

Harmonization of Electronic Collaterals with Jurisprudential Foundations and Sharia Principles in Iran's Banking System(A Comparative Study of Traditional Collateral Contracts with Electronic Capabilities)

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ABSTRACT

This study aims to investigate the possibility of harmonizing electronic collaterals with jurisprudential foundations and Sharia principles in Iran's banking system. Given the rapid development of financial technologies and the emergence of digital assets, the traditional legal system of collaterals based on concepts such as physical possession (qabd), tangibility ('ainiyat), and physical value (māliyat) faces serious challenges. Using a descriptive-analytical method and relying on library resources and a comparative study in Imāmīyah jurisprudence and Iranian statutory law, this research analyzes the compatibility of electronic collaterals with Sharia standards. The findings indicate that concepts such as "virtual possession," "constructive possession," and "customary possession" can replace traditional physical possession and fulfill the essential condition for the validity of the mortgage contract (rahn).

Keywords :

Electronic Collaterals, Imāmīyah Jurisprudence, Mortgage Contract (Rahn), Virtual Possession, Islamic Banking, Digital Assets.

1.Introduction

The collateral-based financing system has always been one of the fundamental pillars of legal and economic relations in human societies. In Imāmī jurisprudence and Iranian statutory law, collateral contracts such as *rahn* (mortgage/pledge), *ḍamān* (guarantee), and *kafālah* (suretyship) hold a special place in strengthening contractual obligations and ensuring their performance. The mortgage contract (*rahn*), as the most important collateral contract, is defined in Article 771 of the Civil Code as follows: "A mortgage is a contract whereby the debtor gives a property to the creditor as security." Although this definition appears simple, in practice it faces numerous complexities. In comparative law, leading legal systems have always sought to keep the institution of collateral aligned with economic developments by updating their laws. For example, Article 9 of the US Uniform Commercial Code (UCC), which is specifically devoted to secured transactions, has in recent years undergone extensive amendments to cover digital assets.

With the advent of new communication and information technologies and the ever-increasing expansion of electronic banking, the traditional concepts governing collaterals have undergone a fundamental transformation. In Islamic jurisprudence, the question has also been raised as to whether concepts such as *qabd* (possession), which is an essential condition for the validity of *rahn*, are confined to physical, material possession, or whether they can be extended to customary and even virtual possession. Jurists such as Shaykh Anṣārī in *al-Makāsib* and Shahīd al-Thānī in *Masālik al-Afhām* have provided a definition of *qabd* based on "domination and control" (*istīlāʾ*), not merely the physical transfer of property. This broad interpretation paves the way for the acceptance of electronic collaterals, because in digital collaterals, control is also achieved through encryption keys and access controls. Today, a vast volume of commercial and banking transactions is conducted in cyberspace, and assets such as digital currencies, electronic securities, digital commercial instruments, and even intellectual property rights have acquired enormous economic value. The fundamental question is whether these modern assets are capable of being collateralized within the framework of Iran's legal system and on the basis of jurisprudential foundations and Sharia principles.

The importance of this issue arises from the fact that Iran's banking system, unlike many countries around the world, is based on Sharia standards and Imāmī jurisprudence. Therefore, any acceptance or non-acceptance of new legal institutions must be justified by reference to authoritative jurisprudential and legal sources. The main objective of the present research is to examine the possibility of harmonizing electronic collaterals with jurisprudential foundations and Sharia principles in Iran's banking system. In this regard, the following questions form the core of the research:

- Are fundamental jurisprudential concepts such as *qabd* (possession), *māliyat* (financial value), and *ʿainiyat* (tangibility) applicable to electronic collaterals?
- What jurisprudential-legal solutions exist for removing obstacles to the acceptance of electronic collaterals?
- Can electronic collaterals be accepted in the Islamic banking system by relying on secondary jurisprudential rules such as the rule of *al-ṣulḥ* (settlement) and the theory of *maqāṣid al-sharīʿah* (objectives of Sharia)?

- Answering these questions will not only fill the existing research gap in Iran's legal literature from a theoretical perspective but will also, from a practical standpoint, guide banks and financial institutions in granting facilities based on modern collaterals.

2. Literature Review

A review of the research background shows that the subject of mortgage and collaterals in Iranian jurisprudence and law has always been of interest, but independent research on electronic collaterals is very limited.

