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Virtual Digital Assets Service Providers under Indian Insolvency Framework

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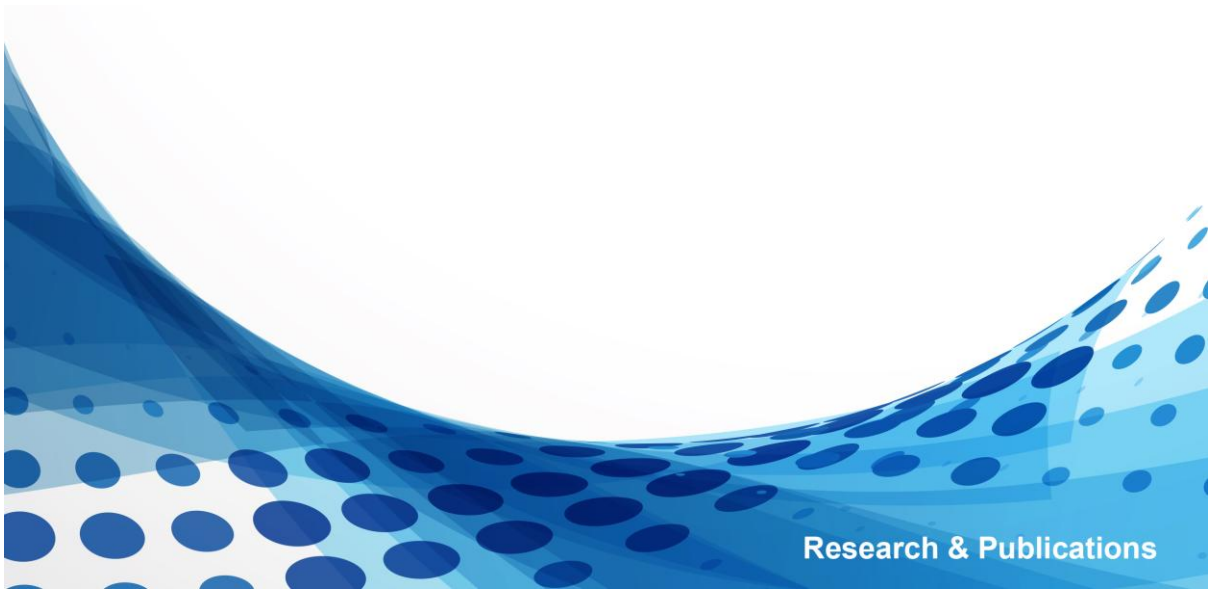

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Virtual Digital Assets Service Providers under Indian Insolvency Framework

Prerna Seerwani* & M P Ram Mohan**

Abstract

Crypto trading is emerging as a prominent investment avenue within India's financial landscape. The Indian legal regime has recognized crypto assets as "virtual digital assets" only for limited purposes of taxation and anti-money laundering obligations. The loss of crypto assets following the hack of Indian crypto exchange WazirX, remains an evolving legal controversy, with Indian courts continuing to struggle with the complexities of disputes involving crypto assets. As crypto markets remain largely underregulated globally, crypto platforms engage in regulatory arbitrage by relocating to jurisdictions with favourable legal system, thereby complicating the determination of applicable law, jurisdiction, and the identity of the debtor entity. A review of literature on failed crypto exchanges shows that their collapse is frequently linked to two factors: the absence of regulatory oversight and their susceptibility to cyberattacks. In this context, this paper undertakes a foundational enquiry into the need to adapt the Insolvency and Bankruptcy Code, 2016 to address insolvency proceedings involving crypto platforms. Drawing from comparative regulatory and judicial developments, it examines issues of classification, ownership, valuation, and cross-border implications of crypto assets. We contend that crypto assets qualify as "property" under the IBC and that targeted statutory interventions are essential to safeguard crypto exchange users' rights in the event of insolvency.

Keywords: Virtual Digital Assets, Cryptocurrency, Insolvency, IBC

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1 Introduction

"*As a store of value, cryptocurrencies like bitcoin have given impressive returns so far, but so did tulips in 17th century Netherlands. Cryptocurrencies are very much like a speculative or gambling contract working like a Ponzi scheme."*[1]

- T. Rabi Sankar, the Deputy Governor of the Reserve Bank of India ("**RBI**")

Cryptocurrencies, characterized by their decentralized and digital nature, have emerged as a significant innovation in global finance. The underlying technology of cryptocurrencies allows their creation and transfer without reliance on a central authority, which underpins both their appeal and regulatory challenges.[2] The usage of cryptocurrencies as a "currency" or a medium of exchange is limited. Regulators across jurisdictions have instead recognized them as "assets," adopting terminology such as digital assets[3], crypto assets[4], virtual assets[5] or digital tokens[6] to describe them. There is no universal definition of crypto assets. The European Central Bank describes them as "*a new type of asset recorded in digital form and enabled by the use of cryptography that is not and does not represent a financial claim on, or a liability of, any identifiable entity*".[7] The distinctive feature of crypto asset is the lack of an underlying claim, which makes them highly volatile and speculative.[8]

The year 2022 witnessed a "crypto winter," marked by a sharp decline in crypto prices, the collapse of several major crypto platforms like Celsius, Voyager, FTX, Genesis, Three

[1] T. Rabi Sankar, *Cryptocurrencies – An Assessment*, BANK FOR INTERNATIONAL SETTLEMENTS (Feb. 14, 2022), https://www.bis.org/review/r220217d.pdf.
[2] Kathryn White et al., *Cryptocurrency regulation: where are we now, and where are we going?*, WORLD ECONOMIC FORUM (Mar. 28, 2022), https://www.weforum.org/stories/2022/03/where-is-cryptocurrency-regulation-heading/.
[3] *Digital assets*, INTERNAL REVENUE SERVICE, https://www.irs.gov/filing/digital-assets (last visited Aug. 2, 2025).
[4] Money Laundering, Terrorist Financing and Transfer of Funds (Information on the Payer) Regulations 2017, §14A(3)(a) (United Kingdom); *International Standards for Automatic Exchange of Information in Tax Matters*, OECD (June 8, 2023), https://www.oecd.org/en/publications/international-standards-for-automatic-exchange-of-information-in-tax-matters_896d79d1-en/full-report/component-5.html.
[5] *Virtual Assets*, FINANCIAL ACTION TASK FORCE, https://www.fatf-gafi.org/en/topics/virtual-assets.html (last visited Aug. 2, 2025).
[6] Financial Services and Markets Act, 2022, §136 (Singapore).
[7] *Crypto-assets – trends and implications*, EUROPEAN CENTRAL BANK (June 2019), https://www.ecb.europa.eu/press/intro/mip-online/2019/html/1906_crypto_assets.en.html.
[8] *Id*.

Arrow Capital, BlockFi and their eventual bankruptcies.[9] Crypto market capitalization as of now in the global financial market may not be significant but considering the developing public interest in crypto assets despite the downturn in 2022, crypto market has the potential to affect the real economy.[10] Given the extreme price volatility and unregulated nature of crypto assets, significant exposure of traditional financial institutions to the crypto market could produce negative spillover effects.[11] The bankruptcy of California-based Silvergate Bank, which catered to crypto industry clients and experienced a bank run in the wake of crypto market turmoil, illustrates this risk.[12]

India does not have a specific regulator overseeing crypto trading. Nevertheless, domestic adoption has surged, with India ranking first in the Global Crypto Adoption Index 2024.[13] Under the (Indian) Income-tax Act, 1961, crypto assets fall within the definition of "*virtual digital assets"* ("**VDA**"). To support the growing demand, multiple crypto exchanges, formally known as VDA service providers ("**VDA SPs**") have started operating in India.[14] As crypto trading has expanded, risks have also emerged, with their effects gradually becoming apparent to Indian investors.

The July 2024 cyber-attack on WazirX, a major VDA SP, resulted in losses of around $230 million user assets. [15] Despite the magnitude of the incident, Indian courts have been unable to provide any relief to affected Indian users.[16] WazirX has filed restructuring scheme in

[9] *Crypto's string of bankruptcies*, REUTERS (Jan. 20, 2023), https://www.reuters.com/business/finance/cryptos-string-bankruptcies-2023-01-20/.
[10] THE CRYPTO ECOSYSTEM: KEY ELEMENTS AND RISKS (2023), https://www.bis.org/publ/othp72.pdf.
[11] Heike Joebges et al., *Crypto assets as a threat to financial market stability*, 15 Eurasian Econ. Rev. 473 (2025), https://doi.org/10.1007/s40822-025-00311-4.
[12] Dietrich Knauth, *Silvergate Capital enters bankruptcy after crypto bank's shutdown*, REUTERS (Sept. 19, 2024), https://www.reuters.com/legal/litigation/silvergate-capital-enters-bankruptcy-after-crypto-banks-shutdown-2024-09-18/.
[13] *2024 Global Crypto Adoption Index*, CHAINALYSIS (Sept. 11, 2024), https://www.chainalysis.com/blog/2024-global-crypto-adoption-index/.
[14] Ministry of Finance, GST Evasion by Cryptocurrency Exchanges, Lok Sabha Unstarred Question No. 966, (Answered on Dec. 2, 2024) https://sansad.in/getFile/loksabhaquestions/annex/183/AU966_nhWk4P.pdf?source=pqals.
[15] *WazirX hacked; halts withdrawals as over $230 million stolen*, HINDU, July 27, 2024, https://www.thehindu.com/sci-tech/technology/wazirx-hacked-halts-withdrawals-as-over-230-million-stolen/article68421190.ece.
[16] Arijit Mukherjee, *Lack Of Crypto Framework In India Keeps WazirX Hack Victims From Justice*, 99BITCOINS (Apr. 17, 2025), https://99bitcoins.com/news/lack-of-crypto-framework-in-india-keeps-wazirx-hack-victims-from-justice/.

its parent company's jurisdiction, Singapore.[17] The authors contend that failure and eventual insolvency of an India based VDA SP is not a remote possibility. While crypto is a rapidly evolving, highly volatile, and currently a non-regulated asset, India should adopt a proactive rather than a crisis driven approach to assess the capacity of current law to deal with VDA SP failures.

The European Union has issued regulations governing crypto assets[18], and the United States has issued a legislation governing stable coins (a kind of crypto asset)[19]; wherein both the statutes contain provisions aimed at protecting user rights in the event of insolvency of a crypto asset service provider. Without a legislative mandate, VDA SPs have no incentive to protect user rights through contractual arrangements. We suggest that certain legal safeguards are necessary to mitigate adverse consequences for users in the event of insolvency or liquidation.

This paper is a foundational enquiry on the need to adapt the Insolvency and Bankruptcy Code, 2016 ("**IBC**") to accommodate potential insolvencies of VDA SPs. The structure is as follows: Section 2 traces the evolution of India's legislative approach to crypto assets. Section 3 examines the ongoing WazirX controversy. Section 4 explores the operational vulnerabilities of crypto exchanges that make them prone to failure. Section 5 analyzes the classification of crypto assets as "property" and "security", wherein we advocate that VDAs qualify as "property" under the IBC to ensure that users can claim ownership on their VDAs during a corporate insolvency resolution process or liquidation. The final section draws on bankruptcies of crypto-exchanges from other jurisdictions, to propose crypto specific statutory provisions like segregation of user assets, flexibility in valuation timeline, and reform of cross-border insolvency provisions. We have used the term "VDA" in India specific context, and the term "crypto assets" in other contexts.

