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**CRYPTO-TECHNOLOGY MEETS REAL ESTATE: Navigating Legal  
Frontiers of Real Estate Tokenization in India**

*Srijan Tripathi*

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# CRYPTO-TECHNOLOGY MEETS REAL ESTATE: Navigating Legal Frontiers of Real Estate Tokenization in India

*Srijan Tripathi\**

[Abstract: The paper begins by introducing the concept of real estate tokenization and its underlying blockchain technology, highlighting the benefits of increased liquidity, fractional ownership, and transparency. It then explores the relevant aspects of real estate technology, including smart contracts, decentralized applications (DApps), and digital asset management platforms. Recognizing the paramount importance of regulatory compliance, the paper examines the national and international regulations governing real estate tokenization in India. It provides a comprehensive analysis of the provisions of the Real Estate (Regulation and Development) Act, 2016, Transfer of Property Act, 1882, Indian Contract Act, 1872, Co-operative Societies Acts (applicable in relevant States), Insolvency and Bankruptcy Code (IBC), 2016, Indian Succession Act, 1925, Foreign Exchange Management Act ('FEMA'), 1999, The Digital Personal Data Protection Act, 2023, and Know Your Customer ('KYC')/ Anti-money laundering ('AML') regulations in India. Furthermore, the paper delves into the tax implications of real estate tokenization, addressing potential challenges and opportunities related to capital gains, income tax, and other taxation aspects. It also examines the privacy concerns associated with blockchain technology and the measures required to ensure data protection and compliance with the Digital Personal Data Protection Act, 2023.]

## I

### Introduction

One of the most significant positive developments to come out of the COVID-19 pandemic is blockchain technology becoming mainstream. Blockchain has the potential to revolutionize industries worldwide and while, at the first glance, it may not seem that such technology would have any use in traditional industries like real estate, but there have been certain developments which may potentially transform real estate ownership.<sup>1</sup> In the Indian subcontinent, property investments and ownership hold

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\* The author can be contacted on [srijantripathi@nlunagpur.ac.in](mailto:srijantripathi@nlunagpur.ac.in)

<sup>1</sup> Satoshi Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System. (2008).



significant cultural and economic importance, and hence, the possible advent of an era of real estate tokenization will naturally give rise to its own unique set of opportunities and challenges. This paper examines the intricacies of law surrounding real estate tokenization in the Indian scenario, by examining the regulatory framework, challenges and prospects associated with this emerging phenomenon.<sup>2</sup>

At present, real estate tokenization, in simple words, can be defined as the process of digitizing property assets into tradable tokens on a blockchain. This technology holds immense potential and may liberalize the Indian real estate landscape substantially by facilitating dilution of ownership which will cause a much-needed disruption in the system of syndicates having been formed by individuals and organizations possessing large capital availability. Fractional ownership and investment will further democratize access to real estate markets thereby fostering financial inclusion and wealth creation.<sup>3</sup>

The additional transparency, security, and efficiency afforded by blockchain technology has the potential to provide solutions to long standing issues such as fraud, opacity and other inefficiencies which have become prevalent in the traditional real estate environment.<sup>4</sup> However, there exists a complex web of legal and regulatory considerations which need to be addressed to realize this potential. At present, the legal framework governing real estate tokenization in India is still at very nascent stages, while regulating agencies and policymakers continue to grapple with existing outdated laws to accommodate for this novel new class of assets. Hence, central to our discussion, would be the classification of tokenized assets and the regulatory oversight that would entail.<sup>5</sup>

In India, real estate transactions are subjected to a myriad of laws and regulations which span property, contract, tax and securities laws. And therefore, at the very initial stage, the categorization of tokenized assets as securities, commodities or something entirely different (which would call for framing of completely new regulations from scratch) become significant for framing policy regarding regulatory compliance, investor

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<sup>2</sup> Di Maggio, Marco, David Lane, and Susie Ma, *Fluidity: The Tokenization of Real Estate Assets*, HARVARD BUSINESS SCHOOL CASE 219-057 (Dec. 2018) available at: <https://www.hbs.edu/faculty/Pages/item.aspx?num=55466>. Fabian Kienbaum, Christian Hoppe, and Philipp Steiner, *Tokenization of Assets: Revolutionizing Alternative Investments*, available at: [https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_ch/topics/blockchain/ey-tokenization-of-assets-broschure-final.pdf](https://assets.ey.com/content/dam/ey-sites/ey-com/en_ch/topics/blockchain/ey-tokenization-of-assets-broschure-final.pdf) (last visited Mar. 24, 2024).

