



The Regulation of the Investment in Crypto-Assets and its role in the growth of International Trade

Mustafa G. Mustafa

Master of Laws (LL.M) in International Commercial law, Ain shams University- Faculty of Law.

Email: Mustafa.gamal.law@hotmail.com

Abstract

This article discusses the importance of enacting a regulatory framework for investing in Crypto-Assets where the need for this arose after the advent of blockchain technology and the accompanying development, The volume of trading on cryptocurrencies has increased, and Non-fungible Tokens (NFTs) have become the focus of many investors in every country in the world and are sold for a huge price. Crypto-assets are attracting investors, especially because of their features such as encryption and ease of proof of ownership equally, many countries seek to invest in crypto-assets to ensure that they have an additional financial resource that increases the volume of GDP.

Crypto-assets have also played an important role in international trade by facilitating trade financing operations. Crypto-assets have helped remove traditional barriers and eliminate risks that have hindered investors, and the international trade process is proceeding more smoothly and efficiently.

During this time, it was necessary to examine and discuss how to enact regulatory frameworks for investing in crypto-assets, ensuring that people and countries make the best use of them, and also prevent money-laundering and terrorist financing that might accompany it.

Keywords: Crypto-Assets; Non-fungible Tokens (NFTs); Distributed Ledger Technology (DLT).

1. Introduction

Recently, as the use of blockchain technology has increased, so-called Crypto-Assets have emerged. They are assets with material value, but digital assets have no physical presence. Among these Crypto-Assets that have received the attention of many investors are Non-fungible Tokens (NFTs) that have become investors and traders like antiquities and artistic collectibles, not only did it demonstrate a vital role in the growth of international trade by promoting and facilitating international trade operations and removing existing difficulties and hindering their growth. NFTs played a mediator role in international trade operations and contributed to the development of supply chains and the verification of goods and suppliers on a large network on the blockchain.

Undoubtedly, we all have many questions about what these assets are, where did they gain value as an asset with material value, what encouraged traders and investors to buy and trade them, and is there a difference between Crypto-Assets and Cryptocurrencies? How did it contribute to the

development and growth of the international trade movement and solve some of the problems that existed?

All these questions and more will be answered in this article in an attempt to examine how to enact legal legislation and establish regulatory frameworks to regulate investment and trading in crypto-assets, and their positive response to the growth of international trade.

2. “Blockchain Technology” Meaning and Definition:

Blockchain, sometimes referred to as Distributed Ledger Technology (DLT), is a technology that allows data to be transmitted to another person securely and maintained without interference by any intermediary. Simply a series of blocks or records each containing a timestamp and link to previous blocks, managed by a set of computers that are not owned by any entity, these blocks are secured and interconnected by encryption algorithms (Sarmah, s. 2018. p.23) The blockchain network is independent and is not subject to any central authority because it is essentially an unchangeable joint registry, and the data in it is available to anyone to view, so anyone on the blockchain is transparent, and transactions are free and have no cost.

Blockchain is a simple way to transfer information from A person to B person in a fully automated and secure. One party begins to create a block that is verified by millions of computers distributed on the network. Verified blocks are then added to a series stored in the network, creating a record associated with other records. For the forgery of a single record, all records must be falsified on millions of computers.

For this reason, it is seen as "almost unhackable", because to alter any information about it, a cyberattack must hit all ledger copies simultaneously.

3. “Crypto-Asset” Concept:

A crypto asset is a cryptocurrency or asset that has been tokenized, transferring an object's value to a blockchain.

Crypto assets are defined as digital assets based on online public ledgers to demonstrate ownership. Encryption, blockchain technology, and peer-to-peer networks are used to create, secure and verify different transactions. Crypto-Assets have several functions and characteristics. They are used as a means of exchange and transaction, as a way of storing value, and in many other commercial transactions. Crypto-Assets operate away from any central or government authority. (Demertzis, M., & Wolff, G. B. 2018. p.2.3)

The distributed ledger is a digital system that allows users and systems to record asset-related transactions. Distributed ledger technology stores information in multiple locations at any given time.

Unlike traditional databases, DLT technology does not have any central place to store information. That's what distinguishes it from a traditional database. Decentralization also provides better security, transparency, and confidence among the parties you use.