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[17] *Zettai Gets Singapore Court's Approval to Proceed With Revote on Amended Restructuring Scheme,* WAZIRX BLOG (July 16, 2025), https://wazirx.com/blog/zettai-gets-singapore-courts-approval-to-proceed-with-revote-on-amended-restructuring-scheme/.

[18] Markets in Crypto-Assets, Regulation (EU) 2023/1114, May 31, 2023, art. 75(7), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02023R1114-20240109.

[19] Guiding and Establishing National Innovation U.S. Stablecoins Act or GENIUS Act, Public Law No: 119-27, July 18, 2025, §11(a), https://www.congress.gov/bill/119th-congress/senate-bill/1582/text.

2 Guidance and attempts at regulation of crypto assets (2013-2025)

As per Bank for International Settlements (BIS) 2023 report done for 19 countries,[20] the policy measures related to crypto assets across jurisdictions include bans, restrictions, clarifications, bespoke requirements and initiatives to facilitate innovation.[21] India's approach, as outlined below, is predominantly reactive and compliance-driven, focused on taxation and anti-money laundering reporting obligations, rather than the development of a comprehensive or innovation-oriented regulatory framework.

2.1. Warning, ban and reversal of ban on virtual currencies.

In 2013, RBI issued a press release ("**RBI's 2013 Guidance**") wherein it cautioned the users, holders and traders of virtual currencies ("**VC**s")[22] about the following risks:[23]

- **Cybersecurity Risk**: VCs stored in digital wallets are vulnerable to hacking, malware, and loss of credentials, potentially resulting in permanent loss.
- **Lack of Consumer Protection**: VC transactions lack regulatory oversight, offering no mechanism for dispute resolution or chargebacks.
- **Price Volatility**: VCs are not backed by any asset, leading to speculative valuation and exposing users to sharp value fluctuations.
- **Legal and Financial Uncertainty**: Trading VCs on unregulated international platforms poses legal and financial risks due to unclear regulatory status.
- **Illicit Use Risk**: The anonymity of VC transactions can lead to inadvertent involvement in violations of anti-money laundering and combating the financing of terrorism laws.

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[20] DENISE GARCIA OCAMPO ET AL., CRYPTO, TOKENS AND DEFI: NAVIGATING THE REGULATORY LANDSCAPE (2023), https://www.bis.org/fsi/insights49_summary.pdf. The jurisdictions covered are Australia, Belgium, Canada, China, the European Union, France, Germany, Hong Kong SAR, Italy, Japan, the Netherlands, the Philippines, Singapore, South Africa, Spain, Switzerland, the United Arab Emirates, the United Kingdom and the United States.

[21] *Id*.

[22] RBI in its Financial Stability Report (2013), defined virtual currencies as *"a type of unregulated, digital money, which is issued and usually controlled by its developers, and used and accepted among the members of a specific virtual community*". *See*, FINANCIAL STABILITY REPORT ISSUE NO. 7 (2013), https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/FSPI260613FL.pdf.

[23] Press Release, RBI cautions users of Virtual Currencies against Risks, 2013-2014/1261 (Dec. 24, 2013), https://rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=30247.

RBI's 2013 Guidance is as relevant today as it was at the time of issue, as we will explain in this and subsequent sections, the regulatory framework in India and other countries remain inadequate to fully alleviate the risks associated with crypto assets.

In February 2017, the RBI through a press release again cautioned that it has not given any license/authorisation to any entity to operate schemes or deal with any VC and any user, holder, investor, or trader, dealing with VC is doing so at their own risk.[24] In April 2018, RBI prohibited entities regulated by the RBI (like banks) to provide any services to individuals or business entities that deal in VCs (the "**RBI Prohibition Circular**").[25] The effect was that an Indian investor could not purchase or transfer his or her investments in VC using a bank account or borrow money for this purpose.

The VC exchanges challenged the RBI Prohibition Circular in *Internet and Mobile Association of India v Reserve Bank of India* (the "**IMAI Case**"), on the ground that it violates their fundamental right to carry on their occupation, trade or business guaranteed under Article 19(1)(g) of the Indian Constitution.[26] The Supreme Court in its March 4, 2020 order conveyed that the RBI Prohibition Circular made operation of VC exchanges impossible in India by prohibiting their interface with the banking sector, and the burden of showing that larger public interest[27] warranted such a serious restriction lies on the RBI.[28]

The Supreme Court noted that (i) RBI has not found any evidence that the activities of VC exchanges have actually impacted adversely, the way the entities regulated by RBI function (ii) RBI has not prohibited VCs in the country and (iii) the Inter-Ministerial Committee constituted in 2017 with respect to VC regulation was *initially* of the opinion that a ban on VCs might be an extreme tool and that the same objectives can be achieved through

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[24] Press Release, RBI cautions users of Virtual Currencies, 2016-17/2054 (Feb. 1, 2017), https://www.rbi.org.in/commonperson/English/Scripts/PressReleases.aspx?Id=2152.
[25] Reserve Bank of India, Prohibition on dealing in Virtual Currencies (VCs), RBI/2017-18/154 (Notified on Apr. 6, 2018) https://www.rbi.org.in/Commonman/English/Scripts/Notification.aspx?Id=2632.
[26] *Internet and Mobile Association of India v Reserve Bank of India* (2020) SCC Online SC 275, ¶ 6.146.
[27] *Id*. ¶ 6.146. The Supreme Court noted that RBI intended to restrict VC trading to ensure *"(i) consumer protection (ii) prevention of violation of money laundering laws (iii) curbing the menace of financing of terrorism and (iv) safeguarding of the existing monetary/payment/credit system from being polluted."*
[28] *Id.* ¶ 6.144.

regulatory measures.[29] On this basis, the Supreme Court held that the RBI Prohibition Circular was not a proportionate regulatory measure and set aside the RBI Prohibition Circular.[30] The IMAI case marked a pivotal development for crypto exchanges in India, prompting a gradual shift in the government's stance and the recognition of crypto assets in the legal regime. The following section examines this recognition, implemented piecemeal through selective incorporation across separate statutes.

2.2. Attempts at regulation

2.2.1. Mandatory disclosure by companies

The Ministry of Corporate Affairs, on March 24, 2021, amended the Schedule III to the Companies Act, 2013 to mandate disclosures by companies regarding VC and crypto currency in their financial statements, effective from April 1, 2021.[31] All private and public companies are required to disclose the profit or loss on transactions involving cryptocurrency or VC in a financial year, amount of VC or cryptocurrency held as at the reporting date; and deposits or advances from any person for the purpose of trading or investing in cryptocurrency or VC in a financial year. The Companies Act 2013 as of today does not provide a definition of VC and cryptocurrency.

2.2.2. Record keeping mandate for cybersecurity

The Indian Computer Emergency Response Team ("**Cert-In**"), the national agency for cyber security in India, on April 28, 2022 issued directions to virtual asset service providers, virtual asset exchange providers and custodian wallet providers to maintain all information obtained as part of Know Your Customer (KYC) and records of financial

[29] *Id.* ¶ 6.167. The final report of the Inter-ministerial committee dated February 28, 2019 departed from its initial view, and recommended banning and criminalizing any cryptocurrency related activity (See, REPORT OF THE COMMITTEE TO PROPOSE SPECIFIC ACTIONS TO BE TAKEN IN RELATION TO VIRTUAL CURRENCIES (2019), https://dea.gov.in/sites/default/files/Approved%20and%20Signed%20Report%20and%20Bill%20of%20IMC%20on%20VCs%2028%20Feb%202019.pdf).

[30] *Id.* ¶ 6.172.

[31] Press Release, MCA amends Schedule III of Companies Act on disclosure norms in financial statements (Aug. 10, 2021), https://www.pib.gov.in/PressReleasePage.aspx?PRID=1744542#:~:text=In%20order%20to%20bring%20in,companies%20in%20their%20financial%20statements.

transactions for a period of five (5) years.[32] This requirement is also applicable on a foreign service provider offering services to the users in India.[33]

2.2.3. Introduction of "virtual digital assets" in the Income-tax Act, 1961, and tax reporting framework

The Income-tax Act, 1961 ("**IT Act**") was amended in 2022 to recognize crypto assets as "virtual digital assets" ("**VDA**"), and provided the following definition of VDA: [34]

(a) any information or code or number or token (not being Indian currency or foreign currency), generated through cryptographic means or otherwise, by whatever name called, providing a digital representation of value exchanged with or without consideration, with the promise or representation of having inherent value, or functions as a store of value or a unit of account including its use in any financial transaction or investment, but not limited to investment scheme; and can be transferred, stored or traded electronically;

(b) a non-fungible token[35] or any other token of similar nature, by whatever name called; or

(c) any other digital asset, as the Central Government may, by notification in the Official Gazette specify.

The Finance Act, 2025 further amended the IT Act to expand the definition of VDA to specifically include:

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[32] Indian Comput. Emergency Response Team (CERT-In), DIRECTIONS UNDER SUB-SECTION (6) OF SECTION 70B OF THE INFORMATION TECHNOLOGY ACT, 2000 RELATING TO INFORMATION SECURITY PRACTICES, PROCEDURE, PREVENTION, RESPONSE AND REPORTING OF CYBER INCIDENTS FOR SAFE & TRUSTED INTERNET, NO. 20(3)/2022-CERT-IN, at 4 (2022), https://www.cert-in.org.in/PDF/CERT-In_Directions_70B_28.04.2022.pdf.

[33] *Frequently Asked Questions (FAQs) On Cyber Security Directions of 28.04.2022*, INDIAN - COMPUTER EMERGENCY RESPONSE TEAM (May 2022), Question 36, https://www.cert-in.org.in/PDF/FAQs_on_CyberSecurityDirections_May2022.pdf.

[34] Income-Tax Act, 1961, §2(47A).

[35] Non-fungible tokens are not technically defined. Central Board of Direct Taxes has clarified that a non-fungible token does not include a non-fungible token whose transfer results in transfer of ownership of underlying tangible asset and the transfer of ownership of such underlying tangible asset is legally enforceable. See, Central Board of Direct Taxes, Notification 75 of 2022 (Issued on June 30, 2022) https://incometaxindia.gov.in/communications/notification/notification-no-75-2022.pdf.

*"any "crypto asset" being a digital representation of value that relies on a cryptographically secured distributed ledger or a similar technology to validate and secure transactions, whether or not such asset is included in sub-clause (*a*) or sub-clause (*b*) or sub-clause (*c*)".*

The IT Act imposes a 30% tax on income from VDA along with a 1% tax deducted at source (TDS) on sale of VDAs.[36] VDAs have been defined in a wide manner, presumably to ensure that no income from VDA trading is out of the taxman's net. Certain digital assets such as gift cards, gift vouchers, mileage points, reward points, loyalty cards, subscription to websites or platforms or applications have been excluded from the definition of VDA.[37]

With effect from April 1, 2026, a reporting entity under the IT Act is required to furnish a statement of transactions in "*crypto assets*" to the tax authorities.[38] The Indian government is yet to publish rules specifying the entities who would be required to comply with such reporting obligations, the nature of information to be reported and the manner of reporting.

