

Theoretical Explanation and Institutional Topology of Financial Risk Regulation for NFT Digital Collectibles

WANG Yu

School of Economics, Shenzhen Polytechnic, Shenzhen, China

The Chinese Web 3.0 industry, represented by NFT digital collectibles, is developing in a different direction from overseas NFT markets. The regulatory thinking aims to discard its financial attributes and curb its tendency towards financial secularization. Currently, given the absence of a regulatory body for NFT digital collectibles, the production and release may constitute ICO (Initial Coin Offering) that is explicitly prohibited by official decree. China may adopt the governance path, based on the principle of inclusiveness and prudence in both a short and long term, to establish a regulatory sandbox system for NFT digital collectibles. It is a must to strictly regulate digital collectibles trading platforms and set access standards. At the same time, it is essential to strengthen the supervision of the entire process of trading and withdrawal of NFT digital collectibles, and use financial technology supervision methods for real-time monitoring to improve supervision efficiency.

Keywords: regulatory logic, practical challenges, specific path

The Regulatory Logic of Financial Risk for NFT Digital Collectibles

The NFT skins of Dunhuang flying sky and nine-coloured deer, jointly sold by Alipay and Art Research Institute of Dunhuang in 2021, were once speculated to nearly one million yuan. Obviously, the opening of the secondary market has thus brought to the fore the problem of the financialisation of NFT digital collectibles and the risk of disrupting the economic and financial order. As early as 2017, the People's Bank of China, the Cyberspace Administration of China (CAC), the Ministry of Industry and Information Technology (MIIT), the State Administration for Industry and Commerce (SAIC), the China Banking Regulatory Commission (CBRC), the China Securities Regulatory Commission (CSRC), and the China Insurance Regulatory Commission (CIRC) jointly issued the *Public Notice on Preventing Risks of Fundraising through Coin Offering*¹, which clarified that coin offering fundraising is essentially an unauthorized and illegal public financing. Both Jingtian and Phantom Core have been told to stop trading in NFT digital collectibles by regulators to prevent speculation in the secondary market. As a result, there are no longer any legal ICOs in China. If some NFTs can be recognized as securities, or at least considered to be of a securities nature, the question that arises is whether their production and issuance may constitute ICOs that are officially prohibited in China. After all, we all know that

Shenzhen Philosophy and Social Science Planning Project of 2022: "Research on the innovation of fair competition review mechanism in Shenzhen" (Subject No: SZ2022D014).

WANG Yu, Ph.D., lecturer, Shenzhen Polytechnic, Shenzhen, China.

Correspondence concerning this article should be addressed to WANG Yu, Shenzhen Polytechnic of Economics, No. 7098, Liuxian Avenue, Nanshan District, Shenzhen, China.

¹ http://www.gov.cn/xinwen/2017-09/05/content_5222657.htm.

the essential feature of NFT is that the smallest unit of its assets is one and cannot be further divided, which is fundamentally different from other homogenized tokens or stock securities with percentage modifiers, for example. However, the logical premise that it cannot be divided remains somewhat questionable. First, the “non-fungible” nature of the NFT is analyzed in the context of the Ethereum blockchain, where it is created based on standards such as ERC-1155. Tokens created using the ERC-1155 standard ensure uniqueness, so we say that NFTs are “non-fungible”. However, it is not technically difficult to create an NFT. If we mint a large number of essentially identical NFTs and distribute them to the market, will a “fungible token” be formed naturally? We can analyse it from the perspective of fungibles, which are of the same nature and type, they have common physical properties and economic significance. If the split NFTs can be distinguished, then the fact that each NFT has a different number does not affect the identification of its kind. Just like the RMB, each RMB is not exactly the same as the other, but has a different number, but the different numbers do not affect the identification of its type. Second, there are already “fractional” NFT items. Just as one of the original purposes of the NFT concept was to solve the circulation problem in the art collecting world, it is already very attractive to NFT owners to break up NFTs into fractionalized proceeds for investors and further speed up circulation. For example, a decentralized project called “F-NFT” enables NFT owners to tokenize fractional ownership of their own works, thereby facilitating the trading of NFTs on a percentage basis. Another project called “DAO-Fi” breaks down the non-fungible ERC-721 tokens into fungible ERC-20 tokens, allowing buyers to take partial ownership of NFTs. In this way, NFT is equivalent to a specific asset that is originally indivisible and creates other tokens that can be substituted for each other. If financing is done in this way, the behavior pattern is very similar to ICO, which is explicitly prohibited in China. Consequently, the secondary trading function of digital collectibles is strictly controlled to avoid the risk of speculation, money laundering, and illegal financial activities on domestic NFT digital collectibles platforms; more importantly, it is to guard against the “resurgence” of ICOs.