The distributed ledger eliminates the need for a central transaction tracking authority. It also can track money transfers, manage asset transfers, and control access to payment services in various business transactions.

The most common types of Crypto-Assets we might encounter are:

Cryptocurrency, Utility Tokens, Security Tokens, Non-Fungible Tokens (NFTs).

4. Non-Fungible Token (NFT) Concept:

In recent times, the term non-fungible token, which NFT abbreviates, has popularized term "non-fungible token", mainly because of the sale of some of them with a huge sum of money, which has made everyone wonder, what it is?

Non-fungible tokens (NFTs) are crypto-assets on the blockchain with special identification codes and metadata that distinguish them from each other.

where they cannot be traded or exchanged at equivalency, unlike cryptocurrencies. (NFT) do not function as cryptocurrencies, as they cannot be used as a means of exchange. They are not

interchangeable because they are not similar to exchanges with them, and, therefore, can serve as a medium for commercial transactions. (Conti, R. Schmidt, J. 2022, Apr 8).

The special construction of each NFT allows for a wide range of applications. NFT is an excellent way to represent physical assets in the digital world such as real estate and artwork.

With a simple explanation, it can be said that NFT looks like a human fingerprint where there is no copy and cannot be replaced.

Because NFT relies on blockchain, it can also be used to replace intermediaries and connect artists and their fans directly with each other without any third party. In other words, NFT eliminates brokers, simplifies commercial contracts, and provides new markets. (HOFFMAN. C. 2021, Mar 29).

5. Investing in Crypto-Assets:

Note that many famous celebrities and brands are starting to take great interest in the metaverse, which is a large virtual space that mimics the physical real-world using augmented reality, virtual reality, and blockchain technology.

It is a virtual digital world where people can use their avatars - their digital likeness - to attend meetings, lectures, parties, meet each other, buy exclusive NFTs, etc.

We find that big companies and investors have set their eyes on Metaverse and this new digital world, and have seen it as the future of investment in the world.

Bloomberg estimates that the metaverse market will reach around \$800 billion in the world by 2024 after tech investment giants such as Meta, Microsoft, Apple, and Google entered into the investment in the metaverse. (CNBC. January 2022).

In follow-up, we will find that thousands of people and many companies have already spent millions of dollars buying assets in virtual worlds such as Decentraland and The Sandbox. metaverse has also seen the influx of many giant companies such as Adidas, Samsung, JP Morgan, and HSBC who have shown their intention to invest in the metaverse. (JP Morgan. 2022).

Although real estate is always a lucrative investment option, it is difficult to imagine the idea of having it by default in the metaverse because it has no physical presence.

However, a CNBC report showed that virtual real estate prices have risen by as much as 500% since Facebook, which has become Meta into the metaverse world, suggesting to many people that the next world is a virtual world. (DiLella, C. Day, A. 2022 Jan 12).

Simply put, we find that there is an influx of metaverse, made through the purchase of non-exchangeable codes (NFT) using cryptocurrencies, and its ownership is registered on the blockchain and thus becomes a unique and tradable crypto-asset. Owners can also sell their virtual land through a third-party exchange or metaverse ecosystem.

You may find that some virtual lands in the metaverse are more expensive than actual real estate investment, as the digital real estate ecosystem has become hugely popular in the crypto-assets world.

6.1 “Crypto-Assets” play an important role in International Trade:

Although the use of NFTs within art or collectibles is of great interest to this emerging technology, in the world of international trade, interest in using NFTs is not as much as in collectibles and art.

Blockchain technology, smart contracts, and NFTs help facilitate trade operations, from easy verification of the source of goods and prevention of fraud and manipulation as well as debt management.

The use of blockchain technology and smart contracts, and NFTs in trade finance is not just virtual there are many companies already doing their business based on this technology.

6.2 Enabling wider accessibility to trade finance:

Trade finance has been facilitated since the establishment of centralized institutions that oversee commercial transactions, investments, and contracts and instill trust and accountability.

Here we must know that, while the presence of such intermediaries is necessary, they create obstacles that can often hinder people's access to these services and not enable them to do business. Moreover, the prices of the services they provide are high. Moreover, many parties during the execution of tasks leave room for error or fraud.