In the field of Imāmī jurisprudence, authoritative sources have examined the conditions for the validity of the mortgage contract. Shaykh Anṣārī, in his valuable work *al-Makāsib*, discusses in detail the issue of qabd in the mortgage contract and believes that qabd is a condition for the validity of the mortgage contract; that is, until the mortgaged property is delivered into the possession of the mortgagee or a third party designated by the parties, the mortgage contract is not binding (Anṣārī, 1415 AH, vol. 5, p. 257). He also points to cases where qabd can be non-material, such as constructive possession or customary possession.

Imam Khomeini, in his book *Tahṛīr al-Wasīlah*, following the majority of jurists, considers qabd to be a condition for the validity of the mortgage contract and states: "*al-rahn ‘aqd yaftaqir fī ṣiḥḥatihi ilā al-qabd*" (Khomeini, 1422 AH, vol. 2, p. 462). However, he does not confine qabd to material possession and believes that whatever is customarily considered possession is sufficient.

Shahīd al-Thānī, in *Masālik al-Afhām*, analyzes the concept of qabd and argues that qabd consists of "domination over the object such that one is able to dispose of it" (Shahīd al-Thānī, 1413 AH, vol. 4, p. 127). This definition is based on the concept of "domination" (*istīlāʾ*), which is also conceivable in the case of non-material and electronic property. Accordingly, if a person can dominate and control the collateral asset, even if this control is exercised through passwords and digital keys, the condition of qabd is fulfilled.

Among contemporary jurists, Ayatollah Makārim Shīrāzī, in his book *al-Fiqh al-Istidlālī*, refers to new developments in the field of financial value and believes: "*al-māl huwa mā lahu qīmah ‘inda al-‘uqalā’ wa yumkin al-tamalluk minhu*" (Makārim Shīrāzī, 1430 AH, vol. 2, p. 56). Based on this definition, property is anything that has value among rational people and can be owned; therefore, digital assets that have value in customary transactions and are capable of being owned are considered instances of property.

In Iran's legal system, the Civil Code, which is derived from Imāmī jurisprudence, sets out the conditions of the mortgage contract in Articles 772 to 776. Article 774 provides: "The mortgaged property must be a specific tangible object, and the mortgage of a debt or a benefit is void." Article 772 also states the condition of qabd as follows: "The mortgaged property must be delivered into the possession of the mortgagee or into the custody of a person designated by the parties, but the continuation of possession is not a condition for the validity of the transaction."

However, Iran's Electronic Commerce Act adopted in 2003 (with subsequent amendments) has, to some extent, opened the way for the acceptance of electronic documents and instruments. Article 2 of this Act defines "data message" as any representation and symbol of information that can be transmitted and stored. Although this Act has not specifically addressed the issue of electronic collaterals, it has provided the necessary groundwork for the recognition of electronic documents.

In research conducted in the past decade, some scholars have paid attention to the issue of collateral in cyberspace. 'Abbāsī and Arghand (2024), in their article "Legal Analysis of Commercial Collaterals in the Collection of Bank Claims," referred to the limitations of traditional collaterals but did not address electronic collaterals. Şahrānavard (2024), in his book *Collection of Claims and the Method of Executing Bank Facility Collaterals*, focused mainly on traditional collaterals.

Mīrshikārī (2016), in his article "Statutory Collateral," referred to a specific type of collateral that is created by operation of law and without the need for possession, but did not raise the issue of electronic collateral. Ḥamīdī Awwal (2021), in his doctoral dissertation entitled "Collateralization of Industrial Property Rights," attempted to examine the possibility of collateralizing intangible assets, which bears similarities to the present research in terms of method and approach (Ḥamīdī Awwal, 2021, pp. 85-92).

However, none of the above studies have specifically addressed the possibility of harmonizing electronic collaterals with jurisprudential foundations and Sharia principles. This research gap demonstrates the necessity and novelty of the present study.

3. Methodology

The present research is applied in terms of its objective and descriptive-analytical in terms of its nature. The data collection method is library-based, relying on the study of primary jurisprudential sources (including well-known works of Imāmī jurists such as Shaykh Anṣārī, Imam Khomeini, Shahīd al-Thānī, and contemporary jurists), legal sources (including the Civil Code, the Electronic Commerce Act, and judicial practice), scientific-research articles published in the past decade, and specialized books in the field of banking law and contracts.