<sup>3</sup> Fabian Kienbaum, Christian Hoppe, and Philipp Steiner, *Tokenization of Assets: Revolutionizing Alternative Investments*, available at: [https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_ch/topics/blockchain/ey-tokenization-of-assets-broschure-final.pdf](https://assets.ey.com/content/dam/ey-sites/ey-com/en_ch/topics/blockchain/ey-tokenization-of-assets-broschure-final.pdf) (last visited Mar. 24, 2024).

<sup>4</sup> *Id.*

<sup>5</sup> Securities and Exchange Board of India (Real Estate Investment Trusts) (Amendment) Regulations, 2024.



protection and market integrity.<sup>6</sup> Presently, Securities Exchange Board of India (SEBI) regulates securities markets, including initial coin offerings (ICOs) and security token offerings (STOs), however, the status of utility tokens and asset backed tokens still remain a topic of debate and confusion.<sup>7</sup>

Moreover, if the presently applicable laws and regulations are used for deciding ownership, transferability and enforceability of tokenized assets, it would give rise to further ambiguity and inconsistencies. Real estate tokenization completely flips the traditional notions of property ownership on its head by allowing for digital ownership rights which can be acquired and held by individuals and organization who have never even been to the property in which they are buying a stake in, this creates a divergence from most of the legal frameworks presently applicable.<sup>8</sup> Clear and concise legal mechanisms for recording, transferring, and enforcing ownership rights in tokenized assets are imperative to ensure that there is legal certainty and investor confidence.

Furthermore, another major aspect which would have to be reimaged for the widespread induction of real estate tokens is taxation. Proper characterization of tokenized transactions for tax purposes including capital tax, stamp duty and goods and service tax (GST), calls for clarity and consistency regarding taxation laws<sup>9</sup> of the country. Ambiguities in determining the tax treatment of tokenized assets could hinder their widespread adoption and application. Lastly, among other concerns, technology and operational challenges put up further hurdles to the widespread adoption of real estate tokenization in India. Smart contract vulnerabilities, data privacy concerns and inoperability between different blockchain platforms demand a robust technology infrastructure which at present cannot be said to exist in India.<sup>10</sup> The integration of tokenization platforms with real-world real estate practices and market procedures would require extreme collaboration among all of the industry stakeholders, including developers, legal experts and technology providers.

In the light of the above discussed aspects, this paper would seek to analyse the present legal framework surrounding real estate tokenization in India, identify gaps and challenges in regulations and policies and propose useful recommendations.

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<sup>6</sup> The Transfer of Property Act, 1882.

<sup>7</sup> Securities and Exchange Board of India (ISSUE and Listing of Debt Securities by Municipalities) Regulations, 2015.

<sup>8</sup> *Id.*

<sup>9</sup> Income-tax Act, 1961.

<sup>10</sup> Deloitte, *Tokenization in Real Estate: Bridging Traditional and Digital Capital Markets* (2019).



## II

### Background

The rise of blockchain has opened up new prospects to most of the industries, especially those which involve data, and hence, real estate is no exception. Real estate tokenization implies digitizing property assets into cryptographic tokens on a blockchain, it has emerged as one of the most significant technological enhancements of the past decade which has the potential to transform traditional real estate investment models.<sup>11</sup> This process involves conversion of real estate assets into digital tokens, which offer a fractional ownership and enable person to person transactions, thereby enhancing liquidity and opening up accessibility of real estate to a very large extent.<sup>12</sup> However, the conversion of tangible and intangible real estate into digital tokens and allowing for things like fractional ownership and peer-to-peer transfer forms a humongous challenge in front of this country's law makers and the policy framers. This matter extends beyond technological considerations to encompass issues like property rights, regulatory compliance, contractual enforcement, and investor protection.<sup>13</sup>

### *Property Rights and Ownership*

With reference to the Indian scenario, major questions arise when we talk about legal recognition and transferability of contentious and grave matters like property rights when they are represented by digital tokens.<sup>14</sup> Traditional Indian laws, primarily governed by statutes such as Transfer of Property Act, 1882, may require to be amended and expanded to accommodate for the unique attributes of digital assets.<sup>15</sup> Moreover, fractional ownership units which are an essential part of tokenization would require much needed clarity as to what is the status of rights and responsibilities along with establishing proper decision-making procedures among the token holders.<sup>16</sup>

### *Regulatory Framework*

Real Estate tokenization process operates within a set of frameworks governed by various statutes, including securities laws, property laws, and consumer protection

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<sup>11</sup> Neha Kukrety, Pitresh Kaushik, & Shashank Pandey, *Blockchain Technology and Legal Framework in India: A Systematic Review* 22 EMPIRICAL ECONOMIC LETTER (2023).

