

Non-Fungible Token - Impact on Economy and Financial industry

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Abstract—The non-fungible token has gained popularity since last 2 years and has become a financial asset with the recent trends in blockchain, NFT's are exchanged through blockchains and are bought through cryptocurrencies which has made a huge impact on the financial growth and has made a different way of investing. Our research mainly focuses on the economic and financial impact on the industry and technological factors of blockchain and how all these things are linked with each other. We have also focused as on how NFT's has become an financial asset and has been recognized as a new source of income.

I. INTRODUCTION

Simply non-fungible tokens are the basically are the tokens which are created on the blockchain technology which represent a unique identity on blockchain which can represent anything like arts, real estates, music, unique creative stamps. They are non-fungible which basically means are non-replaceable unlike other replaceable or interchangeable assets with same type of another like Bitcoins, Dogecoins. or any Currency

Currency is a fungible item because a ten-dollar bill can be exchanged for another ten-dollar bill or divided into ten one-dollar bills. Despite fungible items, non-fungible items are unique and distinguishable. They cannot be divided or exchanged by another identical item. The first tweet on Twitter is a non-fungible item with mentioned characteristics. Another tweet cannot replace it, and it is unique and not divisible. NFT is a non-fungible cryptographic asset that is declared in a standard token format and has a unique set of attributes. Due to transparency, proof of ownership, and traceable transactions in the blockchain network, NFTs are created using blockchain technology.(1)

NFT is a digital certificate that represents ownership or rights in relation to intangible assets (either tangible or intangible). NFTs can act as digital twins on tangible assets. The digital delivery of products with limited systems drives the demand due to shortages. NFT can be used to sell everything from digital art, music, and even sports seasons. They represent a new kind of ownership of anything that can survive in the digital world Unconventional tokens use blockchain technology to digitally display identity, making NFT more like a car title than the car itself. Just as you would not buy a car with a title deed that comes with it, it is not wise to buy property because it is marked with an NFT

logo.

Recently, NFTs are in the news as many Indian celebrities (such as Amitabh Bachchan, Rajnikant, Sonu Nigam) trade in NFTs. Recently, digital artist 'Beeple' made history by selling his piece of digital art for USD 69 million. Currently, India accounts for about 5 percent of the global NFT market. NFT introduces significant changes in the way consumers buy and sell digital goods such as music, affordable video game content, movies and more. In addition, smart contracts allow publishers, artists and content creators to continue to be paid every time NFT is sold. The combination of NFTs and DeFi, for example, opens up many opportunities for fintech renaming, at least in the short term. On this basis, the big question arises: is NFT a good investment by 2022? It could be, but with a lot of research and clever techniques. We construct a comprehensive dataset on a near universe of non-fungible token (NFT) transactions, create indices for the NFT market and its components, and analyze their properties. The NFT market return is significantly exposed to the cryptocurrency market return, but the majority of the NFT market variations remain unexplained. NFT market returns have low exposures to other cryptocurrency factors and factors from traditional asset markets. In the time-series, volatility and the NFT valuation ratio significantly predict NFT market returns. In the cross-section, NFT returns exhibit size and return reversal effects.(2)

NFT represents an exciting new way for brands to connect with their customers and fans. Brands, token buyers and token creators should consider the issues behind the tokens - including credit, consumer protection, data protection, IP, financial control, technology and product reputation - especially as the number, complexity and variety of NFTs are only possible. escalation (and this will no doubt lead to more complex issues that need to be considered and resolved).

II. LITERATURE REVIEW

According to the data, 49 percent of NFT clients make at least \$ 80,000 per year, 23 percent make less than \$ 40,000 and 20 percent make between \$ 40,000 and \$ 79,000. Levels of education have also been a factor in which the more educated a person is, the less likely he or she is to buy NFT. Remarkably, there was a similar pattern in visible objects.

According to Scalefast, the trend is likely to continue in 2022.