2.2.4. Registration under the Prevention of Money Laundering Act, 2002

On March 7, 2023, Ministry of Finance notified that service providers operating in India that are engaged in VDA activities ("**VDA Service Providers** or **VDA SPs**") will come under the ambit of "reporting entity" under the Prevention of Money Laundering Act, 2002 ("**PMLA**"). [39]All VDA SPs are required to register with Financial Intelligence Unit- India ("**FIU-IND**"), and establish a process for customer due diligence, record keeping, internal control procedure, training of employees, and filing of suspicious transaction reports with

[36] Income-tax Act, 1961, § 115BBH & § 194S.
[37] Central Board of Direct Taxes, Notification 74 of 2022 (Issued on June 30, 2022) https://incometaxindia.gov.in/communications/notification/notification-no-74-2022.pdf.
[38] Income-tax Act, 1961, § 285BAA.
[39] Ministry of Finance, S.O. 1072(E) (Issued on March 7, 2023) https://egazette.gov.in/WriteReadData/2023/244184.pdf. The business activities specified in this notification are: exchange between VDA and fiat currencies, exchange between one or more forms of VDA, transfer of VDA, safekeeping or administration of VDAs or instruments enabling control over VDA, and participation in and provision of financial services related to an issuer's offer and sale of a VDA.

FIU-IND. [40] FIU-IND has issued show cause notices, imposed high monetary penalties,[41] and blocked the URLs of the foreign VDA SPs that provide services to Indian users that have not registered or complied with PMLA.[42]

2.3. Future of VDA regulation

Indian government has admitted that VDAs are borderless and require international collaboration to prevent regulatory arbitrage.[43] There is no timeline anticipated for introduction of comprehensive regulatory guidelines for VDA industry in India. Nonetheless, it does not necessarily mean that VDA will not be recognized, or worse, trading in VDA will be banned. The regulatory approach towards VDA has changed post 2020 given the introduction of regulatory measures discussed in this section. With the growing international acceptance of crypto assets,[44] the Indian regulatory regime is more geared towards better regulation, than outright ban. That said, lack of comprehensive regulatory regime has left the individuals who trade in crypto assets without a judicial recourse, as demonstrated by the disputes surrounding WazirX which is discussed in the next section. The WazirX disputes highlight that the crypto industry is no longer a niche area of technology and finance and warrants better investor protection.

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[40] Ministry of Finance, Revision of Circular for Registration of Virtual Digital Asset Service Providers in FIU India as Reporting Entity, F. No. 9-8/2023/COMPL/FIU-IND (Issued on Oct. 17, 2023) https://fiuindia.gov.in/pdfs/downloads/VDASP17102023.pdf.

[41] *See*, for example, Order in original No. 15/DIRFIU-IND/2024 in the matter of Bybit Fintech Limited u/s Section 13 (Issued on Jan. 31, 2025) https://fiuindia.gov.in/pdfs/judgements/ByBit_Order_15_2024.pdf.

[42] Press Release, Financial Intelligence Unit India (FIU IND) issues compliance Show Cause Notices to nine offshore Virtual Digital Assets Service Providers (VDA SPs) (Dec. 28, 2023), https://www.pib.gov.in/www.pib.gov.in/Pressreleaseshare.aspx?PRID=1991372.

[43] Ministry of Finance, Virtual Digital Assets (VDA) Regulation, Lok Sabha Unstarred Question No. 3418, (Answered on Dec. 16, 2024) https://sansad.in/getFile/loksabhaquestions/annex/183/AU3418_RjYPEN.pdf?source=pqals.

[44] Sanjana B, *As US' Crypto Push Sets Global Precedent, Indian Industry Wants Similar 'Progressive Policies'*, BUSINESSLINE, Mar. 3, 2025, https://www.thehindubusinessline.com/money-and-banking/cryptocurrency/as-us-crypto-push-sets-global-precedent-indian-industry-wants-similar-progressive-policies/article69285663.ece.

3. WazirX Cyber Attack: Complex World of VDA Service Providers

In July 2024, WazirX, a popular Indian VDA SP suffered a cyber-attack leading to the theft of investor holdings worth $230 million.[45] The aftermath of this cyber-attack has uncovered the following issues for WazirX users.

3.1. Ownership confusion and change of jurisdictions

India to Singapore

WazirX is registered with the Financial Intelligence Unit-India (FIU-IND) under the company name "Zanmai Labs Private Limited" ("**Zanmai**").[46] Zanmai was incorporated on December 21, 2017 and is registered as a private company with Registrar of Companies-Mumbai.[47] The RBI Prohibition Circular of April 6, 2018 restricted operation of WazirX in India, and in the aftermath of this prohibition, WazirX founders incorporated Zettai Pte. Ltd. ("**Zettai**") on January 7, 2019 in Singapore to handle crypto based operations. [48]

Dispute with Binance

In November 2019, Zettai transferred its cryptocurrency wallets to Binance. Binance is a foreign VDA SP that registered with FIU-IND in August 2024.[49] In 2022, Zettai, took custody of WazirX's assets following an ownership dispute with Binance which is still ongoing. [50]

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[45] *Day-Wise Report: WazirX Cyber Attack Incident - WazirX Blog*, WAZIRX BLOG, https://wazirx.com/blog/wazirx-cyber-attack-day-wise-report/#July_18_2024 (last visited Aug. 3, 2025).

[46]Ministry of Finance, GST Evasion by Cryptocurrency Exchanges, Lok Sabha Unstarred Question No. 966, (Answered on Dec. 2, 2024) https://sansad.in/getFile/loksabhaquestions/annex/183/AU966_nhWk4P.pdf?source=pqals.

[47] As per publicly available company master data available on the website of the Ministry of Corporate Affairs.

[48] *ZETTAI PTE. LTD.*, THE GRID (June 12, 2025), https://sgpgrid.com/company-details/zettai-pte-ltd.

[49] *Binance Achieves Its 19th Global Regulatory Milestone With Registration in India*, BINANCE (Aug. 15, 2024), https://www.binance.com/en-IN/blog/regulation/binance-achieves-its-19th-global-regulatory-milestone-with-registration-in-india-3022489348045738409.

[50] Swathi Moorthy, *3 Questions the USD230 Million Crypto Heist Raises about WazirX-Binance Dispute*, THE ECONOMIC TIMES, Sep. 4, 2024, https://economictimes.indiatimes.com/prime/technology-and-startups/3-questions-the-usd230-million-crypto-heist-raises-about-wazirx-binance-dispute/primearticleshow/113059780.cms?from=mdr.

Zettai claims that it has proposed a restructuring of the WazirX crypto balances (in Singapore court) so that users would not have to wait for the resolution of dispute between Zettai and Binance.[51] Zettai further claims that if Binance is determined to be the owner of the WazirX platform and its assets as an outcome of the dispute, WazirX users will be creditors of Binance (not Zettai) for the crypto assets.[52] As per Binance, the transaction between Binance and Zettai was never closed, and Binance has never owned, controlled, or operated WazirX at any time. Therefore, Binance claims that it has no responsibility for the operation of the WazirX platform and the consequences of the hack. [53]

WazirX's ownership issues have made it uncertain now to pinpoint at the exact entity against whom the claims of Indian users lie. That said, WazirX ownership issues did not just appear after the cyber-attack. The Directorate of Enforcement (ED), during its investigation in relation to a money laundering case in 2022, [54] had noted:

> "*Zanmai Labs Pvt Ltd, the company owning WazirX Crypto Exchange, has created a web of agreements with Crowdfire Inc. USA, Binance (Cayman Islands), Zettai Pte Ltd Singapore, to obscure the ownership of the crypto exchange. Earlier, their Managing Director Mr Nischal Shetty had claimed that WazirX is an Indian Exchange which controls all the crypto-crypto & INR-crypto transactions and only has an IP & preferential agreement with Binance. But now, Zanmai claims that they are involved in only INR-crypto transactions, and all the other transactions are done by Binance on WazirX.* ***They are giving contradictory & ambiguous answers to evade oversight by Indian regulatory agencies***."[55]

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[51] *Since the user did not sign any TnCs with Zettai, why are we conducting the procedure in Singapore and not in India? Is the NCLT and NCDRC in India not equipped to handle this matter?*, WAZIRX, https://support.wazirx.com/hc/en-us/articles/8116075700506-Since-the-user-did-not-sign-any-TnCs-with-Zettai-why-are-we-conducting-the-procedure-in-Singapore-and-not-in-India-Is-the-NCLT-and-NCDRC-in-India-not-equipped-to-handle-this-matter (last visited Aug. 3, 2025).
[52] *Id*.
[53] *To the WazirX Community: Correction of Zettai's Inaccurate and Misleading Statements Concerning Binance*, BINANCE (Sept. 17, 2024), https://www.binance.com/en-IN/blog/community/4005526688459858370.
[54] Sakshat Kolhatkar, *WazirX And ED: A Timeline Of Events That Occurred*, NDTV Profit (Oct. 6, 2022), https://www.ndtvprofit.com/business/wazirx-and-ed-a-timeline-of-events-that-occurred.
[55] Press Release, Freezing of assets of WazirX Crypto Exchange (Aug. 5, 2022), https://enforcementdirectorate.gov.in/sites/default/files/latestnews/PR%20HYZO_Freezing%20of%20assets%20of%20WazirX%20Crypto%20Exchange.pdf.

Change in Singapore law

In Singapore, individuals, partnerships or corporations that are operating from a place of business in Singapore or formed or incorporated in Singapore **but carry on a business of providing digital token services outside Singapore** are called Digital Token Service Providers ("**DTSPs**"). On May 30, 2025, the Monetary Authority of Singapore announced that it will (i) issue a license to DTSP only in extremely limited circumstances given the risks of digital tokens used for illicit purposes; and (ii) without a license a DTSP will have to suspend or cease its business of providing digital token services **outside** Singapore by June 30, 2025.[56] This amendment in Singapore law affected the restructuring proceedings filed by Zettai, that has not applied for the DTSP license. The Singapore High Court declined to approve the restructuring scheme because Zettai will be in contravention of the Singapore law for holding the crypto tokens and thereafter effecting the distribution pursuant to the restructuring scheme.[57]

As per press reports, Singapore High Court's dismissal of the restructuring scheme was also prompted by Zettai's failure to disclose the existence of a newly incorporated entity in Panama, where it intended to relocate during the ongoing proceedings. [58] A move to Panama was expected to even lower the transparency of the restructuring and distribution

[56] RESPONSE TO FEEDBACK RECEIVED ON PROPOSED REGULATORY APPROACH, REGULATIONS AND NOTICES FOR DIGITAL TOKEN SERVICE PROVIDERS ISSUED UNDER THE FINANCIAL SERVICES AND MARKETS ACT 2022, P010-2024, at 4 (2025), https://www.mas.gov.sg/-/media/response-to-feedback-received-from-dtsp-cp.pdf.
[57] Mehab Qureshi, *Zanmai India to take over WazirX operations, MAS clears key compliance hurdle*, YAHOO FINANCE (July 10, 2025), https://finance.yahoo.com/news/zanmai-india-over-wazirx-operations125733924.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAIatQI30ljzw_OWg-vzVUUcJUUeGckStFQsZ5ZB4XQ6Qej1O9vxRXLFeErg0UGO1Erzd1r14CCNg_bN5jagBF9arsHj25LyDB_Srvh_A_IevBRVqfBvrvMaJg6gC8_hPqvNSLtWAXNdbRwZA8m6tLwoTru3VXGbDjCiN5frrljUh.
[58] Ajinkya Kawale, *Singapore Court Rejects Restructuring Plan of WazirX Parent Zettai*, BUSINESS STANDARD (June 4, 2025), https://www.business-standard.com/markets/cryptocurrency/wazirx-parent-zettai-restructuring-plan-rejected-by-singapore-court-html-125060401253_1.html.

process as Panama is considered a less restrictive space for crypto assets[59] compared to Singapore and India.[60]

After its initial dismissal, the Singapore High Court has allowed WazirX to amend the restructuring scheme and take creditor consent on the amended restructuring scheme.[61] The main amendment in the scheme is that Zanmai, the Indian entity will facilitate distributions, and not Zettai or the Panama entity.[62] The required approval by the Singapore High Court is pending for the amended scheme.