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> Jason G. Allen, *et al.*, LEGAL AND REGULATORY CONSIDERATIONS FOR DIGITAL ASSETS 16-35 (2020).

<sup>15</sup> *Id.*

<sup>16</sup> Shaik, Vaseem Akram & Malik, Praveen & Singh, Rajesh & Gehlot, Anita & Tanwar, Sudeep, *Adoption of blockchain technology in various realms: Opportunities and challenges* 3 SECURITY AND PRIVACY (2020).



laws.<sup>17</sup> It is paramount that regulators like Security Exchange Board of India (SEBI) and Reserve Bank of India (RBI) keep a watch upon tokenization activities to ensure that there is compliance and no foul play is involved.<sup>18</sup> Classification of tokens under existing categories of securities or commodities means that they will be governed by the existing compliance requirements, as well as investor protection measures and market accessibility.<sup>19</sup> It is crucial that there are harmonizing efforts in order to reconcile jurisdictional disparities and promote regulatory clarity for tokenized real estate transactions at both state and national levels in India.<sup>20</sup>

### ***Smart Contracts<sup>21</sup> and Legal Enforcement***

Smart Contracts essentially form the backbone of any real estate tokenization system as they automate the contract formation and execution and ensure transparency.<sup>22</sup> However, the legal enforceability of smart contracts has become a major topic of debate among the legal community because of concerns regarding interpretation, dispute resolution mechanisms, and difficulty in jurisdictional enforcement.<sup>23</sup> It is essential to clarify the legal status of smart contracts and to integrate them into existing legal framework before making any attempts at bringing real estate tokenization into the mainstream, this would ensure trust and confidence among the investors.<sup>24</sup>

### ***Investor Protection and Due Diligence***

In the Indian scenario, it is of paramount importance that the interests of the investors are protected and thorough due diligence is conducted when it comes to any blockchain transaction relating to real estate.<sup>25</sup> These regulatory frameworks should be laid down as such that they robust disclosure requirements, investor accreditation standards, and

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<sup>17</sup> Aleksandr P. Alekseenko, *Model Framework for Consumer Protection and Crypto-Exchanges Regulation* 16 JRFM (2023).

<sup>18</sup> Ramya Bhaskara, *Real Estate Tokenization - Way Forward for India* 4 JCLJ 101 (September 29, 2023).

<sup>19</sup> Gaurav Kodrani, *Whether Real Estate Tokenisation of Real-World Asset (RWA) Legal in India?* (Aug. 14, 2023) available at: <https://medium.com/@gauravkodrani4/whether-real-estate-tokenisation-of-real-world-asset-rwa-legal-in-india-5835fc7c1ae3> (last visited March 28, 2024).

<sup>20</sup> *Id.*

<sup>21</sup> *In simple terms, smart contracts can be defined as digital contracts that are stored on blockchain and get executed automatically when predetermined terms and conditions get fulfilled.*

<sup>22</sup> Tarhini, Mahmoud, *Application of asset tokenization, smart contracts and decentralized finance in agriculture* 6 JFS 152-163 (2021).

<sup>23</sup> Jaswant, Shilpa & Kale, Prajakta. *Smart contracts and blockchain: legal issues and implications for Indian contract law* 36 INTILL REV. L. COMP. & TECH, 1 (2021).

<sup>24</sup> *Id.*

<sup>25</sup> Tian, Yifeng & Adriaens, Peter & Minchin, R. & Chang, Charles & Lu, Zheng & Qi, Chaoying. *Asset Tokenization: A Blockchain Solution to Financing Infrastructure in Emerging Markets and Developing Economies*. (2020).



compliance protocols to mitigate risks associated with fraud, misrepresentation and market manipulation.<sup>26</sup> Additionally, mechanisms for dispute resolution, asset valuation, and investor recourse should also be determined to uphold market integrity.

In essence, navigating the legal complexities surrounding property rights, regulatory compliance, contractual enforcement, and investor protection is crucial if the vision of a functioning real estate token market has to be realized.

### III

#### Process of Real Estate Tokenization<sup>27</sup>

It is crucial to understand the process of real estate tokenization to understand the nuanced approach required to regulate it. The procedure involved in tokenizing real estate has several steps which should be adhered to, in order to ensure compliance and efficacy.