The data analysis method is qualitative content analysis with a comparative approach. That is, first, the conditions and rulings of traditional collaterals are extracted from jurisprudential and legal sources, and then the possibility of applying these conditions to electronic collaterals is analyzed. In the third stage, relying on secondary jurisprudential rules and the theory of maqāṣid al-sharī'ah, solutions for removing obstacles are identified and presented.

The study population includes all sources related to the subject of mortgage, collateral, Islamic banking, and digital financial technologies, from which sampling was conducted purposively, focusing on authoritative and accessible sources. In selecting sources, priority was given to works published in the past decade that are directly or indirectly related to the subject of electronic collaterals.

4. Findings and Discussion

The present research has examined and analyzed the subject in three main axes: the condition of qabd in electronic collaterals, the condition of financial value (māliyat) and tangibility (‘ainiyat) of digital assets, and the use of secondary jurisprudential rules for accepting electronic collaterals.

4.1. The Condition of Qabd in Electronic Collaterals: From Physical Possession to Virtual Possession

The most important jurisprudential challenge facing electronic collaterals is the condition of qabd in the mortgage contract. Imāmī jurists, following the traditions of the Infallibles, have considered qabd to be a condition for the validity of the mortgage contract. It is well-known that the Prophet (peace be upon him) said: "lā rahn illā maqbūd" (there is no mortgage except in possession) (Ḥurr ‘Āmilī, 1409 AH, vol. 18, p. 362). Based on this tradition and numerous other traditions, the mortgage contract will not be valid and binding until the mortgaged property is delivered into the possession of the mortgagee.

But the fundamental question is: what is meant by "qabd"? Is qabd confined to the physical transfer of property, or does it encompass broader concepts? By examining jurisprudential sources, we conclude that the concept of qabd has undergone evolution and development throughout the history of Islamic law.

Firstly: Shahīd al-Thānī, in *Masālik al-Afhām*, defines qabd as follows: "al-qabd huwa al-istīlā’ ‘alā al-‘ayn wa al-taṣarruf fihā bi-ḥasab mā huwa al-māl" (Shahīd al-Thānī, 1413 AH, vol. 4, p. 129). According to this definition, whatever is customarily considered domination and control over property constitutes qabd. In the case of digital assets that exist in an electronic medium, domination is achieved through access to private keys, passwords, and control of the digital account. In other words, if the pledgor provides the mortgagee with the access key to the digital asset and the mortgagee can exclusively control and dispose of that asset, it can be said customarily that qabd has taken place.

Secondly: The concept of "constructive possession" or "customary possession" is recognized in Islamic jurisprudence. For example, concerning warehouse receipts, jurists hold that if goods are deposited in a warehouse and the warehouseman issues a receipt, this receipt and the related documents constitute delivery of the goods to the customer, and qabd is fulfilled. The basis for this ruling is traditions indicating the validity of commercial documents (Muḥaqqiq al-Ḥillī, 1408 AH, vol. 3, p. 205). Today, an electronic warehouse receipt issued in the form of a data message can play a similar role. In a recent study entitled "Feasibility Study of Using the Warehouse Receipt System by Farmers for Short-Term Financing" (Riyāḍī et al., 2023), it was also noted that the warehouse receipt system can provide a platform for collateralizing goods and facilitating access to credit (Riyāḍī et al., 2023, p. 16).

Thirdly: The "Control Theory," which is also discussed in Western law, is applicable in Islamic jurisprudence. According to this theory, what matters in collateral is the ability of the mortgagee to control the collateral and prevent the pledgor from disposing of it, not merely the physical transfer of the property. This objective can be achieved either through physical delivery or through digital control. Shaykh Anṣārī also pointed to this point, noting that rational people in their transactions consider any kind of domination and control that prevents the pledgor from disposing of the mortgaged property as sufficient (Anṣārī, 1415 AH, vol. 5, p. 261). This point is very important because it shows that the custom of rational people (‘urf al-‘uqalā’), which is one of the important sources of transactional jurisprudence, can serve as a basis for accepting virtual possession.

Therefore, from a jurisprudential perspective, there is no objection to regarding qabd as being realized virtually and through electronic means, provided that the mortgagee's complete domination and control over the collateral asset is established and the pledgor cannot unilaterally dispose of that asset.

4.2. The Condition of Financial Value (Māliyat) and Tangibility (‘Ainiyat) of Digital Assets

The second fundamental challenge in the discussion of electronic collaterals is the condition of "financial value" (māliyat) and "tangibility" (‘ainiyat) of the collateral asset. It is self-evident that "the pledgor must own property that can be given as collateral, whether that property is a tangible object or a debt." Article 774 also emphasizes that "the mortgaged property must be a specific tangible object."