While WazirX, an India based VDA SP engages in cross-jurisdictional maneuvers like restructuring in Singapore, and incorporation of a Panama entity, against the backdrop of its ownership dispute with Binance, Indian users continue to face prolonged uncertainty over the recovery of their crypto assets.

A crypto platform can be operated from any part of the world as it is entirely a digital ecosystem. Therefore, the biggest factor for a crypto platform to decide physical location is which country's law they would want to be regulated under. As regulatory regimes keep evolving, the location of crypto platforms keep shifting. Frequent changes in jurisdiction may also facilitate the concealment of misconduct, for example FTX group (that operated the FTX crypto exchange) moved from United States to Hong Kong to the Bahamas, in a continual effort to enable and avoid detection of misuse of customer deposits.[63]

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[59] Nik, *Panama City Approves Bitcoin and Crypto Payments for Taxes, Fees, and Permits*, Bitcoin Magazine (Apr. 16, 2025), https://bitcoinmagazine.com/news/panama-city-approves-bitcoin-and-crypto-payments-for-taxes-fees-and-permits.

[60] Vallari Sanzgiri, *WazirX's Relocation to Panama Good for Restructuring, Bad for India's Crypto Sector*, BUSINESSLINE, Jun. 5, 2025, https://www.thehindubusinessline.com/money-and-banking/cryptocurrency/wazirxs-plan-to-relocation-to-panama-good-for-restructuring-bad-for-indias-crypto-sector/article69661524.ece.

[61] FE Online, *Singapore court clears path for revote on WazirX restructuring plan*, FIN. EXPRESS, July 29, 2025, https://www.financialexpress.com/life/technology/singapore-court-clears-path-for-revote-on-wazirx-restructuring-plan/3919124/.

[62] *Zettai Gets Singapore Court's Approval to Proceed With Revote on Amended Restructuring Scheme - WazirX Blog*, WAZIRX BLOG (June 16, 2025), https://wazirx.com/blog/zettai-gets-singapore-courts-approval-to-proceed-with-revote-on-amended-restructuring-scheme/.

[63] In re: FTX Trading Ltd., et al, *Notice of filing Second Interim Report of John J. Ray III to the Independent Directors: The Commingling and Misuse of Customer Deposits at FTX.com*, U.S. Bankruptcy Ct. For The District Of Del., June 26, 2023, Case No. 22-11068 (JTD), at 5 (U.S.), https://restructuring.ra.kroll.com/FTX/ExternalCall-DownloadPDF?id1=MTUzNzc0OA==&id2=0&cid=0.

3.2. Issues with forum shopping

Users typically exhibit minimal concern regarding the identity of the corporate entity operating a crypto platform during periods of normal functioning.[64] In the event of operational distress, whether arising from cybersecurity breaches, regulatory investigations or in insolvency and bankruptcy proceedings, complex and opaque corporate structures, often spanning multiple jurisdictions, tend to surface. These structures obscure the platform's ultimate ownership and control, thereby complicating the identification of the responsible entity for claim recovery process in an insolvency.

Users of Celsius, a global crypto asset platform, accessed the platform after digitally executing the "Terms of Use" available on the Celsius platform website. These Terms of Use specified the counterparty as Celsius Network Limited, a United Kingdom ("**UK**") based company ("**Celsius UK**").[65] On January 10, 2020, the Financial Conduct Authority of the UK (the "**UK FCA**"), began requiring certain crypto asset firms to register with the UK FCA.[66] In June 2021, Celsius group announced that it was migrating its main business activity and headquarters from the UK to the United States ("**US**") due to "increasing regulatory uncertainty". [67] In July 2021, Celsius modified its Terms of Use and changed the relevant counterparty from Celsius UK to Celsius Network LLC ("**Celsius US**"), and the applicable law from UK law to New York law.[68]

When bankruptcy was filed by Celsius in July 2022[69], the relevant party to the latest version of the Terms of Use of Celsius platform was Celsius US. In the bankruptcy proceedings,

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[64] Ilya Kokorin, *Who's your debtor? Group insolvency and the curious case of Celsius*, 2023 BANKING & FIN. L. REV., at 6-7, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4705029.
[65] In re Celsius Network LLC et al, *Memorandum Opinion Regarding Which Debtor Entities Have Liability for Customer Claims under the Terms of Use*, U.S. Bankruptcy Ct. S.D. of N.Y., Mar. 9, 2023, Case No. 22-10964 (MG), at 8.
[66] Press Release, Fin. Conduct Auth., FCA becomes AML and CTF supervisor of UK cryptoasset activities (Jan. 10, 2020), https://www.fca.org.uk/news/news-stories/fca-becomes-aml-and-ctf-supervisor-uk-cryptoasset-activities.
[67] In re Celsius Network LLC et al, *Memorandum Opinion Regarding Which Debtor Entities Have Liability for Customer Claims under the Terms of Use*, U.S. Bankruptcy Ct. S.D. of N.Y., Mar. 9, 2023, Case No. 22-10964 (MG), at 9.
[68] *Id* at 10.
[69] In re: Celsius Network LLC, et al, U.S. Bankruptcy Ct. S.D. of N.Y, Jan. 31, 2023, Case No. 22-10964 (MG), (U.S.), https://www.jenner.com/a/web/aag4HeVaPPyEsfWyTp9N5G/4SaB6v/celsius-final-report-shoba-pillay.pdf.

the US Bankruptcy Court, Southern District of New York ("**US Bankruptcy Court**") had to assess whether Celsius customers have claims against all the Celsius group entities that filed Chapter 11 bankruptcy and all of their affiliates or only against Celsius US under the Terms of Use? [70]

Section 25 of the Terms of Use provided that "*[…] in no event shall you [customer] have any recourse […] with respect to our obligations, to or against any assets of any person or entity other than Celsius, including, without limitation, any member, shareholder, Affiliate […] of Celsius*".[71] However, the Terms of Use also provided that "*Celsius comprises Celsius Network LLC* ***and its Affiliates***".

Section 25 is ambiguous as it may be read as "Affiliate of [Celsius Network LLC and its Affiliates]", meaning direct affiliates like Celsius UK will also be liable, and the section only excluded indirect affiliates. A group of equity investors of Celsius UK argued that Section 25 should be interpretated to exclude Celsius UK.[72] As unsecured creditors are prioritized before equity holders under the US bankruptcy law, the Celsius UK investors had a chance of recovering their investments only if customer claims are limited to Celsius US. [73]

The US Bankruptcy Court acknowledged that the Terms of Use contract was ambiguous and there was a need to rely on extrinsic evidence.[74] Based on the evidence, the US Bankruptcy Court gave the judgment in favour of the Celsius UK investors and held that contractual claims can only be against the debtor, Celsius US. [75] Celsius UK may still be liable for non-contractual claims like fraud, and negligent misrepresentation.[76]

The US Bankruptcy Court acknowledged that it did not address the argument of the committee of unsecured creditors that substantive consolidation of all assets and liabilities

[70] In re Celsius Network LLC et al, *Memorandum Opinion Regarding Which Debtor Entities Have Liability for Customer Claims under the Terms of Use*, U.S. Bankruptcy Ct. S.D. of N.Y., Mar. 9, 2023, Case No. 22-10964 (MG), https://www.nysb.uscourts.gov/sites/default/files/opinions/312902_2205_opinion.pdf.
[71] *Id*. at 19.
[72] *Id*. at 23.
[73] *Id.* at 3.
[74] *Id.* at 19.
[75] *Id*. at 26.
[76] *Id*. at 37.

of the global enterprise is appropriate in these cases, unlocking value that would not otherwise be available to customer claims. [77] Eventually, Celsius group itself reached a voluntarily settlement to substantively consolidate the estates of Celsius UK and Celsius US, and the US Bankruptcy Court allowed this settlement. [78]

The Celsius case illustrates the legal complexities arising from the regulatory arbitrage of crypto asset providers. This issue is likely to persist until there is greater uniformity and maturity in the legal frameworks governing crypto assets across jurisdictions. In the next section, we have discussed how courts in India, approached the disputes related to WazirX, while it undergoes restructuring proceedings in Singapore.

3.3. Disputes in India

While developing its restructuring scheme, WazirX informed that its users are considered as "*unsecured creditors*", that is they hold unsecured claims for the value of their token balances and do not have a claim over any specific tokens.[79] This means that in a potential restructuring, the value of Zettai's assets, including tokens such as Bitcoin, Ethereum, and others, will be consolidated, and any recovery will be shared equitably among all the general users of WazirX platform.[80]

An Indian user filed a petition in the Delhi High Court claiming that WazirX's proposal to use the funds of users unaffected by the cyber-attack for the restructuring violates the user agreement with WazirX. The Delhi High Court in its October 18, 2024 order held:

> "*in the absence of a specific regulatory framework governing the same, the Petitioner's remedy may not lie before this Court under a writ petition. Instead, the Petitioner would need to pursue his grievance through a civil suit where the terms*

[77] *Id*. at Footnote 1.
[78] In re Celsius Network LLC et al, *Memorandum Opinion Approving the Settlement Among the Debtors, The Committee, and the Initial Consenting Series B Preferred Holders*, U.S. Bankruptcy Ct. S.D. of N.Y., July 24, 2023, Case No. 22-10964 (MG), https://www.nysb.uscourts.gov/sites/default/files/opinions/312902_3074_opinion.pdf.
[79] Akshay, *What is an unsecured creditor, and why are users unsecured creditors?*, WAZIRX, https://support.wazirx.com/hc/en-us/articles/8116102578458-What-is-an-unsecured-creditor-and-why-are-users-unsecured-creditors (last visited Aug. 4, 2025).
[80] Akshay, *How the Restructuring works?*, WAZIRX, https://support.wazirx.com/hc/en-us/articles/8115910226586-How-the-Restructuring-works (last visited Aug. 4, 2025).

of the user agreement and the alleged breach thereof could be thoroughly examined."[81]

When the Indian users approached the National Consumer Disputes Redressal Commission ("**NCDRC**"), the NCDRC dismissed the complaint stating that "*the legality and the nature of the (VDA) transactions are still not regulated to the extent as required*".[82]

In a separate writ petition filed in the Delhi High Court for the constitution of a Special Investigation Team to investigate the WazirX cyber-attack, the Delhi High Court in its January 15, 2025 order, has directed Government of India, RBI and Securities Exchange Board of India to file replies specifying (i) the regulatory mechanism in place to exercise oversight over platforms such as WazirX, through which trading / investment in "crypto currency" is offered/enabled for public at large; and (ii) whether any action has been taken or is proposed to be taken by the regulatory authorities against the entities operating the WazirX platform. This matter is currently pending before the Delhi High Court. [83]