In addition, the company's findings show that 44 percent of consumers say they "do not know what NFT is" and 36 percent say the same about tangible assets. For example, for consumers who are sure to buy NFT, 46 percent say the leading factor in doing so is a better understanding of how they work. An additional 42 percent said "if it will inform or be a reasonable investment" as a factor, 31 percent said "if it comes from a trusted source," 25 percent said "if it comes with physical fitness" and 24 percent said, "if it is a process shopping was easy.

"The NFTs market and tangible assets have not been as widely used as the active participants so far are small and closely aligned with overseas technology trends," said Dan Wallace-Brewster, senior vice president of marketing for Scalefast. "As the media platforms generate investment for these products, they will bring awareness and demand from a wider range of US consumers and products should take steps now to avoid being left behind." If you look at the product categories where NFT consumers have reported that they are more likely to buy music or film-related NFTs than any other category (22 percent). Other areas to consider include art or photography (17 percent), souvenirs / sports collections (14 percent), fashionable clothing items (12 percent), memes (11 percent) and first collections of -NFT like Bored Ape Yacht Club, Cryptopunks, Loot, etc. (9 percent).

We collected Google search activity for the keywords "NFT + non-fungible token" (the plus sign means that results can include searches containing the words "NFT" or "non-fungible token"), "Cryptopunk", "Decentraland", "Bitcoin", and "Ethereum" from Google Trends (<https://trends.google.com/>, accessed on 9 August 2021) between 1 December 2017 and 30 July 2021. The Google search index ranges between 0 and 100. Average weekly NFT sales in USD are available from nonfungible.com (<https://nonfungible.com>, accessed on 9 August 2021). This data source has been previously used in NFT research (see, for example, [2,4]). We also collected weekly Bitcoin and Ethereum prices between the exact same dates from coinmarketcap.com (<https://coinmarketcap.com>, accessed on 9 August 2021). This data source has been widely used in cryptocurrency research (see, e.g., [20,21,22]). VIX index, SP 500 index, and gold prices are from Yahoo Finance (<https://finance.yahoo.com>, accessed on 9 August 2021).

A. Drawbacks and Risks

Fraud, on the other hand, is an important consideration when dealing with cryptocurrencies, and there may be market fraud or other fraudulent activities in NFT currencies. Therefore, in the current or future NFT market, further research is being requested to identify or warn of the risks involved. On the other hand, NFT trading and mining processes may generate higher returns uncontrollably and distort investors' expectations, thus

raising market bubbles as a result of greater inflation. The emphasis on NFT and cryptocurrencies on increasing power, self-regulation, and collective preservation has influenced the centralized control system. How to establish a coherent and beneficial model between the two still requires researchers to study and analyze. NFTs in terms of policy development and method development.

III. OBJECTIVES

NFT and material assets present a great opportunity for growth if the species can provide additional education to consumers about what these organizations are and identify the next most important group of recipients,

NFTs can be a very powerful asset for the creativity peoples who basically cannot afford to make it publicly available at the large scale. There are many platforms through which we can create and sell our NFTs through which the well-deserved creatives would earn from their creativity.

A. NFT's in Crypto

Additionally, crypto markets are volatile and surrounding regulatory frameworks are undergoing development. This market volatility could drastically change the need for NFTs - which also underscores the importance of community-building and other direct value sources of NFT ownership.

B. Economic and financial growth

In this model, the NFT market can act as a stock market, and allow users to buy / sell certain NFTs for trading. In some of the developed and regulated NFT markets, such transactions may also be legalized, as in commercial real estate. Examples of NFT in this market place are game / trade cards, winning prizes, unique videos of rare gaming times, digitized as a non-rising token

C. NFT as an Art

NFT Art is a completely new way to differentiate digital artworks that enable designers to monetize their work. It should be a faster process and a more accessible way for designers to produce work and earn rewards for their creativity. No chasing clients for payment, no preparation of files for printing and no waiting to hear feedback or change and edit your work to suit client needs.