In Imāmī jurisprudence, property (māl) is defined as something that has three characteristics: 1) it has rational and customary utility; 2) it is capable of private ownership; and 3) it is approved by the sacred Sharia (Najafī, 1386 AH, vol. 22, p. 42). According to this definition, money, physical objects, benefits, and even financial rights (such as patent rights and goodwill) can be considered property, provided that custom considers them as property.

With this introduction, we must see whether digital assets, including digital currencies, cryptocurrencies, and electronic securities, possess these conditions.

Regarding digital currencies such as Bitcoin, Ethereum, and other cryptocurrencies, it must be said that, despite disagreement among jurists, contemporary custom accepts many of them as valuable assets. Although some jurists consider these virtual currencies to lack financial value due to the absence of government backing and physical possession, a number of contemporary jurists (such as Ayatollah Sīstānī in some of his responses) hold that they have financial value. The basis for this view is the rule "al-māl mā yaqbaluhu al-‘urf mālan" (that which custom accepts as property is property) (Mūsavī Bujnūrdī, 1419 AH, vol. 2, p. 189). That is, whatever custom and rational people consider as property is also considered property in Sharia. At present, digital currencies are traded in many countries and have considerable financial value.

However, it must be noted that in the banking system of the Islamic Republic of Iran, cryptocurrencies have not yet been accepted as official currency, and the Central Bank has not established specific regulations for their collateralization. Nevertheless, from a jurisprudential perspective, their customary valuation alone can serve as a basis for financial value.

In the case of electronic commercial instruments and digital securities, the situation is clearer. The Electronic Commerce Act, in Article 17, considers the validity of electronic documents to be equal to that of paper documents. Furthermore, the new Commercial Bill in some of its provisions refers to electronic commercial instruments. From a jurisprudential perspective, a commercial instrument is a document that represents a financial right and is customarily transferable and tradable. In the discussion of non-material property, the well-known view among jurists is that "al-ḥuqūq al-māliyyah yaṣiḥḥu an takūn muta‘alliqatan li-l-‘uqūd al-jā’izah wa al-lāzimah bi-mā fihā al-rahn" (financial rights can be the subject of permissible and binding contracts, including mortgage) (Makārim Shīrāzī, 1430 AH, vol. 2, p. 62). This means that financial rights (such as the right to claim the amount of a document) can be the subject of a mortgage contract, even if they are not a physical object. The essential condition is that the right is transferable to another.

Regarding Bitcoin and similar cryptocurrencies, the Jurisprudential Council of the Central Bank of Iran, in unofficial opinions, has prohibited their use for current transactions due to lack of transparency and lack of backing, but there is still no consensus regarding their collateralizability.

Another important point is the necessity of distinguishing between the "financial value" (māliyat) of a digital asset and its "tangibility" (‘ainiyat). Iran's Civil Code requires that the mortgaged property be a "specific tangible object." In the case of digital assets, this condition is to some extent debatable. Although a digital asset lacks physical existence, since "tangible object" (‘ayn) is opposed to "debt" (dayn) and includes anything that has external existence, a digital asset, by virtue of being recorded on a blockchain or central servers, has external existence (albeit virtual). Consequently, it can be considered as falling under the heading of "tangible object." Some legal scholars have classified electronic property under the category of "virtual tangible objects" or "digital tangible objects" (Ḥamīdī Awwal, 2021, p. 112).

4.3. The Use of Secondary Jurisprudential Rules and the Theory of Maqāṣid al-Sharī‘ah

Some jurists believe that even if electronic collaterals do not fully conform to primary rules in some respects, they can be accepted by relying on secondary jurisprudential rules and the theory of maqāṣid al-sharī‘ah (objectives of Sharia).