In September 2021, the *Notice on Further Preventing and Resolving the Risks of Virtual Currency Trading and Speculation* emphasized that virtual currency-related activities are illegal financial activities.² In September 2021, the National Development and Reform Commission and other 11 departments issued a notice forbidding the addition of virtual currency “mining” projects, and accelerating the orderly withdrawal of existing projects, and imposing a complete ban on “mining”.

National Copyright Trading Center Alliance, China Academy of Fine Arts, CCTV Animation Group, Hunan Provincial Museum, and other NFT digital collectible service platforms jointly released *Convention on Self Discipline of Digital Cultural and Creative Industry*³, proposing to resist substantive issuance and speculation on virtual currencies; resist the disguised issuance of financial products through share splitting and standardized contract trading; implement a real-name system for the offering subjects and purchasing users of digital cultural and creative works; the distribution and transfer platform of digital cultural and creative works and the supplier providing payment and settlement shall have anti-money laundering and fraud supervision capabilities. The Internet Finance Association of China, China Banking Association, and the Securities Association of China jointly issued the *Initiative on Preventing Financial Risks Related to NFT*⁴ on April 13, 2022. As an internal

² <http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/4348521/index.html>.

³ http://epaper.zqrb.cn/html/2021-11/03/content_780800.htm.

⁴ <https://www.nifa.org.cn/nifa/2955675/2955763/3014136/index.html>.

governance document of the industry, the Initiative clearly warned of financial risks caused by the chaos of domestic NFT issuance platforms. Moreover, it resolutely curbed the tendency of financial securitization of NFT, prohibited the issuance of trading financial products through NFT, and prompted consumers to resist NFT speculation and not to invest directly or indirectly in NFT. Amid stricter regulation of virtual currency, NFT, as a matter of fact, was not covered by this regulation. However, due to the inevitable speculation of NFT issuance, the Initiative of the three associations was aimed at protecting the interests of ordinary investors through internal governance to discipline the industry and avoid greater financial risks.

The Initiative specified that “Initial coin offering (ICO) will not be disguised by weakening the non-fungible characteristics of NFTs, such as through split ownership or bulk creation”. In other words, the typical application of NFTs for ICOs is to weaken the non-fungible character of NFTs by means of split ownership or bulk creation. Of course, it cannot be argued that any behaviour that fits this pattern is an ICO. Then, what does ICO really mean? The *Public Notice on Preventing Risks of Fundraising through Coin Offering* jointly issued by the People’s Bank of China and seven other departments clearly states that the object of fundraising through coin offering must have the meaning of “investing and waiting for returns at a future point in time” when providing funds.⁵ As such, this clause in the Initiative shall be understood in a “penetrating” manner, rather than beating around the bush on ownership, real rights, or creditor’s rights.

It can be seen that the Chinese Web 3.0 industry, represented by NFT digital collectibles, has explored a path of “coinless” development in the way of compliance survival. This China-specific adaptation, by issuing digital collectibles on the Alliance Chain, will be able to prevent NFT from having financial attributes since its inception by prohibiting the development of NFT digital collectibles in the secondary market.

This unique Chinese adaptation, by issuing digital collectibles on the Alliance Chain, will prohibit the development of NFT digital collectibles in the secondary market. In this way, NFT would not have financial attributes from its inception. Under this regulatory logic, the issuance of NFT digital collectibles will fail to use virtual currencies such as Bitcoin as pricing and settlement tools, and will be unified on the chain standard in the future. At the moment, all domestic blockchain projects are Alliance Chains, where the flow of assets needs to be delivered under the national regulatory framework. Although NFT digital collectibles are of great significance for the capitalization of non-fungible resources, the lack of regulation by various entities makes such decentralized transactions follow in the footsteps of “P2P” finance and the like. Undoubtedly, the opening of a secondary market will help in price discovery for NFT. But the conclusion as to whether the unleash of the secondary market for NFT necessarily leads to financialisation is a policy response that current regulators have to make. Secondary trading itself is a licensed business in China, but the current issuance and trading platforms for NFT digital collectibles are not yet qualified. As a result, Circular 37 (*Implementation Opinions of the General Office of the State Council on Straightening out and Rectifying Various Types of Trading Venues*) and Circular 38 (*Decision of the State Council on Straightening out and Rectifying Various Types of Trading Venues to Effectively Prevent Financial Risks*) are still the legal bottom line for the secondary market.