However, blockchain and smart contracts can potentially augment the trade finance industry. This emerging technology offers new, verifiable, security, speed trust, and transparent transactions, as there is a fixed code that can enforce contracts and allows transfers only after specific conditions are met. NFTs are just one part

of this technology that would bring a boom in international trade where unchangeable digital documents can be provided that could serve as a hub for trade finance networks. (Belu, M. G. 2019. p. 3).

Through these technologies, the middleman can be permanently removed while enhancing security, speed, and confidence at the same time. Blockchain can have directly encrypted supervision systems in it, reducing costs and human error.

6.3 Its Role in Global Supply Chain Management:

Supply Chain is a network of all persons, companies, resources, activities, and technologies involved in the manufacture, production, and sale of the product, which includes the delivery of raw materials or inputs from the supplier to the manufacturer, and then eventually to the end-user.

What particularly distinguishes NFTs from all the solutions blockchain offers for trade finance is the ease with which NFT blockchains can mint unique and serial records and make these records programmable in a peer-to-peer distributed database with all unchangeable blockchain properties. (Nasdaq. 2021, Sep 7).

Supply chain management (SCM) is the process of supervising materials, information, and financial resources as they move from supplier to factory and then to the wholesaler and from it to the retailer until they end up in the consumer.

The three main flows of the supply chain are product flow, information flow, and financial resources flow, and supply chain management ensures everything flows smoothly from start to finish. (McDaniel, C. A., & Norberg, H. C. 2019).

In the global export industry and its handling of inventory management, we find that there are many regulatory entanglements where countless items are handled across multiple borders.

But after the advent of blockchain, has created a boom in this field, where programmable smart contracts are immediately utilized in serial numbers indicating inventory and secured via blockchain. It is also possible to automate payments, transfer funds, and control the smart contract of the unit code is shipped.

The non-fungible part of each code will be the source of the units and their chronology of ownership, location, and other information .Which makes it unique and connects it to every stock unit in the blockchain management system. For example, harmonized commodity description code and coding systems for international product classification can be programmed in each token for a supply chain management's NFT chain. It was first introduced in 1989 and has since been adopted by most countries for international trade.

As the United Nations summarizes it, the HS Code¹ allows participating countries to classify traded goods on a common basis for customs purposes.” This is an increasingly important aspect of the hurdles of international trade for blockchain engineers to overcome with NFTs, especially as sovereign nations put the brakes on decades of globalism, and regulatory compliance and customs duties increasingly require newer, more agile solutions to keep the shipping lanes flowing.

6.4 Ensuring the Provenance of Goods:

Another advantage NFT offers in international trade is that it can track any product from its creation to its sale. The source of raw materials entering the product can also be monitored in full transparency. It will be easy to check the source of any product and control any irregularities. (Bloch, D. S. 2022. p.46). The digital representation of the contract, certificate of origin, letter of credit, bill of lading, or any other relevant documents can be stored and verified within an immutable NFT. (Ganne, E. 2018).

7. “Crypto-Assets” under Income Tax Ambit:

An important question is whether the sale and purchase of crypto-assets will be subject to income tax ambit. But we find India to have answered this question, where profits from crypto assets like cryptocurrencies and non-fungible tokens (NFTs) have been subject to income tax ambit since April 1 as the new financial year began. (Sikarwar. D, 2022, May).

¹ *Harmonized System (HS) Codes are commonly used throughout the export process for goods. The Harmonized System is a standardized numerical method of classifying traded products. It is used by customs authorities around the world to identify products when assessing duties and taxes and for gathering statistics. US International Trade Administration. Retrieved from <https://www.trade.gov/harmonized-system-hs-codes>*

According to India's Finance Minister, crypto-assets and NFTs will be taxed at a fixed 30 percent in any such transaction. (Shukla, S. Bloomberg. 2022, Apr 2).

8.1 Countries tried to regulate the trading of “Crypto-assets”:

To answer this question, we need to know that NFTs are available and traded globally because as we have indicated decentralized DLT platforms operate outside borders.

It, therefore, applies to the need for exporters, importers, buyers, and sellers to know the legal status and regulatory frameworks of different countries.