The process begins with identifying suitable real estate assets for tokenization. These assets could be residential apartments, commercial buildings, or industrial properties. It is of paramount importance that the established legal procedure is strictly adhered to and due diligence is done in the examination of ownership rights, title deeds, and identifying any other encumbrances on the property which may cause problem to the fractional owners at a later stage.<sup>28</sup> This step is imperative because it ensures that there is legal compliance from the very initial stages of the tokenization process. It also ensures the mitigation of legal risks involved, given the complex nature of real estate transactions in India.<sup>29</sup>

Once the legal groundwork has been well established, it is then that a robust tokenization structure is put in place. This structure makes sure that there is delineation of all the rights and obligations associated with the tokens, especially revenue-sharing arrangements and governance mechanisms.<sup>30</sup> The aim is to provide clarity and transparency to the investors, fostering trust in the tokenization process.

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<sup>26</sup> *Supra* 23.

<sup>27</sup> Shashank Joshi & Arhan Choudhury. *Tokenization of Real Estate Assets Using Blockchain* 18 IJIT, 1-12 (2022).

<sup>28</sup> Oleksii Konashevych. *General Concept of Real Estate Tokenization on Blockchain: The Right to Choose*. 9 EPLJ, 21-66 (2020).

<sup>29</sup> *Id.*

<sup>30</sup> Mohd Javaid, Abid Haleem, Ravi Pratap Singh, Rajiv Suman, Shahbaz Khan, *A review of Blockchain Technology applications for financial services*, 2 BenchCouncil Transactions on Benchmarks, Standards and Evaluations (2022).



Subsequently, tokens representing fractional ownership of real estate assets are offered to investors through a token offering platform which would again be required to comply with all the regulations. These regulatory guidelines would be set forth by authorities such as Securities and Exchange Board of India (SEBI).<sup>31</sup> These tokenized assets grant their holders, the option to invest in real estate while dodging low liquidity and opens the market to a broader pool of investors, transcending geographical and political barriers.

The final stage of the whole tokenization involves secondary market trading, in such markets the investors can trade their tokens among themselves. This is the key of the higher liquidity and flexibility of real estate investments, allowing the investors with the freedom to exit their position or to diversify their portfolios as per their preferences.<sup>32</sup>

## IV

### Real Estate Investment Trusts (REITS)

These REITS offer a parallel investment avenue in the Indian real estate landscape. REITS operate as listed trusts that possess the ownership and management of income-generating real estate assets, and they distribute this rental income among the token holders.<sup>33</sup> They are established by sponsors and offer retail and institutional investors the opportunity to buy a stake in income-generating properties through publicly traded units.

The integration of real estate tokenization with REITs could potentially revolutionize the real estate market. The real estate tokens can be seamlessly incorporated into REIT portfolios which would further enhance the diversification and liquidity.<sup>34</sup> However, it is of paramount importance that regulatory compliances and interoperability between blockchain-based tokens and traditional financial systems is ensured.

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<sup>31</sup> SEBI, Securities and Exchange Board of India (Real Estate Investment Trusts) (Amendment) Regulations, 2022.

<sup>32</sup> Kreppmeier, Julia, Ralf Laschinger, Bertram I. Steininger, and Gregor Dorfleitner, *Real Estate Security Token Offerings and the Secondary Market: Driven by Crypto Hype or Fundamentals?* 154 J. BANKING AND FINANCE (2023).

<sup>33</sup> P K, Manoj. *Real Estate Investment Trusts (REITS) In India: Relevance and Significance in Emerging Scenario* 3 INTERNATIONAL JOURNAL OF TRADE & GLOBAL BUSINESS PERSPECTIVES (2014).

<sup>34</sup> Prashant Das, *Managing Indian REITs: The Conventional Wisdom*. Presented at the International Research Conference II, Securities & Exchange Board of India (SEBI), Mumbai, March 20<sup>th</sup> 2015.



### ***Legal Regulatory Framework Challenges***

The first and foremost aspect which needs to be addressed when it comes to making real estate tokens a legally viable and secure means of investment and property ownership is making them congruent with the existing laws regulating real estate in India. Amending, Adjusting and interpreting these laws such that they are able to offer compliance guidelines which can be applied in the industry to regulate the market efficiently.

### ***Real Estate (Regulatory and Development) Act, 2016<sup>35</sup>***

Regarded as a landmark legislation which was aimed at bringing transparency and accountability to the previously unorganized real estate sector, RERA is currently the blanket legislation upon which different states draft their own regulations for real estate.<sup>36</sup> However, the rise of digitization and cryptocurrencies have come before the law makers unexpectedly, causing serious doubts regarding RERA's efficacy in addressing the intricacies and nuances of property ownership and investments which tokenization brings. With the intent to safeguard the interests of homebuyers and to promote fair trade practices, the act establishes regulatory bodies at both national and state levels which may be reinforced to regulate tokenized assets which fall within their jurisdiction as well.