The General Idea of Financial Risk Supervision of NFT Digital Collections in China

Establishing Principles of Progressive Regulation That Are Inclusive and Prudent

In the short term, the formation of regulatory rules for digital collectibles requires experimental

⁵ http://www.gov.cn/xinwen/2017-09/05/content_5222657.htm.

supervision in the early stage. Short-term industry regulation cannot be shut down in one go. Rather, the negative impact on the NFT digital sector should be avoided through pilot-type measures to avoid chaos. In the long run, there should be a healthy game between regulatory rules and new technologies. The digital collectibles industry should adopt the regulation based on the principle of inclusiveness and prudence in both a short and long term (Wang & Zhao, 2021). At the same time, the regulation of the NFT market cannot be driven solely by specific events, but should focus on blockchain technology and the evolution of China's localization. Regulators need to gradually form a long-term mechanism for risk supervision. If they want to ensure that the regulatory policies adopted to prevent and reduce risks match the risks identified in the industry, they need to have the ability to identify and reasonably evaluate the risks in the industry, and objectively assess the compliance risks of NFT service platform operations.

Inspiring the Creator Economy

Regarding the long-term supervision mechanism to promote the high-quality development of the digital collectible industry, the purpose of supervision is to promote the growth of the industry, especially to enhance the healthy and orderly development of the digital cultural and creative industry, and to protect the rights and interests of creators. It is necessary to speed up the building of a people-centered “creator economy” model, in particular, to open up the normal transaction and circulation functions of NFT digital collectibles. Although China currently prohibits the secondary trading of NFT digital collectibles, through the establishment of author royalties, that is, through the continuous incentive of intellectual property benefits from the circulation of works, outstanding cultural products can live up to the wisdom of the people, so as to achieve creative transformation and innovative development.

A Regulatory Model Based on Statutory Supervision and Supplemented by Industry Self-discipline

Statutory supervision should clarify the status and authority of NFT regulators (Liu & Guo 2022), and strengthen the whole process supervision of storage and trading. If the division of responsibilities of multiple regulators is unclear, independent regulators or intermediate regulators can be established in the future to be responsible for market access, technical standards formulation, daily supervision, and enterprise credit information.

The supervision of industry self-regulatory organizations focuses on the supervision of NFT technology and exerts the ability of industry autonomy. It is essential to supervise NFT service platform and business practices, and develop industry codes and industry application and access standards. Moreover, it is necessary to strengthen the protection of intellectual property rights of NFT digital collectibles, and ensure that the risk of digital collectibles circulation can be well predicted and controlled. With these efforts, effective supervision by social forces will be delivered (Xie, 2019).

The Specific Path of Financial Risk Supervision of NFT Digital Collectibles

High Compatibility Between Regulatory Sandbox and NFT Digital Collectible Market

As a derivative and innovation of FinTech Innovation, regulation of digital collectibles aims to find a balance between encouraging innovation and preventing and controlling financial risks. The British government pioneered the regulatory sandbox mechanism in 2015, and since then countries and regions such as Australia, Singapore, and Canada have established their own or local regulatory sandboxes.

So can the supervision of financial risks of NFT digital collectibles in China be applied to the regulatory

sandbox mechanism? As an innovation of blockchain technology, NFT digital collectibles are highly compatible with the application of the regulatory sandbox mechanism (Zhao, 2021). First and the foremost, the innovative nature of NFT digital collections meets the basic requirements of the regulatory sandbox for the innovation of regulated objects. Second, the failure to apply existing rules meets the basic requirements for regulatory sandbox implementation. The decentralized operation mode of NFT digital collectibles is a far cry from the current system of Internet legal rules. Government regulation has specific intermediaries for NFT as a blockchain technology innovation. However, the original supervision is a traditional model based on the supervision of network service providers, which has been very ineffective. In addition, NFT based on smart contracts to achieve the flow of the chain impact on the existing contract legal system. The original human intervention factor in the execution of the contract is reduced, and the traditional contract signing and execution process makes it difficult to regulate the effect of contract law. Last but not the least, in the NFT digital collectible up-chaining and circulation, it is difficult to authenticate the identity of the subject, and the circulation parties cannot determine the real identity of the other party. As a result, the difficulty of confirming the responsible subject is also a new problem arising from this technology. But taking the look from another angle, the difficulty in determining the rule system and regulation model enables the regulatory sandbox in a new blockchain application technology just like NFT (Jiang & Peng, 2021).