First Rule: "al-ṣulḥ jā’iz bayn al-muslimīn" (settlement is permissible among Muslims). Based on this rule, derived from the prophetic tradition "al-ṣulḥ jā’iz bayn al-muslimīn illā ṣulḥan aḥalla ḥarāman aw ḥarrama ḥalālan" (settlement is permissible among Muslims except a settlement that makes the unlawful lawful or the lawful unlawful) (Ḥurr ‘Āmilī, 1409 AH, vol. 13, p. 175), Muslims may enter into any kind of settlement in their relations with one another, provided that it does not make the unlawful lawful or the lawful unlawful. Accordingly, the contracting parties may agree to accept a digital asset as collateral, even if some of the apparent conditions of the traditional mortgage are not met. This rule is particularly applicable in the banking system, where the facilitation of loans and the granting of credit are the primary objectives. The bank and the customer can, through a settlement contract (ṣulḥ), substitute the delivery of the digital asset into the bank's control for traditional possession.

Second Rule: "mā yuḍman bi-ṣaḥīḥihi yuḍman bi-fāsidihī" (what is guaranteed in its valid form is guaranteed in its invalid form). Based on this rule, if a property is guarantee-able in a valid contract, it is also guarantee-able in an invalid contract (Najafī, 1386 AH, vol. 21, p. 103). Consequently, if a digital asset can be traded in a valid sale contract (bay‘) and has financial value, it can also be the subject of a mortgage contract, which is a type of guarantee, even if the mortgage contract is defective in some respects.

The Theory of Maqāṣid al-Sharī‘ah: This theory, developed by Shāṭibī in al-Muwāfaqāt, is based on the principle that the rulings of Sharia have been established to realize five essential necessities (ḍarūrāt): the preservation of religion, life, intellect, lineage, and property (Shāṭibī, 1417 AH, vol.

2, p. 4). Among these, "the protection of property" (ḥifẓ al-māl) is one of the important objectives. Since the ultimate purpose of the mortgage contract is to protect the rights of creditors and prevent the dissipation of their property, any legal institution that fulfills this purpose should be acceptable within the framework of the objectives of Sharia. Accepting electronic collaterals enables banks and individuals to grant facilities with greater confidence and prevents the wastage of capital.

Some contemporary jurists, including Ayatollah Khamenei in response to inquiries, have emphasized that in emerging economic issues, one must refer to "general principles and foundations," and if a financial institution helps to achieve the objectives of Sharia and does not involve corruption, it is not prohibited (Office of the Supreme Leader, 2021). This approach opens the way for the acceptance of new financial instruments, including electronic collaterals.

4.4. Implementation Challenges and Solutions

In addition to the aforementioned jurisprudential challenges, there are significant implementation obstacles to the acceptance of electronic collaterals in Iran's banking system, and the experience of leading countries in this field can be instructive.

First, the lack of an appropriate legal framework: Iran's Civil Code, which dates back to the late Qajar period, has not benefited from developments in the digital world, and the Electronic Commerce Act adopted in 2003, despite its initial innovations, does not have sufficient provisions for electronic collaterals. In foreign law, the United States, by amending Article 9 of the Uniform Commercial Code (UCC), has made it possible to collateralize intangible and digital assets. The European Union, with the eIDAS Regulation, has created a coherent legal framework for electronic identification and trust services, and UNCITRAL, with its Legislative Guide on Secured Transactions, provides a suitable model for the enactment of a comprehensive electronic collateral law in Iran.

Second, the issue of valuation and volatility of digital assets: Digital currencies and cryptocurrencies inherently experience severe price fluctuations that can significantly reduce the value of the collateral and increase the bank's credit risk. In international practice, European supervisory bodies such as ESMA, as well as the central banks of leading countries, to manage this risk, require "over-collateralization" and periodic review of collateral value (margin calls). From a jurisprudential perspective, the bank can also, drawing inspiration from this practice and by including a condition in the contract, require the receipt of additional collateral and its periodic adjustment to maintain contractual balance.

Third, the issue of establishing ownership and preventing double collateralization: In the digital space, the possibility of collateralizing a single asset in multiple banks simultaneously and without the knowledge of supervisors is one of the most important concerns of the legal system. Foreign law has solved this problem by establishing centralized electronic collateral registration systems; for example, the Canadian Personal Property Security Act (PPSA) and the UK Financial Collateral Arrangements, through instant registration and determination of priority based on the order of registration, prevent double collateralization. A similar solution in Iran would be the design of a centralized system similar to the Central Bank's "Samat" system, which would register and make all electronic collaterals searchable.