But the intersection of RERA and real estate tokenization gives rise to a plethora of legal uncertainties and regulatory gaps which must be dealt with. The act was not drafted to regulated digital assets and hence the rules and definitions contained in it seem inapplicable, for instance, the definition of promoter under RERA<sup>37</sup> may not encompass all the parties involved in the whole tokenization process leading to major ambiguity when it comes to deciding ambiguity and accountability. Furthermore, the disclosure requirements<sup>38</sup> mandated under RERA may be almost impossible to comply with in the context of digital asset management and tokenized ownership structures.

Policymakers and regulators should consider amendments and supplementary guidelines which are tailored to the digital asset landscape in order to enhance the adaptability of the statute to the changing trends of the industry.

### ***Transfer of Property Act, 1882***

Although the act is a seminal piece of legislation when it comes to regulating property transactions in India, it faces multiple challenges in accommodating the nuances of real estate tokenization. The act was drafted by the colonial regime and has gone through

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<sup>35</sup> Hereinafter referred to as RERA.

<sup>36</sup> Manoj Kumar, *An Overview of the Real Estate (Regulation and Development) Act, 2016*, 10 RMLNLJ (2018).

<sup>37</sup> Real Estate (Regulation and Development) Act, 2016, S. 2(zk).

<sup>38</sup> Real Estate (Regulation and Development) Act, 2016, S. 4 and 34(b).



multiple rounds of various amendments and would be needed to be altered yet again to be able to regulate the transfer of fractional ownership which real estate tokenization entails.

Among the many changes required, the act needs to recognize digital assets, including tokenized properties as valid forms of immovable property. This may be done by expanding the scope of sections 3 and 6 of the act to include digital assets and tokens. Moreover, the various modes of transfer defined under the act should also be expanded to encompass transfers facilitated through blockchain technology.<sup>39</sup>

It would also be beneficial for regulating bodies if a new section is added which talks about tokenized property and distinguishes it from traditional forms of property. This would encapsulate the unique characters of tokenized assets such as divisibility, transferability and immutability. It would also provide much needed clarity and legal certainty regarding the nature and scope of tokenized properties.

An international case study from which India may take note is the European nation of Liechtenstein, which implemented the Token and Trusted Technology Service Providers Act (TVTG) in 2020 commonly known as the Blockchain Act.<sup>40</sup> This statute is an exemplary legislative response to the challenges which arise due to tokenization of tangible assets like real estate. This law adopts the “token container model” which qualify the holder of the block-chain based token to a large number of rights, be it proprietary or contractual. The rights associated with tokenized assets are awarded full legal recognition and enforceability while, at the same time explicitly distinguishing them from traditional property classifications. The Liechtenstein TVTG model integrates principles of tokenization within the existing framework of civil and property law of the nation, posing as a compelling legislative precedent of doctrinal coherence while adapting technological advancements. This demonstrates that archaic property regimes such as the Indian Transfer of Property Act can be modernized through harmonized statutory innovation without unsettling the foundation of property jurisprudence. This may involve introducing provisions for the recognition and enforcement of smart contracts, possibly under Section 58 of the Act.

### ***Indian Contract Act, 1872***

This act serves as the bedrock legislation governing contracts and agreements taking place in India. Although the Act is foundational and is highly adaptable having applicability to smart contracts while providing a broad framework for contract formation, enforcement and performance in India, its applicability in the realm of real estate tokenization, where properties are represented as digital tokens and are represented on blockchain, signifying fractional ownership is insufficient. Careful

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<sup>39</sup> Transfer of Property Act, 1882, S. 8.

<sup>40</sup> Government of Liechtenstrin, Token and Trusted Technology Service Providers Act, 2020.



examination and potential amendments must be done to accommodate this modern innovation.

The Indian Contract Act is more than well equipped to handle the essential elements of contract formation, mainly, offer, acceptance, consideration and intention to create legal relations. All these principles are mostly transferrable to contracts formed through electronic means including the contracts formed through blockchain technology.

Section 10A of the Information Technology Act explicitly recognizes electronic contracts, holding that agreement which are formed through electronic means are valid contracts in the eyes of law, provided that they fulfil the essential elements of a contract.<sup>41</sup> Real estate tokenization chiefly involves the execution of smart contracts via a blockchain network, which may be brought under the purview of electronic contracts governed by this provision.