The Indian users also filed a criminal writ petition in the Indian Supreme Court, accusing WazirX and its partners of negligence and misuse of customer funds[84], and sought directions from the Supreme Court to the Indian government to clarify the regulatory framework for VDA.[85] The Indian Supreme Court dismissed the petition on April 16, 2025 stating that it is "*the domain of the legislature and the executive*."[86]

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[81] *Jaivir Bains v Financial Intelligence Unit - India & Others* (W.P. (C) 14571/2024). The Delhi High Court has directed the Delhi Police Intelligence Fusion and Strategic Operations (IFSO) to submit the status report of the investigation of the cyber-hack. The matter is currently pending before the Delhi High Court.
[82] *Gurmeet Singh & Ors v Zenmai Labs Pvt Ltd & Ors* (Mar. 13, 2025) National Consumer Disputes Redressal Commission Consumer Complaint No. 7/2025.
[83] *Sudhir Verma & Anr. Vs. Union of India* (W. P. (C) 14969/2024). Delhi High Court in its latest order (August 5, 2025) has asked Zettai to file the following with the Delhi High Court: (i) the acquisition agreement with Binance, and (ii) the restructuring scheme filed with the Singapore High Court, along with the orders passed by the Singapore High Court.
[84] *India's Top Court Shuts Door on WazirX Victims Seeking Justice, Cites Lack of Crypto Rules*, CCN.COM (Apr. 16, 2025), https://www.ccn.com/news/crypto/indian-top-court-wazirx-hack-investigation/.
[85] *Supreme Court Turns down Plea for Cryptocurrency Regulations.*, THE ECONOMIC TIMES, Apr. 16, 2025, https://economictimes.indiatimes.com/markets/cryptocurrency/supreme-court-turns-down-plea-for-cryptocurrency-regulations/articleshow/120338670.cms?from=mdr.
[86] *Hajarimal Bathra & Ors. V Union of India* (W.P.(Crl.) 161/2025).

The RBI, through its press releases from 2013 to 2017, has earlier warned that there is no established framework for recourse to customer problems or disputes arising from virtual currency transactions. This warning was prophetic and came true in 2024, when users of WazirX started approaching Indian courts. The Indian courts are hesitant to rule on VDA disputes due to absence of a regulatory regime on VDAs. This is in stark contrast to other jurisdictions like USA and Singapore wherein courts were in forefront adjudicating disputes on crypto assets within the existing regulatory and legal framework (elaborated in Section 5 and 6). The next section discusses certain reasons that lead to the collapse of crypto exchanges to illustrate why operation of VDA SPs in India is also extremely prone to failure, and eventual insolvency.

4. Key Vulnerabilities Behind Crypto Exchange Collapses

Crypto assets such as Bitcoin are structured as a *decentralized* system, that allows its users to conduct *irreversible* transactions with *anonymity*. The features of irreversibility and anonymity, while integral to technology, are routinely exploited by cybercriminals, and once a platform's cybersecurity is breached, the recovery of misappropriated funds is highly improbable before the assets are laundered.[87] Moreover, in the absence of regulatory mandates requiring prudential safeguards, reserve maintenance, and counterparty risk mitigation, the crypto industry remains susceptible to market instability. This section outlines these vulnerabilities and discusses the recent regulatory interventions aimed at containing their impact.

4.1. Cyber Attacks

RBI's 2013 Guidance warned that electronic wallets containing virtual currency are prone to losses arising out of hacking, loss of password, compromise of access credentials, and malware attack. Hamid Cheraghali *et al*. state that cyber-attacks statistically cause negative returns on crypto assets and increase the price volatility.[88]

[87] Hamid Cheraghali et al., *The impact of cryptocurrency-related cyberattacks on return, volatility, and trading volume of cryptocurrencies and traditional financial assets*, 95 Part B INT'L REV. FIN. ANALYSIS 103439, (2024), https://doi.org/10.1016/j.irfa.2024.103439.
[88] *Id*.

The Digital Threat Report 2024 for the Banking, Finance and Insurance Sector issued by CERT-In, Computer Security Incident Response Team in the Finance sector (CSIRT-Fin) in India along with SISA, a cyber-security firm, flagged cryptocurrency as a new frontier to cyber threat landscape. As per this report, hackers have evolved from hijacking infected computers to mine crypto assets without the owner's knowledge, to directly attacking crypto exchanges by exploiting their cyber security vulnerabilities and steal large amounts of crypto assets.[89]

North Korean cyber-attacks have been seen as a major suspect for the theft of over $5 billion worth of crypto assets since 2017.[90] In India, the recent examples of crypto-exchanges attacked by North Korea-affiliated hacking collectives include WazirX in July 2024, [91] and CoinDCX in July 2025.[92] The operational efficiency of such cyber-attacks, and the laundering of stolen crypto assets, have brought new challenges for traditional anti-money laundering mechanisms. The following section examines the structural weaknesses of the crypto industry and outlines the regulatory responses of the European Union and the United States aimed at preventing platform failures and ensuring adequate investor protection.

4.2. The role of regulatory gaps in crypto platform failures

The wave of bankruptcies in 2022 involving several prominent crypto platforms, such as Voyager Digital Holdings, Inc. ("**Voyager**"), Celsius Network LLC ("**Celsius**"), BlockFi Lending LLC ("**BlockFi**"), Genesis Global Capital, LLC ("**Genesis**"), and FTX Trading Limited ("**FTX**") underscored the systemic risks associated with the largely unregulated

[89] DIGITAL THREAT REPORT 2024, at 36, https://www.cert-in.org.in/PDF/Digital_Threat_Report_2024.pdf.
[90] *The Bybit Hack: Following North Korea's Largest Exploit*, TRM LABS | BLOCKCHAIN INTELLIGENCE PLATFORM (Feb. 26, 2025), https://www.trmlabs.com/resources/blog/the-bybit-hack-following-north-koreas-largest-exploit.
[91] *North Korea's Lazarus Group behind $235 Million WazirX Hack, Confirms Joint Statement by US, South Korea, Japan*, BUSINESS TODAY, Jan. 14, 2025, https://www.businesstoday.in/technology/news/story/north-koreas-lazarus-group-behind-235-million-wazirx-hack-confirms-joint-statement-by-us-south-korea-japan-460804-2025-01-14.
[92] Kostiantyn Tsentsura, *CoinDCX Hack Traced to North Korea's Lazarus Group: $44M Stolen*, YELLOW.COM (July 22, 2025), https://yellow.com/news/coindcx-hack-traced-to-north-koreas-lazarus-group-dollar44m-stolen.

nature of crypto assets, as previously cautioned in the RBI's 2013 Guidance. In the following sub-sections, some of these risks are detailed.

4.2.1. Risky investments to provide a high return to customers

During the Chapter 11 bankruptcy proceedings of Celsius, the US Bankruptcy Court appointed a legal expert Shoba Pillay to investigate on Celsius' activities regarding its crypto assets and public representations.[93] Shoba Pillay reported that the reward rates that Celsius advertised and paid were not based on the actual revenue Celsius was earning, but instead the rates that were necessary to beat the competition of other investment products.[94] To close the gap between earned revenue and the promised reward rate, Celsius made riskier investments, with most of its loans being unsecured. Celius accepted FTX's native token, FTT, as collateral from FTX, another crypto exchange. FTT's value was dependent on the continued viability of FTX itself and therefore failed to provide meaningful security when FTX collapsed and defaulted on its loan.[95] FTX also filed for bankruptcy in November 2022.[96]

4.2.2. Lack of reserves and counterparty risk

The Terra network, developed by a Singapore entity TerraForm Labs introduced an algorithmic stablecoin TerraUSD (more popularly known as "**UST**") in 2020 which was pegged against the US Dollar, and was backed by its sister-coin LUNA.[97] To encourage users to adopt UST, the Terra blockchain based borrowing and lending protocol "Anchor"

[93] In re: Celsius Network LLC, et al, U.S. Bankruptcy Ct. S.D. of N.Y, Jan. 31, 2023, Case No. 22-10964 (MG), (U.S.), https://www.jenner.com/a/web/aag4HeVaPPyEsfWyTp9N5G/4SaB6v/celsius-final-report-shoba-pillay.pdf.
[94] *Id*. at 14.
[95] *Id*. at 15, 17.
[96] Alun John & Hannah Lang, *Crypto exchange FTX files for bankruptcy as wunderkind CEO exits*, REUTERS (Nov. 12, 2022), https://www.reuters.com/business/ftx-start-us-bankruptcy-proceedings-ceo-exit-2022-11-11/.
[97] When UST traded above $1, users could buy LUNA, swap it for UST (burn LUNA and mint UST), and sell UST at a premium above $1, pocketing the difference as profit. When UST traded below $1, users could buy UST, burn UST to mint new LUNA, and then sell LUNA with a profit. The model was designed to even out supply and demand for UST. See, *What really happened to LUNA crypto?*, FORBES (Sept. 20, 2022), https://www.forbes.com/sites/qai/2022/09/20/what-really-happened-to-luna-crypto/.

promised high yields to its UST depositors.[98] On May 7, 2022, anonymous address wallets sold high amounts of UST on Anchor protocol that eventually led to panic with multiple traders selling their UST leading to a crash in UST prices (the "**Terra-Luna Crash**").[99] Notably, TerraForm Labs invested in Bitcoin to act as its reserve, and did not have any liquid money in its reserves to stabilize after the Terra-Luna Crash.[100] On April 5, 2024, Terraform Labs and its founder Do Kwon agreed to pay $4.5 billion penalty against a charge of securities fraud by the US Securities and Exchange Commission ("**SEC**").[101] In September 2024, Terraform Labs received court approval to wind down its operations.[102] On March 12, 2025, the Terraform Wind Down Trust initiated the procedure for claimants to file claims related to losses suffered as a result of purchases or investments made of cryptocurrency created by the Terraform Labs and other cryptocurrency held on the Terra ecosystem.[103]

After the Terra-Luna Crash, Three Arrows Capital (also known as "**3AC**"), a crypto currency hedge fund that had heavily invested in UST went into liquidation in British Virgin Islands. [104] Voyager, a crypto asset broker, had granted unsecured loans in the form of crypto assets to 3AC, that defaulted due to the Terra-Luna Crash. As customer confidence in the crypto market fell, withdrawal requests by Voyager customers increased (a phenomenon called a "bank run"). Voyager initially decreased the withdrawal limit; then

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[98] Jiageng Liu et al., *Anatomy of a Run: The Terra Luna Crash*, 2023 SSRN Elec. J., 1, https://doi.org/10.2139/ssrn.4426941.
[99] *What Really Happened to LUNA Crypto, supra* note 98.
[100] Ryan Browne, *A $3.5 billion bet on bitcoin becoming a 'reserve currency' for crypto is being put to the test*, CNBC (May 9, 2022), https://www.cnbc.com/2022/05/09/what-is-terrausd-ust-and-how-does-it-affect-bitcoin.html.
[101] Press Release, Terraform and Kwon to Pay $4.5 Billion Following Fraud Verdict, 2024-73, (June 13, 2024), https://www.sec.gov/newsroom/press-releases/2024-73.
[102] Dietrich Knauth, *Terraform Labs approved for bankruptcy wind-down after US SEC settlement*, REUTERS (Sept. 20, 2024), https://www.reuters.com/technology/terraform-labs-approved-bankruptcy-wind-down-after-us-sec-settlement-2024-09-19/.
[103] *Terraform Labs Pte. Ltd. Case # 24-10070*, EPIQ 11, https://dm.epiq11.com/case/terraform/info (last visited Aug. 4, 2025).
[104] MacKenzie Sigalos, *From $10 billion to zero: How a crypto hedge fund collapsed and dragged many investors down with it*, CNBC (July 11, 2022), https://www.cnbc.com/2022/07/11/how-the-fall-of-three-arrows-or-3ac-dragged-down-crypto-investors.html#:~:text=From%20$10%20billion%20to%20zero,many%20investors%20down%20with%20it&text=The%20bankruptcy%20filing%20from%20Three,margin%20calls%20from%20its%20lenders.

froze withdrawals and ultimately filed for bankruptcy.[105] The fall of 3AC and Voyager demonstrated the interconnectedness of the crypto market, and the systemic risk arising out of failure of a counterparty, also known as the large exposures risk.[106]

The absence of a regulatory framework enables crypto asset service providers to pursue risky investment strategies and engage with high-risk counterparties, in an effort to attract customers through the promise of high returns, without any reserves to protect against failure. These practices render crypto asset service providers vulnerable to collapse, resulting in significant financial losses for their users.

