statista.com. The analysis is based on the first three months after the moment when the ETFs were brought to the market, the purpose being the identification of the timely market response as well as the behaviour depicted by institutional and retail investors concerning investments.

The paper also delves into the adoption rates and investment flows while determining the manner in which the novel Bitcoin ETFs influence the market. By placing the lens on this phase, we are able to find trends that otherwise may not present clarity in data for the long-run, such as the early adopters' joy and the starting liquidity generated by these investment alternatives.

The limitations of the paper reside in the fact that the analysis ensures a snapshot of market dynamics on a term of three months, and thus not all the factors shaping investment levels may be identified.

Conducting an extended assessment encompassing a greater timeframe represents a strategy that can unveil supplementary attributes such as the modified interest of investors regarding regulations and the enhanced economic conditions and technological innovations within the cryptocurrency field.

Moreover, enlarging the timeframe of the study to over three months can bring about trends such as the steadiness of investment volumes, the market progression, and the amplitude of the influence posed by economic cycles on Bitcoin ETFs. This broader examination offers a view of how Bitcoin ETFs contribute to and impact the overall cryptocurrency market landscape offering valuable insights for investors, policymakers and researchers.

5. Findings

In 2024 the global market saw the emergence of Bitcoin ETFs after eagerly awaited approvals in the US. This led to a 57% increase in the market capitalisation from 1.6 trillion USD on January 1st, 2024 to 2.6 trillion USD on March 31st, 2024 as per the Trading View daily index for TotalMarketCap.

Bitcoin ETFs could appeal more to investors compared to directly purchasing cryptocurrencies due to lower fees and the familiarity of traditional investment avenues. There ETFs have the potential to change how individual investors engage with Bitcoin by providing a relatively stable investment option. Ultimately choosing between them depends on preferences, attitude towards risk, and financial objectives.

Figure 2. Bitcoin holdings of the ETFs

	Exchange Traded Funds	Country of incorporation	# of BTC	Value of BTC (billion USD)
1	Grayscale Bitcoin Trust (GBTC)	United States	304.970	20,14
2	iShares Bitcoin Trust (IBIT)	United States	273.140	18,03
3	Fidelity Wise Origin Bitcoin Fund (FBTC)	United States	152.465	10,07
4	ARK 21Shares Bitcoin ETF (ARKB)	United States	42.981	2,84
5	Bitwise Bitcoin ETF (BITB)	United States	33.659	2,22
6	Purpose Bitcoin ETF (BTCC)	Canada	27.928	1,84
7	ETC Group Physical Bitcoin (BTCE)	Germany	22.178	1,46
8	CoinShares Physical Bitcoin ETP (BITC)	Jersey	14.127	0,93
9	Bitwise 10 Crypto Index Fund (BITW)	United States	11.315	0,75
10	21Shares Bitcoin ETP (ABTC)	Switzerland	10.931	0,72
11	VanEck Bitcoin Trust (HODL)	United States	9.220	0,61
12	WisdomTree Physical Bitcoin (BTCW)	United Kingdom	8.510	0,56
13	CI Galaxy Bitcoin Fund (CAD) (BTCX-B)	Canada	8.364	0,55
14	Valkyrie Bitcoin Fund (BRRR)	United States	7.927	0,52
15	Hashdex Nasdaq Crypto Index Fundo De Indice (HASH11)	Brazil	6.898	0,46
	TOTAL		**934.613**	**61,71**

Source: statista.com/statistics.

Behavioural finance has influenced investor interest in the cryptocurrency market. In times of market downturns, the short-term focus of investors plays a significant role in influencing players in the cryptocurrency space to turn to media and online sources for information highlighting how investor attention can influence the crypto market briefly (Koutmos, 2018).

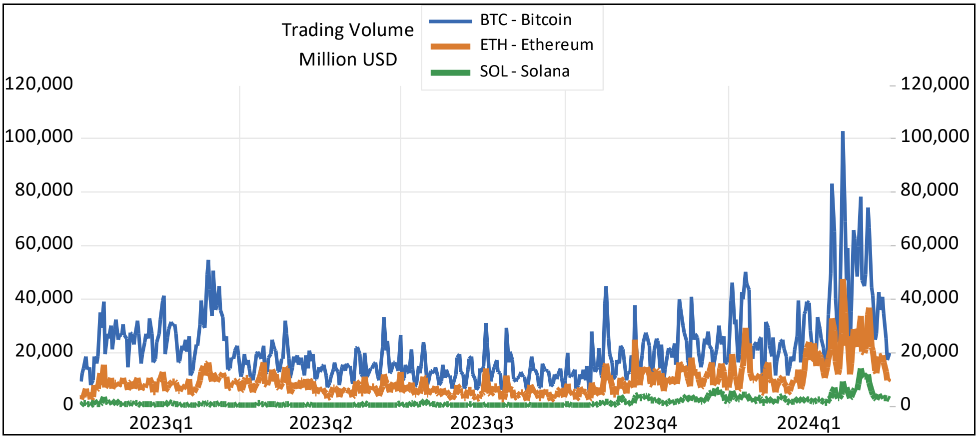
The general tendency indicated by the cryptocurrency market involves a momentum degree and regarding investor interest, size and momentum present a consistent influence (Liua et al., 2020).

The results of the research display that cryptocurrency markets function in an independent manner from other asset kinds. There are signs that the bitcoin market operates independently from macroeconomic conditions, and cryptocurrency markets show no correlation with the regular market (Glas, 2019). Consequently, producing parameters for cryptocurrencies using external data from other financial sectors poses a considerable challenge (Corbet et al., 2018).