Fourth, the issue of enforcing the collateral in the event of default: In Iran's traditional system, the sale of the mortgaged property requires lengthy and time-consuming judicial formalities that can sometimes take years. In foreign law, faster solutions are provided; for example, UCC § 9-609 allows the secured party to sell the collateral without recourse to the court, merely by observing reasonable formalities. UNCITRAL has also recognized out-of-court sale (private sale) in its Legislative Guide. In the case of electronic collaterals, drawing inspiration from these practices and using settlement contracts and blockchain-based smart contracts, it can be stipulated that in the event of default, the digital asset will be automatically transferred to the bank or sold in the digital market.

5. Conclusion

The present research was conducted with the aim of examining the possibility of harmonizing electronic collaterals with jurisprudential foundations and Sharia principles in Iran's banking system. The findings show that the existing ambiguities and challenges in this area, although significant, are of the "removable obstacles" type rather than "inherent and insurmountable obstacles."

Regarding the condition of qabd, it was found that the concept of qabd in Islamic jurisprudence is not limited to physical and material possession, and concepts such as "constructive possession," "customary possession," and "domination over property" can serve as a basis for virtual possession. Provided that the mortgagee's complete domination and control over the digital asset is established, the condition of qabd is fulfilled.

Regarding the condition of financial value (māliyat) and tangibility (‘ainiyat), given the broad definition of jurists of "property" (māl)—anything that custom considers valuable and capable of being owned—and the Civil Code's explicit mention of the possibility of mortgaging a debt (the

right to claim cash), digital assets are also capable of being collateralized if approved by custom and if their economic value is established.

Concerning the use of secondary jurisprudential rules, the rule "al-ṣulḥ jā'iz bayn al-muslimīn," the rule "mā yuḍman bi-ṣaḥīhi yuḍman bi-fāsidihi," and the theory of maqāṣid al-sharī'ah (especially the protection of property and facilitation of transactions) provide the possibility that even if electronic collaterals do not completely conform to the apparent form of traditional contracts, they can be acceptable within the framework of Sharia standards with the aim of ensuring the security of transactions and guaranteeing the rights of individuals.

However, the implementation of electronic collaterals in Iran's banking system requires the reform and completion of the legal and regulatory system. The following proposals are presented to achieve this:

1. Amendment of the Civil Code or enactment of an independent law: Given the existing legal gaps, it is necessary to revise the provisions related to mortgage and collateral in the Civil Code and align them with current developments. If amendment of the Civil Code is not possible, an independent law entitled "Electronic Collaterals Law" can be enacted, inspired by international instruments and regulations (such as the UNCITRAL Legislative Guide on Secured Transactions). This law should provide a clear definition of "virtual possession," "collateralizable digital asset," and "the rights and obligations of the parties."
2. Establishment of a centralized electronic collateral registration system: To prevent double collateralization and establish ownership, the Central Bank should create a comprehensive system in which all electronic collaterals are registered. This system can operate similarly to the "Samat" system. The verification of owners' identities is ensured through existing infrastructures such as electronic signatures and the national smart card.
3. Formulation of a jurisprudential guideline by the Central Bank's Jurisprudential Council: To resolve Sharia ambiguities, the Jurisprudential Council of the Central Bank should, through careful examination, formulate a comprehensive guideline on the conditions for the permissibility of electronic collaterals. This guideline can include permission to use specific cryptocurrencies, valuation models, and enforcement mechanisms.
4. Training and awareness-raising at the level of the banking network: Banks and credit institutions should provide the necessary training to their employees on the benefits and methods of using electronic collaterals and also familiarize customers with this new instrument.

5. Suggestions for future researchers: Given the limitations of the present research (including the lack of access to field data on the performance of banks in collateralizing digital assets), it is suggested that empirical research with a descriptive-survey approach be conducted in the future. In particular, researchers can, through surveying jurisprudential and legal experts as well as bank managers, examine practical perspectives on implementation challenges and solutions to them. Furthermore, a comparative study between the legal systems of successful Islamic countries in the field of electronic collaterals (such as Malaysia and the United Arab Emirates) can be instructive.

Finally, it must be emphasized that the objective of this research was not to justify every type of digital asset for collateralization, but rather to present a framework by which, while preserving Sharia standards, the capacities of technology can be utilized to facilitate financing and strengthen the performance of contractual obligations in Iran's banking system. With this approach, while maintaining compliance with jurisprudential principles, a significant step can be taken towards financial development and the reduction of credit risk in the country.

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Conflict of Interest

The author declares that there is no financial or non-financial conflict of interest in connection with the content of this article, and this research was conducted with personal financial support and without receiving financial assistance from any institution or organization.

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