4.2.3. Need for better regulations to protect investors

T. Rabi Sankar, Deputy Governor of RBI, while recommending a ban on crypto trading despite increasing crypto investment by Indians, in a speech, has stated that crypto investors are aware of the risks and regulatory warnings before investing, and therefore, they do not warrant special protection.[107]

As discussed in the previous sub-sections, crypto asset service providers in USA engaged in risky practices that ultimately led to their downfall and the loss of funds to users. In their paper, "*Anatomy of a Run: The Terra Luna Crash*", Jiageng Liu *et al*., analyzed the Terra-Luna Crash to conclude that while blockchain technology allowed investors to monitor each other's actions, the wealthier and more sophisticated investors were the first to run and incur minor losses, and the less sophisticated investors realized the crisis much later and incurred larger losses.[108] The Terra-Luna Crash underscored the limitation of transparency of blockchain technology and highlighted that free access by itself does not provide the level playing field for investors, if there are significant differences in their ability to process and interpret information.[109] Internationally, regulatory bodies have

[105] Ryan Browne, *Crypto brokerage Voyager Digital files for Chapter 11 bankruptcy protection*, CNBC (July 6, 2022), https://www.cnbc.com/2022/07/06/crypto-firm-voyager-digital-files-for-chapter-11-bankruptcy-protection.html.
[106] Ilya Kokorin, *The Anatomy of Crypto Failures and Investor Protection under MiCAR*, 18 CAPITAL MARKETS LAW JOURNAL 500 (2023) https://doi.org/10.1093/cmlj/kmad019.
[107] T. Rabi Sankar, *supra* note 1, at ¶ 31.
[108] Jiageng Liu et al., *supra* note 99, at 2.
[109] Jiageng Liu et al., *supra* note 99, at 5.

stepped in to ensure that crypto asset service providers operate in a manner that reduces their risk of failing and ensures adequate investor protection.

In the European Union, *Regulation (EU) 2023/1114, Markets in Crypto-Assets Regulation* ("**MiCAR**") provides certain requirements applicable to crypto-asset service providers, including:

(a) maintaining prudential safeguards at least equal to the higher of the prescribed permanent minimum capital requirements or one quarter of the preceding year's fixed overheads[110];
(b) ensuring that clients' crypto-assets and funds are separated from other assets and not use them on their own account[111];
(c) establishing and maintaining effective and transparent procedures to handle clients' complaints promptly, fairly and consistently;[112]
(d) devising a plan for an orderly wind-down of their activities if necessary;[113] and
(e) service providers providing custody and administration of crypto-assets on behalf of clients are required to establish a custody policy that minimizes the risk of a loss of clients' crypto assets or the rights related to those crypto-assets or the means of access to the crypto-assets due to fraud, cyber threats or negligence.[114]

The European Securities and Markets Authority has also developed "*Guidelines specifying Union standards on the maintenance of systems and security access protocols for offerors and persons seeking admission to trading of crypto-assets other than asset referenced tokens and e-money tokens".*[115] These guidelines mandate maintenance of appropriate

[110] Markets in Crypto-Assets, Regulation (EU) 2023/1114, May 31, 2023, art. 67 (1) (European Union), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02023R1114-20240109. These minimum capital requirements range from €50,000 to €150,000 depending on the type of service they provide.
[111] *Id*. art. 70(3).
[112] *Id*. art. 71.
[113] *Id*. art. 74.
[114] *Id*. art. 75(3).
[115] MiCAR categorizes crypto assets in three (3) types based on whether the crypto-assets seek to stabilise their value by reference to other assets. The first type is "e-money tokens" that consists of crypto-assets that aim to stabilise their value by referencing only one official currency, and are likely to be used for making payments. The second type of crypto-assets concerns "asset-referenced tokens", which aim to stabilise their value by referencing another value or right, or combination thereof, including one or several official currencies. The third type consists of crypto-assets other than asset-referenced tokens and e-money

arrangements to identify, monitor, assess, and report on information and communication technology ("**ICT**") risk , and access controls to ensure that physical and logical access to ICT assets is authorised and restricted based on business and information security requirements.[116] Issuers of asset-referenced tokens (such as stablecoins) offering them to the public or seeking their admission to trading on a crypto-asset trading platform are required to maintain, at all times, a reserve of assets sufficient to cover liabilities to token holders. In addition, they must hold own funds at least equal to the highest of the following: €350,000, 2% of the average reserve assets, or one quarter of the preceding year's fixed overheads.[117]

In the United States, on July 18, 2025, President Donald Trump gave his assent to the Guiding and Establishing National Innovation for U.S. Stablecoins Act ("**GENIUS Act**"), making it USA's first major crypto legislation.[118] The GENIUS Act requires a permitted payment stablecoin issuer to maintain identifiable reserves backing the outstanding payment stablecoins of the permitted payment stablecoin issuer on at least 1 to 1 basis.[119]

India has significantly progressed beyond discussions of a ban on crypto assets, having formally recognized them as VDAs. Consequently, in our view, the next logical and necessary step is the formulation of a regulatory framework to ensure that VDA SPs operate in the best interests of users and adhere to internationally accepted best practices

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tokens, and covers a wide variety of crypto-assets, including utility tokens. *See*, Publications Office of the European Union, *Summary of Regulation (EU) 2023/1114 on Markets in Crypto-Assets* (Sept. 25, 2024), https://eur-lex.europa.eu/legal-content/EN/LSU/?uri=CELEX:32023R1114.

[116] Eur. Secs. & Mkts. Auth., GUIDELINES SPECIFYING UNION STANDARDS ON THE MAINTENANCE OF SYSTEMS AND SECURITY ACCESS PROTOCOLS FOR OFFERORS AND PERSONS SEEKING ADMISSION TO TRADING OF CRYPTO-ASSETS OTHER THAN ASSET REFERENCED TOKENS AND EMONEY TOKENS, ESMA75-223375936-6089, at 27 (2024), https://www.esma.europa.eu/sites/default/files/2024-12/ESMA75-223375936-6089_Final_Report_-_GLs_on_security_access_protocols_-_Art._14_1__d_.pdf.

[117] Markets in Crypto-Assets, Regulation (EU) 2023/1114, May 31, 2023, art. 35 (1) (European Union), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02023R1114-20240109

[118] Guiding and Establishing National Innovation U.S. Stablecoins Act or GENIUS Act, No. Public Law No: 119-27, July 18, 2025 (U.S.), https://www.congress.gov/bill/119th-congress/senate-bill/1582/text. The GENIUS Act defines a payment stablecoin as a digital asset that is designed to be used as a means of payment or settlement the issuer of which is obligated to convert, redeem, or repurchase for a fixed amount of monetary value (not including a digital asset denominated in a fixed amount of monetary value); and represents that such issuer will maintain, or create the reasonable expectation that it will maintain, a stable value relative to the value of a fixed amount of monetary value; and does not include a digital asset that is a national currency, a deposit, or a security under US securities laws.

[119] *Id*. § 4(a)(1).

aimed at mitigating systemic and operational risks. In taking the regulatory effort forward, one of the critical issues with VDA is its classification and the consequent nature of regulatory activity, which is discussed in the next section.

5. Classification of crypto assets

In this section, we discuss international attempts to classify crypto assets as *securities* and as *property*, and the direction India can take towards classification in the current legal framework.

5.1. Classification of crypto assets as security

5.1.1. Crypto assets as security in USA, European Union and Singapore.

Under the Securities Act of 1933 of USA, the definition of "security" includes the term "investment contract". [120] In a 1946 case, *SEC v. W.J. Howey Co ("***Howey Case***")*, a US Supreme Court held that the test of whether there is an "investment contract" is whether "*the scheme involves an investment of money in a common enterprise with profits to come solely from the efforts of others*".[121] In this case a company sold citrus grove plots to buyers who then leased the land back to the company, which managed the groves and sold the fruit on their behalf. The buyers would then share in the profits from the sale of oranges. The US Supreme Court held that offering of units of the citrus-grove development, coupled with a contract for cultivating, marketing, and remitting the net proceeds to the investor, is offering of an "investment contract".[122]

In the USA, publicly offered securities are required to be registered with the SEC, unless exempted.[123] The registration process mandates the disclosure of specified financial information, which is made publicly accessible to enable investors to make informed investment decisions.[124] Therefore, by not registering offering of crypto assets as "security"

[120] Securities Act of 1933, § 2(a)(1) (USA),
[121] *SEC v. W.J. Howey Co*., 328 U.S. 293, 301 (1946).
[122] *Id*.
[123] U.S. Secs. & Exch. Comm'n, *Statutes and Regulations*, SEC.GOV, https://www.sec.gov/rules-regulations/statutes-regulations (last visited Aug. 31, 2025).
[124] *Id*.

with the SEC, crypto platforms get away from making necessary financial disclosures to investors.[125] SEC uses the "investment contract" analysis provided in Howey Case to determine whether offering of crypto assets are "investment contracts" and therefore securities. [126] SEC has charged multiple crypto platforms for violating registration provisions, including crypto platforms that offer crypto products on which users can earn "interest" or reward;[127] and also crypto platforms fundraising through initial coin offerings.[128] An Initial Coin Offering (ICO) is a way for start-up entities to bypass the rigorous and regulated capital-raising process, and issue a percentage of their own crypto asset to early backers of the start-up project in exchange for legal tender or other crypto assets.[129] The crypto industry has criticized SEC's way of regulation through enforcement, instead of developing clear regulatory guidance. [130]

Lewis Cohen *et al.* argue that "*Treating these fungible crypto assets as securities implies a need for the development of an entirely new concept in federal securities law: "issuer-independent securities"*.[131] They emphasize that **crypto assets should <u>not</u> be considered "investment contracts" but certain transactions involving crypto assets can be**