The liquidity of the cryptocurrency market is primarily affected by factors unique to cryptocurrencies, such as the volatility of returns, the volume of dollar trading, and the transactions volume rather than by stock and exchange markets (Brauneis et al., 2021). However, data indicates that Bitcoin liquidity is impacted by the opening of the stock markets in London, Tokyo, and New York, peaking when both London and New York markets are active (Aleti & Mizrah, 2020).

Cryptocurrencies can serve as a good hedge against fiat currencies, topping diversified currency portfolios and gold, especially due to gold's vulnerability to political instability and the global economy (Cheong, 2019).

Figure 3. Trading volume in million USD for BTC, ETH, and SOL

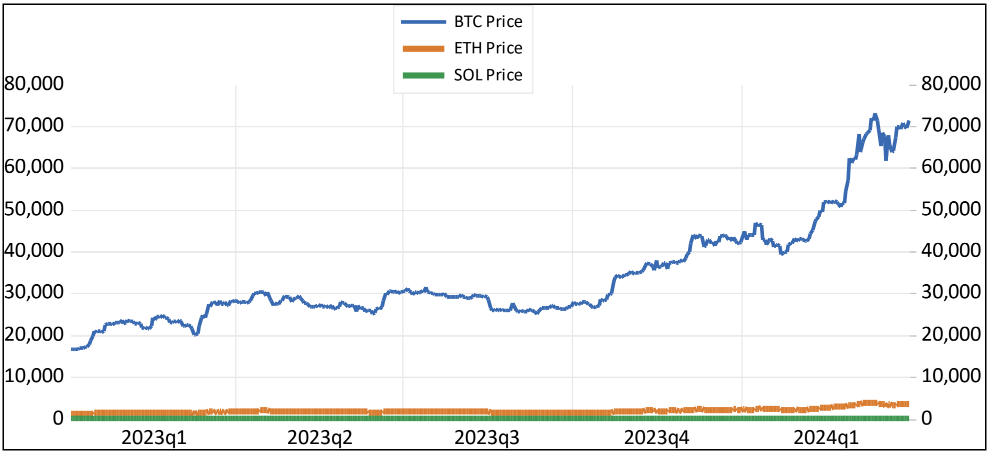


Source: EViews graphs based on the data retrieved from coinmarketcap.com.

Based on our econometric analysis which used regression analysis for the period January 1 to March 1, 2024, a strong correlation exists between the cryptocurrency market capitalisation, defined as the dependent variable, and the Bitcoin volume, as the independent variable. The coefficient is 1.19, and the p-value is 0.00, indicating that variations in the independent variable are associated with changes in the dependent variable. However, the R-squared and adjusted R-squared are 0.30, indicating that the independent factors are associated with the dependent variable, but not explaining a significant change in the dependent variable, and leading to increased variability around the regression line.

Crypto investors view the introduction of regulations in the cryptocurrency market as adverse news leading to a negative response. Investors exhibit negative sentiments when exploring less liquid cryptocurrencies with higher levels of information asymmetry risk (Chokor & Alfieri, 2021).

Figure 4. Closing daily trading price for BTC, ETH and SOL



Source: EViews graphs based on the data retrieved from coinmarketcap.com.

In July 2023 the Financial Stability Board (FSB), an organisation responsible for overseeing and advising on the global financial system, released its regulatory framework for crypto assets activities. The framework covers aspects such as crypto assets regulations, supervision, and oversight along with updated stablecoin principles. The recommendations are based on market trends and the practical experiences of national authorities. These are grounded in the principle "same activity, same risk, same regulation" focusing on being broad based, adaptable, and neutral towards technology. The FSB cooperates with entities to ensure that efforts aimed at monitoring and regulating cryptocurrencies assets activities and markets are harmonised, mutually beneficial, and supportive of each other. By the end of 2025, FSB aims to assess how these proposals have been implemented while continuing to explore policy implications for decentralised finance.

In September 2023, both the International Monetary Fund (IMF) and the Financial Stability Board (FSB) jointly issued a policy recommendation document. The paper delves into the advantages and disadvantages of cryptocurrencies focusing on how it impacts the larger economy and the financial stability. The IMF-FSB suggests putting in place rules and oversight practices for crypto assets to tackle potential risks to macroeconomics and financial stability. By regulating and monitoring authorised or registered crypto assets issuers and service providers it may be possible to maintain measures related to capital flows, fiscal policies, tax laws, and financial integrity standards. To prevent fluctuations in capital movements, nations should protect the control over their currency systems and fortify their monetary policy frameworks.

6. Conclusions

The introduction of Bitcoin exchange-traded funds impacted the cryptocurrency market, but it did not lead to significant changes in the market capitalisation.

As a result of factors such as reduced transaction fees and the familiarity posed by traditional investment options, some individual investors might choose ETFs instead of cryptocurrency purchasing. In line with this, Bitcoin investments can become easily attainable, more monitored from the legislative perspective, and stable. Nevertheless, given that the research relies on data from the first three months after the introduction, novel perspectives can be provided by an extended analysis in a greater timeframe.

Taking into account the conducted analysis, a proactive approach needs to be employed in regards to cryptoassets. Among the advantages of cryptocurrencies, we may name the lowered transaction expenses, the quick international payments, and the developed financial inclusion through payment technologies and trends. The potential held by Bitcoin is manifested in the direction of expanding portfolio performance, mitigating risks, and leveraging on innovative changes pertaining to digital assets. On the other hand, it is important to acknowledge that an evolutionary pattern is reflected by the technology that sustains cryptocurrencies and the viability of this method has not been fully proven yet. Due to this, the individual investor must be careful and map volatility risks, uncertainty regarding the regulatory framework, and problems associated with security.

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