It should be noted that very few States have been interested in developing regulatory frameworks for trading cryptocurrencies.

Most jurisdictions have still not established regulatory frameworks that are particularly applicable to NFTs, although many have implemented or published plans to regulate crypto-assets.

8.2 Countries tried to regulate the trading of “Crypto-assets”:

Although the European Commission published on September 24, 2020, a Regulation of Markets in Crypto assets (MiCA)², which proposes to regulate crypto-assets currently outside the scope and its service providers under a single licensing system, NFTs are not currently specifically regulated in the EU.

However, the features of any proposed NFT release must be considered alongside various existing systems, including securities, e-money, and crowdfunding, to ensure they are not operational.

The MiCA Regulation is expected to come into force by 2024 and will be applied to anyone who exports or provides crypto-asset services in all EU member states, as well as any non-EU company seeking to trade with EU member states.

One of the proposed obligations is that crypto-asset issuers would need to issue a prospectus-like "crypto asset white paper" - MiCA's definition of 'crypto-assets' includes NFTs – although, as currently drafted, issuers of non-fungible crypto-assets will not be required to publish a white paper. (Zetzsche, D. A., Annunziata, F., Arner, D. W., & Buckley, R. 2020).

8.3 United States (US) efforts to regulate the trading of “Crypto-assets”:

As for the current legal status of Non-fungible Tokens (NFTs), in the United States, it is still unclear, there is no legal regulation of Non-fungible Tokens (NFTs) in the United States, yet we will find that as a crypto-asset that can be purchased and sold, it can be subject to current U.S. federal regulatory frameworks.

Also, according to the U.S. Securities Act, pieces of memorabilia and collections are not usually considered a " security " on their own. However, NFT is marketed as a financial investment whose holders expect it to be a pilot project that will have profits, and therefore could be the place of an "investment contract", a type of " security " subject to U.S. securities law.

Although no U.S. federal citizen has yet taken enforcement action against NFT issuers, we find that there are litigants who file civil suits against NFT issuers who claim that their NFTs release constitutes a security offer not registered under U.S. law. (Inozemtsev, M. I. 2020, May. p. 519).

To date, the Financial Crime Enforcement Network (FinCEN) and the courts have not issued any guidance on NFTs.

In the view of the United States anti-money laundering, although NFT could be described as a " medium of exchange ", it could not be described as a convertible virtual currency" under US law. because unlike Bitcoin or other virtual currencies, NFTs were not designed as a means of exchange.

However, the situation could change, if NFTs are frequently traded and have a fixed value from which they can easily be converted into currency.

² Markets in Crypto-Assets (MiCA) is a proposed regulation in EU law. It is intended to help streamline distributed ledger technology (DLT) and virtual asset regulation in the European Union (EU) whilst protecting users and investors. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593>

However, the situation can change - for example, if some NFTs are actively traded and have a fixed value through which they can easily be converted into a currency.

Recent amendments to the Banking Secrecy Act included in the Anti-Money Laundering Act 2020 have amended certain definitions to include companies engaged in the exchange or transfer of "currency, funds, or value that substitutes for currency" as financial institutions subject to anti-money laundering regulatory requirements.

U.S. federal regulators can apply anti-money laundering laws governing trade in "antiquities" or "art" to NFTs. The 2020 Act amended the definition of bank secrecy law for "financial institutions" to include persons engaged in antiquities trading.

The 2020 Act also instructs the Treasury and other agencies to perform a study of the facilitation of money laundering in the trade of works of art, and report to Congress in January 2022 to inform the debate over whether to extend Anti-Money Laundering regulatory requirements to art dealers. The impact such actions will ultimately have on NFTs, if any, is not known at present.

US federal penal laws may also apply to the issuance, purchase, and sale of NFTs. NFTs can occur between people located anywhere in the world. Thus, parties dealing in NFTs must ensure compliance with regulations issued by the United States Office of Foreign Assets Control to prevent business dealings with suspicious persons, where NFTs can be used in suspicious operations.