However, explicit recognition of smart contracts and tokenized agreements in the eyes of law are of paramount importance. The smart contracts, due to their nature may also require more clarifications within the act.

The Indian Contract Act has to be one of the most conducive pieces of legislature in this country for regulating real estate tokenization, but still some clarifications and amendments maybe required to address certain aspects of tokenization process relating to authentication mechanisms, cryptographic signatures, and data integrity standards to remove ambiguity and potential for misuse.<sup>42</sup>

### ***Insolvency and Bankruptcy Code***

The implementation of real estate tokenization within the framework of Insolvency and Bankruptcy Code (IBC) in India is a complex yet promising process. The code was designed for regulating insolvency procedure and offers a robust legal framework. It has high accommodation potential as it was drafted relatively recently. But quite a few aspects would need to be altered and tailored to suit the entry of this completely new technology with its own unique set of terminologies.

Firstly, the broad definition under which the code defines assets<sup>43</sup>, includes both tangible as well as intangible assets which provide a foundation for the inclusion of real estate properties. Yet, to bring digital tokens under the definition of tangible assets, some novel considerations have to be kept in mind regarding their treatment under the code. Adjudicating authorities, especially the National Company Law Tribunal (NCLT)<sup>44</sup>, would need to alter certain procedures to accommodate the nuances of

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<sup>41</sup> The Information Technology Act, 2000, S. 10A.

<sup>42</sup> Jack Gilcrest & Arthur Carvalho, *Smart Contracts: Legal Considerations*, available at: <https://arthurcarvalho.info/publications>.

<sup>43</sup> The Insolvency Bankruptcy Code, 2016, S. 3.

<sup>44</sup> The Insolvency Bankruptcy Code, 2016, S. 5.



dealing with disputes and compliance matters relating to tokens. This entails determining the rights and obligations of token holders within the insolvency proceedings, this poses a serious challenge to the practitioners and presiding officers as expertise in blockchain technology and tokenomics would be required.

Additionally, the appointment of resolution professionals (RP) which is a pivotal aspect of insolvency resolution process<sup>45</sup>. Under the Indian Insolvency Regime, the RP manages the corporate debtor's affairs during the Corporate Insolvency Process (CIRP) to ensure its operations as a going concern, RP also facilitates the preparation, submission, and evaluation of the resolution plans under the supervision of the Committee of Creditors (CoC). The office of the RP as well as the CoC would now necessarily require the collaboration of blockchain experts or token issuers so that the complexities of the tokenized real estate market can be navigated. The CoC which comprises of financial creditors and key decision makers in the resolution process<sup>46</sup> would also be required to be amended as to accommodate the participation of token holders and to clarify their role within the Committee. Further, in cases where resolution failure leads to resolution which is governed by chapter III,<sup>47</sup> the inclusion of tokenized assets would require a completely different sets of rules and regulations. Although tokens have much higher liquidity and streamline asset sales, the process of liquidation would need to be altered and adjusted to accommodate them. The regulators like Securities and Exchange Board of India (SEBI) and Reserve Bank of India (RBI) would need to make collaborative efforts in framing these guidelines.

A precedent worth considering is *Devas Multimedia Private Ltd. Vs. Antrix Corporation Ltd. and Ors.*, where the Supreme Court emphasized the need for substance over form in insolvency matters, stressing economic realities over legal formalities<sup>48</sup>. This principle may well be extended to tokenized property, ensuring that the form of a digital asset does not undermine its underlying economic value in the insolvency process. The incorporation of cyberspace assets demands a functional and technologically neutral approach, wherein resolution professionals and the Committee of Creditors are equipped, possibly with the aid of domain experts, to navigate blockchain infrastructure and token-holder claims effectively. Thus, a jurisprudential synthesis of insolvency law with technological realities is imperative to preserve the Code's efficacy in a digitized economy.

While the Code is a sturdy foundation for resolving insolvency cases, its ability to effectively accommodate tokenized assets hinges on addressing the various legal, regulatory and technological challenges.

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<sup>45</sup> The Insolvency Bankruptcy Code, 2016, S. 21.

<sup>46</sup> *Id.*

<sup>47</sup> Insolvency and Bankruptcy Code, 2016.

<sup>48</sup> *Devas Multimedia Private Ltd. Vs. Antrix Corporation Ltd. and Ors.* 2022 INSC 49.