[125] Gurbir S. Grewal, *What's Past is Prologue: Enforcing the Federal Securities Laws in the Age of Crypto*, SECURITIES AND EXCHANGE COMMISSION (July 2, 2024), https://www.sec.gov/newsroom/speeches-statements/grewal-remarks-age-crypto-070224#_ftn18.
[126] Strategic Hub for Innovation & Fin. Tech., Secs. & Exch. Comm'n, *Framework for "Investment Contract" Analysis of Digital Assets*, SEC.GOV, https://www.sec.gov/about/divisions-offices/division-corporation-finance/framework-investment-contract-analysis-digital-assets#_edn1 (last visited Aug. 31, 2025).
[127] *See,* Press Release, BlockFi Agrees to Pay $100 Million in Penalties and Pursue Registration of its Crypto Lending Product,
2022-26 (Feb. 14, 2022), https://www.sec.gov/news/press-release/2022-26; Press Release, Kraken to Discontinue Unregistered Offer and Sale of Crypto Asset Staking-As-A-Service Program and Pay $30 Million to Settle SEC Charges, 2023-25 (Feb. 9, 2023), https://www.sec.gov/news/press-release/2023-25; Press Release, SEC Charges Celsius Network Limited and Founder Alex Mashinsky with Fraud and Unregistered Offer and Sale of Securities, 2023-133, (July 13,
2023), https://www.sec.gov/newsroom/press-releases/2023-133.
[128] Press Release, SEC Charges Issuer and CEO With Misrepresenting Platform Technology in Fraudulent ICO, 2020-181 (Aug. 13, 2020), https://www.sec.gov/news/press-release/2020-181; Press Release, Unregistered ICO Issuer Agrees to Disable Tokens and Pay Penalty for Distribution to Harmed Investors, 2020-21 (Sept. 15, 2020), https://www.sec.gov/news/press-release/2020-21.
[129] *Definition of ICO - Initial Coin Offering*, FINTECH WEEKLY, https://www.fintechweekly.com/ico-definition (last visited Aug. 4, 2025).
[130] Sophia Kielar & Samidh Guha, *The future of crypto regulation: What is FIT 21?*, THOMSON REUTERS (Sept. 20, 2024), https://www.thomsonreuters.com/en-us/posts/government/crypto-regulation-fit-21/.
[131] Lewis Cohen et al., *The Ineluctable Modality of Securities Law: Why Fungible Crypto Assets Are not Securities*, 2022 SSRN ELEC. J., 12, https://doi.org/10.2139/ssrn.4282385.

considered "investment contracts". They emphasize that the sale arrangement (and not the citrus groves themselves) in the Howey Case was an investment contract. Therefore, in their view, *issuing* a crypto asset to fundraise in an initial coin offering should be considered as "investment contract"; however anonymous third-party trading of the crypto asset on exchanges should not be considered an investment contract. [132]

Lewis Cohen *et al.* also disagree with the "decentralization" test used by SEC.[133] That is, when the blockchain network related to the crypto asset is decentralized, and purchasers do not expect a particular entity or group of promoters to carry out essential managerial or entrepreneurial efforts to obtain the profit, then such an offering of crypto asset is not an "investment contract" and therefore not a security.[134] This decentralization factor has been used to clarify that Bitcoin is not a security because current purchasers of Bitcoin are not relying on the essential managerial and entrepreneurial efforts of others to produce a profit.[135] The decentralization factor, however, does not take into account how the same crypto-asset can be first issued by a centralized platform to fundraise like in initial coin offerings; and then later it can be traded on crypto-exchanges in a decentralized manner. In first instance, the crypto asset will be a security, but in the later instance it will not be a security as it is operated on a decentralized platform, and this makes the very classification of a particular crypto asset as a security, inconsistent.[136]

After election of President Donald Trump in 2025, who is a vocal crypto supporter and has personal stake in crypto ventures,[137] there is a visible shift in the regulatory approach of SEC towards crypto assets. SEC has closed, concluded, or filed to delay a number of

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[132] *Id.*, at 106-107.
[133] *Id.*, at 94.
[134] William Hinman, *Digital Asset Transactions: When Howey Met Gary (Plastic)*, SECURITIES AND EXCHANGE COMMISSION (June 14, 2018), https://www.sec.gov/newsroom/speeches-statements/speech-hinman-061418.
[135] Re: Cipher Techs. Bitcoin Fund, Securities and Exchange Comm'n, Oct. 2, 2019, File No. 811-23443, (U.S.), https://www.sec.gov/Archives/edgar/data/1776589/999999999719007180/filename1.pdf.
[136] Jai Massari, *Why Cryptoassets Are Not Securities*, HARVARD LAW SCHOOL FORUM ON CORPORATE GOVERNANCE (Dec. 6, 2022), https://corpgov.law.harvard.edu/2022/12/06/why-cryptoassets-are-not-securities/.
[137] Nithin Eapen, *Trump, crypto, and the presidency: A story of power, wealth, and survival*, FIN. EXPRESS, July 6, 2025, https://www.financialexpress.com/market/cryptocurrency/creed-capital-crypto/trump-crypto-and-the-presidency-a-story-of-power-wealth-and-survival/3904377/.

notable crypto regulatory enforcement cases and investigations. [138] The US government has also initiated attempts to lay down the regulatory framework for crypto assets. In 2024, the US House of Representatives passed the *Financial Innovation and Technology for the 21st Century Act* (FIT21), but this bill was not advanced by the US Senate.[139] There is a new bill proposed, that is still at draft stage called the *Digital Asset Market Clarity Act of 2025* ("**CLARITY Act**").[140] Under the proposed CLARITY Act, the SEC will regulate "*investment contracts*" under the Securities Act of 1933, however it explicitly provides that the term 'investment contract' does **not** include an investment contract asset (i.e., a digital commodity sold pursuant to an investment contract).[141] The Commodity Futures Trading Commission (CFTC) has been given a general control to regulate crypto assets as "digital commodities" under the Commodities Exchange Act, 1936 and related intermediaries while preserving certain aspects of SEC authority over primary market crypto transactions.[142]

In European Union, the crypto assets that qualify as "financial instruments", are governed under *Markets in Financial Instruments Directive 2014* ("**MIFID II**")[143]. As per the guidelines issued by the European Securities and Markets Authority, a substance over form approach should be adopted to determine if a crypto asset qualifies as a financial instrument

[138] Eric Berman, *SEC Regulation of Crypto and Digital Assets Under Trump 2.0*, REUTERS (June 1, 2025), https://www.reuters.com/practical-law-the-journal/legalindustry/sec-regulation-crypto-digital-assets-under-trump-20-2025-06-01/#:~:text=In%20declining%20to%20exclude%20crypto,crypto%20trading%20activities%20from%20being.

[139] Financial Innovation and Technology for the 21st Century Act, H.R. 4763, 118th Congress (Introduced July 20, 2023) (USA).

[140] Digital Asset Market Clarity Act of 2025, H.R.3633, 119th Congress (Introduced May 29, 2025) (USA) https://www.congress.gov/bill/119th-congress/house-bill/3633/text.

[141] *Id*. § 201.

[142] Paul Tierno, *Crypto Legislation: An Overview of H.R. 3633, the CLARITY Act*, CONGRESS. GOV (July 7, 2025), https://www.congress.gov/crs-product/IN12583.

[143] Markets in Financial Instruments, Directive 2014/65/EU, May 15, 2014, (European Union), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02014L0065-20250117.

("**ESMA Guidelines**")[144]. As per the ESMA Guidelines, a crypto asset qualifies as transferable security, when it cumulatively fulfils the following criteria:[145]

(i) not being an instrument of payment.[146]

(ii) being "classes of securities". A class of securities means if all crypto assets of the same issuance represent or confer the same rights (dividend rights, voting rights, right to liquidation proceedings) and obligations and are therefore interchangeable, as is common with traditional securities classification.[147] Additionally, if a company issues crypto-assets that provide to their holders regular interest payments and/or promise the repayment of the principal at a future date, such crypto-assets should be considered as a class of securities similar to bonds due to their debt representing characteristics.[148]

(iii) being negotiable on the capital market.[149]

ESMA Guidelines also provide that crypto assets may also be considered financial instruments if they fall into the category of money market instruments,[150] collective investment undertakings,[151] and derivatives.[152]

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[144] Eur. Secs. & Mkts. Auth., GUIDELINES ON THE CONDITIONS AND CRITERIA FOR THE QUALIFICATION OF CRYPTO-ASSETS AS FINANCIAL INSTRUMENTS, ESMA75453128700-1323, at ¶ 14 (2025), https://www.esma.europa.eu/sites/default/files/2025-03/ESMA75453128700-1323_Guidelines_on_the_conditions_and_criteria_for_the_qualification_of_CAs_as_FIs.pdf.
[145] *Id*. ¶ 15.
[146] *Id*. ¶ 16.
[147] *Id*. ¶ 18.
[148] *Id*. ¶ 26.
[149] *Id*. ¶ 29.
[150] *Id*. ¶ 33. A crypto asset that is analogous to a short-term debt obligation used for financing and investment.
[151] *Id*. ¶ 37. A crypto-asset that would enable holders to (i) invest in digital investment funds, where holders are entitled to a proportional share of the returns generated by the managed portfolio, without any participation in the governance regarding investment strategies (e.g. no voting rights) and (ii) redeem their tokens for a share of the portfolio's value, is considered as a unit in a collective investment undertaking.
[152] *Id*. ¶ 44. If (i) the rights of the crypto asset holders are contingent upon a contract based on a future commitment (a forward, an option, a swap or a future), creating a time-lag between the conclusion and performance of the obligations under such contract; (ii) the crypto-asset's value is derived from that of an underlying asset and (iii) follows the settlement modalities as referred to in Annex I Section C, points (4)-(10) of MiFID II.

In Singapore, while there is no comprehensive legislation yet, the Monetary Authority of Singapore, has clarified that it will examine the structure and characteristics of, including the rights attached to, a digital token in determining if the digital token is a type of "capital markets products", and if so determined, the securities law of Singapore will apply.[153]

5.1.2. VDA as security from an Indian standpoint

In India, VDAs are presently not classified as securities and therefore do not fall within the regulatory framework governing securities disclosures.

Under Indian securities law, the definition of "securities" is inclusive. They include shares, scrips, stocks, bonds, debentures, debenture stock or other marketable securities of a like nature **in or of any incorporated company or other body corporate**, derivatives, units issued by any collective investment scheme or under any mutual fund scheme, security receipt, government securities, right and interest in any securities, and **such other instruments as may be declared by the Central Government to be securities**.[154] While the definition allows the Indian government to declare a new financial instrument as security, it also contains the element of a security being "*issued*" by an entity like incorporated company, mutual fund, collective-investment scheme, or a body corporate. Therefore, similar to federal securities law of the Unites States, India's securities law also does not contemplate "issuer independent securities". In our view, VDA that is mined anonymously, not necessarily issued by an entity, and is just traded and exchanged on VDA exchanges will not fall within the definition of "security". For example, Bitcoin can be sold and bought on WazirX but is not issued by WazirX or any specific entity.[155]

In the next sub-section, we discuss classification of crypto assets as property.

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[153] MONETARY AUTHORITY OF SINGAPORE, A GUIDE TO DIGITAL TOKEN OFFERINGS (2020), https://www.mas.gov.sg/-/media/mas/sectors/guidance/guide-to-digital-token-offerings-26-may-2020.pdf.

[154] Securities Contracts (Regulation) Act, 1956, § 2(h).

[155] Bitcoin is controlled by all Bitcoin users around the world, and no one organization or individual owns the Bitcoin network. *See, Find answers to recurring questions and myths about Bitcoin.*, BITCOIN. ORG, https://bitcoin.org/en/faq#who-created-bitcoin. (last visited Aug. 4, 2025).