8.4 United Arab Emirates (UAE) efforts to regulate the trading of "Crypto-assets":

The UAE Securities and Commodities Authority, supported by Clifford Chance, issued the Crypto-Asset Regulations to regulate the trading of Crypto-Asset that are securities or otherwise traded on an exchange (a "regulated commodity token). The DLT register was relied upon to verify and register ownership. These regulations apply when NFTs are tradable through digital asset exchanges within the UAE.

We do not think that listing NFTs on digital asset exchanges may be feasible given their unique and non-fungible nature. When NFT is subject to a brokerage or peer-to-peer transfer (whether or not it is organized through an online platform) - this is unlikely to be an "exchange" to which current UAE rules are to apply.

However, it should be noted that the transactions of NFTs and also brokering in them are still subject to the UAE's Anti-Money Laundering Act, which needs to be assessed according to the nature of the underlying assets and the volume of the transaction.

Abu Dhabi Global Market "ADGM" has launched a "framework for regulating crypto-assets activities, including those of cryptocurrency trading platforms, wallets, and other brokers in the Abu Dhabi Global Market". (Guidance – Regulation of Virtual Asset Activities in ADGM) .

ADGM is Abu Dhabi's international financial center, which cooperates with global financial centers, institutions, and regulators; "To develop and support member institutions with the regulatory framework, legal competence and attractive business environment they need for sustainable business growth", and the Financial Services Regulatory Authority (FSRA) is regarded as the market monitor.

The Financial Services Regulatory Authority of Abu Dhabi (FSRA) has also published a guide to regulating digital asset activities in the international financial market in Abu Dhabi "ADGM", and the document explains the regulatory framework for crypto-assets including the requirements of operating the digital asset business, trading platforms or digital currency portfolios.

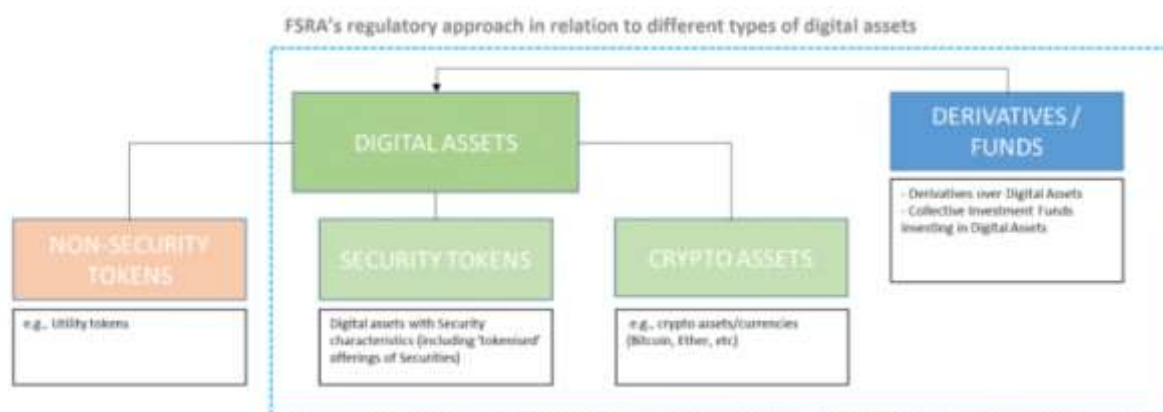


Figure 1: Guidance – Regulation of Virtual Asset Activities in ADGM

9. Conclusion:

Although trading volume in crypto-assets has grown and investment in them has boomed, they have helped to grow the volume of money laundering and terrorist financing because of the difficulty in identifying the source of funds significantly, so the optimal solution is to establish regulatory frameworks that ensure the benefit of investing in crypto-assets and protecting against suspicious transactions.

We, therefore, recommend that States take the following:

1. The presence of an authority in each State to register crypto-assets with each citizen to legitimize them, and the citizen can deal in these assets by selling or buying.
2. Investment funds investing in crypto-assets and intermediaries brokering in the field of investing in crypto-assets receive a license from this authority to engage in the activity.
3. Investors disclose their investments in crypto assets.
4. Taxing transactions in crypto-assets such as those imposed on trading in ordinary assets, so that there is a balance between normal investment and investing in crypto-assets, and amending tax legislation so that investors are forced to comply with them and file tax returns on their dealings in crypto-assets.
5. The Authority makes an inventory of the platforms through which crypto-assets are traded and credible nominations are made to investors.
6. Countries attract digital content makers from their citizens to sell their products via crypto-assets trading platforms such as UAE.
7. Allocate a means of reporting suspicious and illegal transactions in crypto-assets to combat money laundering and human trafficking.
8. Given the nature and decentralization of crypto-assets, international judicial cooperation between States is required to eliminate money-laundering and terrorist financing.
9. The signing of international trade agreements to regulate the use of distributed ledger technology (DLT) and digital assets in international trade.