D. NFT as a digital assets

NFTs are probably a rare commodity. Each non-removable token contains a computer code that confirms that it is the only asset with its own unique digital identity. This very important feature is useful in creating unique digital assets, and can be used to represent rare physical assets, the source of which (historical patent record) can be tracked and cryptographically verified with its basic blockchain protocol. The possibilities for special and unique items for sale - such as digital art, collections, or game pieces - are endless. Platforms like Open Sea, Super Rare, and Nifty Gateway bring NFTs to a ever-growing consumer base.

E. Asset Pricing

Although research in this area is already very active, there is still room for greater output and clearer paths. The first is about whether there is a basic model that drives NFT price determination. There are more NFT markets than just a single market to explore and analyze in depth (Dowling 2022a). Additional factors could be considered for inclusion in the analysis, such as market sentiment, economic and financial policy uncertainty, and pure volatility indicators, etc. (Umar et al. 2022). The second is to clarify the correlation between NFT and other cryptocurrencies and further uncover the common factors driving both markets (Dowling 2022b), including the Volatility Index (VIX), economic policy uncertainty (EPU), Consumer Confidence Index (CCI), and Consumer Sentiment Index (CSI) (Aharon and Demir 2021). Finally, as an increasing number of investors are likely to include NFT in their portfolios, its relationships with a broader range of assets, and the resulting impacts, can be further examined.(3)

IV. FUTURE SCOPE

NFT pricing seems quite distinct to cryptocurrency pricing in terms of volatility transmission. This has interesting implications for investment portfolios, as low-correlation assets are highly desirable for their diversifying characteristics. We need further investigation of NFT pricing to other asset classes to confirm the low-correlation status of NFTs.(4)

A. How NFTs can be used in Trade Finance

NFT index versus major market indices In the previous section, we have constructed the NFT price index. In this section, we compare the performance of NFTs with that of cryptocurrencies (i.e., ETH/USD Index), stocks(i.e., NASDAQ Index, SP 500 Index, or Dow Jones Index), market volatilities (i.e., VIX Index), bonds (i.e., Bond Index), and commodities (i.e., Gold Index).(5)

NFTs represent digital properties, not just JPEGs on the blockchain. They are based on smart contracts and blockchain technology and are the same decentralized networks that power many common cryptocurrencies. By definition, the blockchain platform provides reliable, secure, fully auditable data and immutable ledger history. Smart contracts, on the other hand, are self-executing, predefined agreements that exist on the blockchain and define how assets on the blockchain work.

B. Future of NFTs with crypto

NFTs are purchased using crypto. If there are not enough people with crypto, or are afraid to use any of it because its value can change dramatically up or down, your consumer market remains small.

C. Future of NFTs with VR

A whole bunch of NFTs will be able to navigate through the Hyper Realistic VR experience in this powerful blockchain world of thought. Anyone who wanted to see these digital assets can, and can use, as part of an in-depth gaming

experience. We may see digital NFTs that could be used as tangible and intangible assets one day. Imagine wearing a shirt for your favourite sports team while playing a card game with your friends! This not only creates a cohesive and immersive experience but also enhances the value of the material (jersey) and its longevity and usefulness. NFT shows any object that can be used to make money with any skill. It can range from rare card collections to memes. Think about the future with NFT.

D. Future Technology with NFT's

Technology has always emerged in partnership with people. The difference now is that technology is developing faster than ever before. New inventions are often accompanied by unexpected effects. The creators of laptops probably did not intend for their computers to build up global living communities or the impact of checking emails while asleep could make it difficult to terminate work. The fact is that all new things come with unexpected consequences.

V. CONCLUSION

As an emerging and rapidly growing field of multidisciplinary research, there is a gap between cryptocurrency-related research and the amount of attention paid to NFT. All studies published in economic and financial journals were developed after 2021 and are very dynamic, focusing on the field of commodity prices. Considering that NFT technology, cryptocurrency and blockchain are still evolving at a high rate, we have identified promising areas for future research in the fields of commodity, tokenomics, and risk and control. It is important to highlight the main limitations of our study.

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