Building an Access System for the NFT Digital Collectible Trading Platform

China has not yet adopted digital collectibles as financial products, but governance chaos still exists. For example, some service platforms have not established intellectual property licensing chains and intellectual property review mechanisms, which limits their ability to prevent speculation. Despite the fact that *Initiative on Preventing Financial Risks Related to NFT* has been released within the industry, in the long run, digital collectibles are only one of many objects to be traded. As such, supervision from the platform's access system is conducive to governance at source (Xia, et al. 2022). It is necessary to establish an access mechanism for issuers and operators of NFT digital collectibles. For the digital collectible service platform, it is essential to set threshold requirements for business qualifications such as blockchain information service filing, network culture business license, value-added telecommunications business license, and establish a credit scoring mechanism; as for NFT digital collectible issuers and operators that have repeatedly violated the law, harmed consumers' rights and interests, disrupted the market order, and damaged the industry competition ecology, blacklisting measures such as market bans and enhanced penalties and crackdowns shall be taken. Plus, the preparation of standard and normative systems such as industry standards, local standards, and group standards for NFT digital collectibles shall be accelerated.

Delivering Whole Process Supervision

The domestic platform mainly issues digital collectibles through private chains or alliance chains, but casting, selling, and transferring services on the platform may also apply virtual currency calculation, so it is necessary to supervise the trading data. When it comes to the supervision of digital collectibles casting, selling, and transferring on the platform, it needs to be tracked through monitoring technology to deliver timely supervision of the identification of transaction subjects, early warning of transaction risks and records of transaction capital. And the detection of trading data can achieve digital traceability by strengthening the supervision of the interface between the payment platform and the service platform. This is primarily to ensure that when large or suspicious funds are used for transactions, the platform shall report to the AML Monitoring

and Analysis Centre in a timely manner under certain circumstances and cooperate with functional departments to carry out anti-money laundering investigations. Of course, the platform's real-time automatic monitoring needs to rely on the increasingly developed artificial intelligence and algorithm technology.

Future Prospects

In view of the potential wide application of NFT, it is recommended to legally separate the “technical layer” and “application layer” of NFT, and implement “agile governance” with different scenarios, types, and dynamic adjustments. The development of NFT must fully learn from the previous experience of the development of virtual currencies in China and from the outset it must be “disconnected” from the root causes of illegal and criminal activities such as money laundering, gambling, and fraud. The supervision of NFT digital collectibles should not follow the traditional logic of “identity governance” or “identity rules”. After all, the interests between digital collectible service platforms and online consumers can be resolved through coordination rather than confrontation. To maximize the social impact of the law and to achieve a balance between conflicting interests, an empirical approach should be adopted (Pound, 2016, pp. 79-80). The establishment of a regulatory sandbox mechanism allows for a fundamental shift from “identity to contract” governance between regulators, digital collectible service platforms, and consumers. In this way, transformation will be delivered from confrontational regulation under the identity of regulators to a state of shared governance in which the behaviour of subjects is regulated.

References

- Deng, J. P., & Li, J. N. (2022). Authority certificate of the digital artwork. *Exploration and Free Views*, 38(6), 87-95.
- Jiang, Z. F., & Peng, Z. B. (2021). Regulatory logic in the development of non-fungible art industry—A study on the rapid dissemination and industry impact of NFT art. *Academic Forum*, 44(4), 122-132.
- Liu, S. Z., & Guo, Z. W. (2022). Application risk of NFT in digital art market and its prevention. *Journal of Arts Management*, 4(1), 113-119.
- Pound, R. (2016). *Social control through law*. (Z. L. Shen and B. Y. Lou, trans.). Beijing: The Commercial Press.
- Si, X. (2021). On the real right of blockchain digital assets. *Exploration and Free Views*, 37(12), 80-90.
- Wang, J., & Zhao, B. Y. (2021). The sandbox regulation of internet financial innovation: Challenges and countermeasures. *Lanzhou Academic Journal*, 42(10), 111-123.
- Xia, Y., Huang, H., Bai, Y. L., He, Y., & Pan, Y. X. (2022). Exploration and suggestion on money laundering risk of NFT from the perspective of anti-money laundering. *Times Finance*, 43(5), 93-95.
- Xie, X. S. (2019). Being inclusive and prudent: The new administrative regulation strategy and its governance value in the fourth industrial revolution. *Journal of Northwest University (Philosophy and Social Sciences Edition)*, 49(3), 33-42.
- Zhao, J. B. (2021). The regulatory sandbox as a feasible solution for blockchain legal supervision. *Journal of Hubei University of Police*, 34(6), 114-121.