## V

### Compliance Challenges of (KYC) and Anti- Money Laundering Protocols

Know Your Customer (KYC) and Anti-money laundering (AML) protocols<sup>49</sup> play a fundamental role in forming regulatory frameworks aimed at combatting financial crimes, hence it would be very relevant to the present discussion to explore how tokenization technology would pose a challenge to existing KYC and AML protocols. Because the tokenized assets are represented and stored digitally on a blockchain, it grants the holders substantial anonymity and opens the potential of cross border transactions which could be worrisome for various enforcement authorities of the state.

KYC in simple terms refers to the processes and systems by which businesses verify the identity of their clients to ensure that they are not involved in any illicit activities. The KYC process generally entails collecting personal information such as name, address, and identification documents. In the context of real estate tokenization, the platforms facilitating the issuance and trading of tokenized assets must be made to implement robust KYC procedures by regulatory authorities to verify the identity of the investors. But such strict regulations would themselves dilute the whole nuance of blockchain, this is a problem for policy makers and jurists, where they would need to strike a balance between anonymity and ease of doing business with preventing misuse of the technology.

AML regulations on the other hand are put in place to detect and prevent laundering among other financial crimes. Furthermore, real estate has historically been a very attractive avenue for financial crimes due to its high value, relatively stable and appreciating prices and potential to buy ostensibly to maintain anonymity.

The Prevention of Money Laundering Act, 2002 (PMLA) is the primary legislation in India relating to money laundering. The act curbs money laundering and related offences by establishing stringent KYC and anti-money laundering measures for various entities. The PMLA mandates regulated entities to maintain accurate records of transactions, such records should include the nature and value of transactions recorded along with the parties involved<sup>50</sup>. If the anonymity of blockchain transactions is completely removed then, these tokens can be used to facilitate the creation of a system of immutable transaction record of blockchain transactions which would enable the authorities to accurately trace the flow of funds and identify any suspicious transactions much more effectively. But this would undoubtedly require the

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<sup>49</sup> K. Dabhi, *A Study on Awareness About Know Your Customer (KYC) and Anti Money Laundering (AML) with Special Reference to Gujarat* 4(2) INT'L J. MGMT. PUB. POL'Y & RES. 68 (2025).

<sup>50</sup> Prevention of Money Laundering Act, 2002, S. 12.



enforcement authorities to set up special divisions which would be capable of dealing with cryptocurrency and blockchain related issues.<sup>51</sup>

Regulatory bodies like The Securities Exchange Board of India (SEBI) oversee the compliance of various anti-money laundering regulations in the securities market. Real estate tokenization projects would also fall within the jurisdiction of the same. The PMLA makes it mandatory for regulating bodies to report any suspicious transactions to the Financial Intelligence Unit- India (FIU-IND) and to comply with the directives issue by it.<sup>52</sup> Section 12 and 13 of the PMLA both require reporting entities to undertake thorough KYC procedures in order to verify the identity of client and the source of the funds used in the transaction. The platforms and intermediaries facilitating tokenized real estate transactions would also naturally be required to follow the same norms and protocols.

Thus, it is paramount that if they wish to survive in the highly regulated securities market, the real estate tokenization platforms must establish robust anti-money laundering protocols and promptly report any suspicious activity to the concerned authorities.

Finally, it is imperative that we talk about cross-border transactions. Two approaches can be taken regarding them, they can either be completely prohibited within the scope of real estate tokens or they can be allowed by necessitating compliance with the Foreign Exchange Management Act, 1999 (FEMA) along with other existing laws and regulations. Prohibiting cross-border transactions completely maybe difficult to enforce due to the nature of blockchain and hence regulatory policies would be more plausible.

There must be careful considerations regarding policies for real estate tokenization because even a single loophole has the potential to be exploited to cause a money laundering nightmare.

## VI

### Determination and Payment of Relevant Taxes

#### *Stamp Duty*

Stamp duty is a tax which is levied on legal documents and transactions concerning sale and transfer. In the present context where the property ownership is fractional and is

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<sup>51</sup> Shilpa Mankar Ahluwalia, *Bringing Crypto Transactions Under the Lens of the PMLA: What Does This Mean for the Market*, THE ECONOMIC TIMES (Mar. 21, 2023).

<sup>52</sup> Prevention of Money Laundering Act, 2002, S. 12(1)(b).



represented by digital tokens, the process of determining the applicability and quantum of stamp duty becomes very challenging.

One of the primary challenges while levying stamp duty on tokenized real estate is the ambiguity surrounding the classification of digital tokens and the corresponding legal documents.

Under Indian law, stamp duty is levied at different rates depending upon the nature and value of the transaction in question.<sup>53</sup> Since there is an absence of provisions under the Stamp Act which address the application of stamp duty upon tokenized real estate, a grave lack of clarity in this regard occurs which may lead to legal hurdles further contributing to challenges faced during adoption of tokenized real estate.