References

- [1] Sarmah, s. (2018). Understanding Blockchain Technology. 8. 23-29. 10.5923/j.computer.20180802.02
- [2] Demertzis, M., & Wolff, G. B. (2018). The economic potential and risks of crypto assets: is a regulatory framework needed? (No. 2018/14). Bruegel Policy Contribution.
- [3] Conti, R. Schmidt, J. (2022, Apr 8). What Is An NFT? Non-Fungible Tokens Explained. Forbes Advisor. <https://www.forbes.com/advisor/investing/cryptocurrency/nft-non-fungible-token/>

- [4] HOFFMAN. C, (2021, Mar 29), “How NFTs might play a role in international trade”, Trade finance global. <https://www.tradefinanceglobal.com/posts/how-nfts-might-play-a-role-in-international-trade/>
- [5] CNBC, “Walmart is quietly preparing to enter the metaverse.”, (January 2022). <https://www.cnbc.com/2022/01/16/walmart-is-quietly-preparing-to-enter-the-metaverse.html>
- [6] JP Morgan, (2022), “Opportunities in the metaverse”. <https://www.jpmorgan.com/content/dam/jpm/treasury-services/documents/opportunities-in-the-metaverse.pdf>
- [7] DiLella, C. Day, A. (2022, JAN 12). “Investors are paying millions for virtual land in the metaverse”, CNBC. <https://www.cnbc.com/2022/01/12/investors-are-paying-millions-for-virtual-land-in-the-metaverse.html>
- [8] Belu, M. G. (2019). Application of blockchain in international trade: An overview. *The Romanian Economic Journal*, 71(22), 2-16.
- [9] Nasdaq. (2021, Sep 7). “Trade Finance and NFTs: From Digital Collectibles to the \$19T Global Trade Market”. <https://www.nasdaq.com/articles/trade-finance-and-nfts%3A-from-digital-collectibles-to-the-%2419t-global-trade-market-2021-09>
- [10] McDaniel, C. A., & Norberg, H. C. (2019). Can blockchain technology facilitate international trade?. Mercatus Research Paper.
- [11] Bloch, D. S. (2022). Non-Fungible Tokens: A Solution to the Challenges of Using Blockchain Bills of Lading in the International Sales of Goods. *Journal of Law, Market & Innovation*, 1(1), 44-65.
- [12] Ganne, E. (2018). “Can Blockchain revolutionize international trade?”. The World Trade Organization.
- [13] Sikarwar, D, *The Economic Times*. (2022, May 5). “Reward points, e-vouchers out of crypto tax ambit.”. <https://economictimes.indiatimes.com/news/economy/finance/reward-points-e-vouchers-out-of-crypto-tax-ambit/articleshow/91299526.cms>
- [14] Shukla, S. (2022, Apr 2). “The 1% Tax That Has India’s Crypto Industry Predicting Chaos” Bloomberg. <https://www.bloomberg.com/news/articles/2022-04-02/the-1-tax-that-has-india-s-crypto-industry-predicting-chaos>
- [15] Zetzsche, D. A., Annunziata, F., Arner, D. W., & Buckley, R. P. (2020). The Markets in Crypto-Assets regulation (MiCA) and the EU digital finance strategy.
- [16] Inozemtsev, M. I. (2020, May). Digital assets in the United States: Legal aspects. In *International Scientific and Practical Conference* (pp. 514-522). Springer, Cham.
- [17] Guidance – Regulation of Virtual Asset Activities in ADGM. Retrieved from <https://www.adgm.com/documents/legal-framework/guidance-and-policy/fsra/guidance-on-regulation-of-virtual-asset-activities-in-adgm.pdf>