Two significant complexities associated with tokenized real estate are the cross-border nature of blockchain transactions and the anonymity of participants. Unlike traditional real estate transactions, which are governed by territorial laws and involve clearly identifiable parties, tokenized transactions can occur across jurisdictions through decentralized platforms. This transnational character of blockchain makes it exceedingly difficult for regulatory authorities to consistently apply and enforce stamp duty laws, which are inherently local in nature. Furthermore, the pseudonymous nature of blockchain wallets allows parties to engage in high-value transactions without disclosing their real-world identities, creating hurdles in identifying the appropriate jurisdiction for taxation and enforcing compliance. These factors collectively undermine the effectiveness of conventional regulatory tools and call for a reimagining of tax enforcement mechanisms in the context of decentralized and anonymous digital ecosystems.

The valuation of the tokenized real estate is another aspect which may pose a problem in determining the correct amount of applicable stamp duty. Unlike traditional real estate transactions, the crypto-token prices are dynamic and highly volatile and are extremely prone to fluctuations in value. This volatility is unique to the real estate token market and hence must be separately by the policy makers and regulators. Definitive value of stamp duty is paramount to avoid potential disputes between taxpayers and tax authorities.

Leveraging technology could enable authorities to be able to real-time track and report on tokenized transactions, this would go a long way in enhancing transparency and ensuring compliance with stamp duty regulations.

### ***Registration Duty***

The Indian Registration Act, 1908 governs the process of registration of all the real estate documents in India. But obviously, it lacks any special provisions governing the levy of

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<sup>53</sup> James Alm & Patricia Clarke Annez & Arbind Modi, *Stamp duties in Indian states - a case for reform*, (2004).



registration duty on digital assets represented by tokens on a blockchain. Similar to stamp duty, this lack of clarity may lead to problems in assessing the property and determining the amount of duty to be levied. Furthermore, the fluctuating values of the tokenized assets may make the job of policymakers and regulators more difficult.

## VII

### Conclusion

The legal frontiers of real estate tokenization in India presents a dynamic landscape which is filled with both opportunities and challenges. Throughout this paper, various aspects surrounding real estate tokenization in India have been delved into and an effort has been taken to make sure that none of the legal, regulatory and technological frameworks which may be relevant in shaping this emerging market has been missed out.

The potential benefits of real estate tokenization cannot be overstated. The blockchain technology can be leveraged to democratize access to real estate investments even to the lower strata of the society which for centuries, has been kept devoid of property ownership due to political, sociological and economic barriers. Further, these transactions will unlock liquidity in traditionally illiquid asset which would foster a much greater efficiency and ease in the market. Moreover, fractional ownership further contributes towards financial inclusion and diversification.

With the above being said, the process of making real estate transactions fully functional and a mainstream form of investment is not without its hurdles. Foremost among these challenges is the general regulatory uncertainty regarding the treatment of digital assets within the nation. The recent Supreme Court ruling overturning the Reserve Bank's decision on offering banking services to Cryptocurrency related businesses<sup>54</sup> offers much needed hope, a comprehensive regulatory framework specially tailored towards the Indian real estate market still remains imperative. Policymakers must take up the challenge of trying to navigate the delicate balance between encouraging innovation in the market and safeguarding investor interests, striking a chord that would allow transactions while mitigating the risks of fraud and money laundering.

The technical infrastructure required to support widespread adoption of tokenization in India is still in its nascent stages. Issues like scalability, interoperability and data privacy must be addressed to ensure the integrity and security of tokenized assets. To overcome these technology barriers and build robust, user friendly platforms for real estate

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<sup>54</sup> *Internet and Mobile Association of India v. Reserve Bank of India*, 2019 SCC OnLine SC 1800.



tokenization, it is key that there is collaboration between industry stakeholders, government agencies and technologists.

The legal intricacies surrounding property rights, land ownership and contractual ownership are another complexity which must be dealt with. While, smart Contracts offer the benefit of automation and transparency, a clearly crafted policy must be made to comply with existing legal frameworks and ensure enforceability via the medieval Indian Judicial system. Standardized documentation and procedures must be put in place for real estate transactions. Despite challenges, the potential reward of making tokenization mainstream in India is significant. As the globe moves towards digitization, asset tokenization will continue to gain momentum in the technologically capable nations, it would be beneficial if India is able to join the march and take steps in changing the future of the real estate market by investing in technology, promoting industry collaboration and framing policies.