5.2. Classification of crypto assets as property

Granting crypto asset, the status of property implies that such rights can be enforced against third parties also (such as other creditors), compared to contractual rights that can be enforced only against parties to the contract (such as against crypto platform only).[156] This section analyses the technical architecture of crypto assets, and evaluates their legal characterization as property.

5.2.1. Technical working of crypto assets

Crypto assets are typically defined by data parameters or keys: public and private. The private key has information regarding ownership, value and transaction history, and is kept in confidence with the owner and gives practical control over the asset. Some assets can have multiple private keys indicating shared control of assets. The transactions are broadcasted to a network of participants, and after verification added to a digital ledger. Digital ledgers may be distributed and decentralized, and often use blockchain technology, i.e., blocks of transactions linked together. [157] The transactions are governed through a consensus model, such as Proof of Work and/or Proof of Stake. In the Proof of Work, a user publishes the next block by being the first to solve a computationally intensive puzzle, the solution to which is the proof. The Proof of Stake is based on the idea that the more a user has invested in the system the less likely they are to subvert it, with reputation being one of the incentives not to act maliciously. Another consensus model is related to real identity, namely proof of authority or proof of identity.[158]

In the original white paper, Satoshi Nakamoto summarized the working of Bitcoin as:

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[156] Anna Myrvang & Saskia Wolters, *Crypto Assets as Personal Property: Neither a Thing in Action, nor a Thing in Possession : Clyde & Co*, https://www.clydeco.com:443/insights/2024/06/crypto-assets-as-personal-property-neither-a-thing (last visited Jun. 15, 2025).

[157] LEGAL STATEMENT ON CRYPTOASSETS AND SMART CONTRACTS at ¶ 28-29 (2019), https://technation.io/wp-content/uploads/2019/11/6.6056_JO_Cryptocurrencies_Statement_FINAL_WEB_111119-1.pdf.

[158] Cécile Remeur, *Understanding crypto assets*, EUROPEAN PARLIAMENTARY RESEARCH SERVICE (Dec. 2023), https://www.europarl.europa.eu/RegData/etudes/BRIE/2023/757580/EPRS_BRI(2023)757580_EN.pdf.

"*We define an electronic coin as a chain of digital signatures. Each owner transfers the coin to the next by digitally signing a hash of the previous transaction and the public key of the next owner and adding these to the end of the coin. A payee can verify the signatures to verify the chain of ownership.*"[159]

5.2.2. International jurisprudence in favour of crypto as property

National Provincial Bank v Ainsworth,[160] a landmark common law judgment provides the four indicia of property: the right or interest (i) must be definable, (ii) identifiable by third parties, (iii) capable in its nature of assumption by third parties, and (iv) have some degree of permanence or stability (the "**Ainsworth Principles**").

The United Kingdom Jurisdiction Taskforce ("**UKJT**"), in its *Legal Statement on Crypto Assets and Smart Contracts* assessed Ainsworth Principles to determine whether crypto assets can be considered property.[161] UKJT noted that the public parameter (key) of the system, within the rules of the system is ***definable*** and ***identifiable*** by a person with access to the system. The private key holder(s) can deal with the crypto asset to the exclusion of others and therefore have exclusive control over the crypto asset. The system is designed for transferring crypto assets, and therefore crypto assets are assignable and ***capable in its nature of assumption by third parties***. Crypto assets are ***permanent*** as other financial assets until they exist, that is until they are cancelled, redeemed, repaid or exercised. [162] UKJT acknowledged that consensus models raise some concerns regarding stability as it takes time for the ledger to verify transactions; and there are chances of fork (different groups of participants following different rules). UKJT concluded that "***crypto-assets are sufficiently permanent or stable to be treated as property, at least for a commercial crypto-asset system with a significant number of participants, an established history of transactions, and a generally stable set of rules***."[163]

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[159] Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System*, BITCOIN - OPEN SOURCE P2P MONEY (Oct. 31, 2008), https://bitcoin.org/bitcoin.pdf.
[160] *National Provincial Bank v Ainsworth* [1965] AC 1175.
[161] LEGAL STATEMENT ON CRYPTOASSETS AND SMART CONTRACTS, *supra* note 158 at ¶ 39.
[162] *Id.* ¶ 49 – 52.
[163] *Id.* ¶ 56.

UKJT also relied on a judgment of the Singapore International Commercial Court, where it was held that crypto assets meet all requirements of property as provided in Ainsworth Principles.[164] The Singapore court acknowledged that "*there may be some academic debate as to the precise nature of the property right*", but did not consider the question further as neither party debated the conclusion that crypto assets may be considered property.[165] UKJT's conclusion that crypto assets are property was relied by an English court in *AA v Persons Unknown*,[166] where a proprietary injunction was granted for Bitcoin. UKJT in its *Legal Statement on Digital Assets and English Insolvency Law* has also established that crypto assets are capable of amounting to property for the purposes of insolvency law.[167]

Robert Stevens, in his paper "*Crypto is Not Property*" critically examines the foundational basis of Ainsworth Principles as applied by courts.[168] He claims that the judge in Ainsworth case was stating necessary conditions for property, not sufficient ones. The decision did not concern the existence of rights that are not in relation to physical things.[169] Stevens remarks that Ainsworth case provides no support for the proposition that something is capable of being "property" despite there being no right in relation to it. As per Stevens, in case of crypto assets, there are no statutory rights of enforcement, such as those of someone who holds a patent, copyright or trademark. Stevens is critical of crypto assets, states that there is no legal commercial use of crypto assets and questions the value of creating a statutory right for crypto assets.[170] Hin Liu critiques Stevens' argument that the case for recognizing property rights in crypto assets is (at best) extremely weak.[171] Hin Liu claims that without providing crypto-assets, non-interference rights that are enforceable against

[164] *B2C2 Ltd v Quoine Pte Ltd*, [2019] SGHC(I) 03 (Singapore)
[165] *Id.* ¶ 142.
[166] *AA v Persons Unknown & Ors, Re Bitcoin* [2019] EWHC 3556 (Comm.).
[167] LEGAL STATEMENT ON DIGITAL ASSETS AND ENGLISH INSOLVENCY LAW (2024), https://27221500.fs1.hubspotusercontent-eu1.net/hubfs/27221500/LawtechUK%20archive%20reports/UKJT%20Legal%20Statement%20on%20Digital%20Assets%20and%20English%20Insolvency%20Law.pdf?__hstc=251652889.c5c2219aeaf2160b99642ad62abb6a2c.1713352583016.1713352583016.1713352583016.1&__hssc=251652889.3.1713352583016&__hsfp=2141725003.
[168] Robert Stevens, *Crypto is Not Property*, 2023 SSRN ELEC. J, §7, https://doi.org/10.2139/ssrn.4416200.
[169] The issue in this case was whether a divorced wife had the right to occupy ex-husband's property as the property was mortgaged to a bank.
[170] Stevens, *supra* note 169, at §9.
[171] Hin Liu, *Crypto as property: a response to Professor Stevens* (2025) 141 LAW QUARTERLY REVIEW 392.

the world, the risk of non-consensual interferences like cyber hacks, and violence to obtain the crypto assets will increase, as there will be no remedy for such non-consensual interference in civil or criminal law.[172] Liu's argument gains relevance in light of the current lack of judicial remedies available to users of WazirX.

5.2.3. VDA as property from an Indian standpoint

In the IMAI Case, the petitioners contended that RBI has no power on virtual currency to which the Supreme Court responded "*If an intangible property can act under certain circumstances as money (even without faking a currency) then RBI can definitely take note of it and deal with it."*[173] This statement is indicative of the fact that as per the Supreme Court of India, virtual currency can be considered as intangible property.

In a tax dispute pertaining to assessment year 2021-2022 (before the taxation framework for VDA was introduced), the income-tax appellate tribunal ("**Tax Tribunal**") had to decide whether income from sale of bitcoin is "capital gain" or "income from other sources".[174] Section 2(14) of the IT Act defines capital asset to include "*property of any kind held by an assessee, whether or not connected with his business or profession*". Explanation 1 to this section reads that *"property" includes and shall be deemed to have always included any right in or in relation to an Indian company, including right of management or control or any other right whatsoever*.

The Tax Tribunal, on basis of this definition, held:

> "***all rights are property*** *and thereby the right of the assessee in Bitcon though a virtual asset is a capital asset. Therefore, the AO (Assessing Officer) is incorrect in holding that to qualify as capital asset one should actually own something as property in as much as* ***even if a person has a right or claim on a property it is also a capital asset*** *u/s 2(14) of the Act*." [175]

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[172] *Id.* at § 5.
[173] *Internet and Mobile Association of India v Reserve Bank of India* (2020) SCC Online SC 275, ¶ 6.87.
[174] *Raunaq Prakash Jain v. Income-tax Officer, Ward-1, Bhilwara*, [2024] 169 taxmann.com 298 (Jodhpur - Trib.).
[175] *Id*. at ¶ 8.

The Tax Tribunal was not categorizing crypto assets as property for general legal purposes but for very specific purpose of identifying the head of income for taxation.[176] In our view, the Tax Tribunal's interpretation of the statutory definition of property as "*all rights are property*" is unreasoned and conceptually flawed. All rights, for example contractual rights, are not property. The mere existence of a right to possess, sell, or transact in Bitcoin does not suffice to classify it as a capital asset unless the underlying asset, Bitcoin, is itself legally recognized as property. Nonetheless, the Indian tax regime seems favourable in acceptance of VDA as property. The current definition of "property" for the limited purposes of Section 56(2)(x) of the IT Act includes "VDA".[177]

In another matter involving transfer of an import license by its holder to another person,[178] the Supreme Court had to decide whether this transfer can be constituted as sale of a "good" for the purpose of levying sales tax on the transaction. The court noted that statutory definitions of the expression "goods" include all kinds of movable property, and therefore it becomes necessary to notice the meaning of the expression "movable property".[179] Section 3(36) of the General Clauses Act, 1897 defines "movable property" in the broadest sense possible: "*property of every description, except immovable property"*[180]. The Supreme Court reviewed various definitions of the word "property", including Salmond's Jurisprudence (12th Edition, 1966) and stated:

> "*Suffice to say that property is defined to include material things and immaterial things (Jura in re propria) and leases, servitudes and securities etc. (jura in re aliena). The material things are said to comprise land and chattels while immaterial things include*

[176] The other grounds given by the Tax Tribunal include: (i) as the crypto currency is specifically incorporated in IT Act as an asset, even before April 1, 2022 (enactment of the Finance Act, 2022) it should be taxed under the head "capital gain"; (ii) assessee is a salaried individual and his intention in making investment in crypto currency was to hold it and to earn long term capital gain; and (iii) other tax cases have also taxed transfer of cryptocurrency as capital gain. The Tax Tribunal also relied on the established jurisprudence that if two interpretations of a statutory provision are possible, the court should interpret the provision in favour of a taxpayer and against the revenue.

[177] Section 56(2)(x) of the Income-Tax Act, 1961 taxes the receipt of money or property (now including VDA) without consideration, or for inadequate consideration, if the value of such property exceeds ₹50,000.

[178] *Vikas Sales Corporation and Ors. vs. Commissioner of Commercial Taxes and Ors.* (1996) 4 SCC 433.

[179] *Id.* at ¶ 18.

[180] General Clauses Act, 1897, § 3(26) defines "*immovable property*" to "*include land, benefits to arise out of land and things attached to the earth or permanently fastened to anything attached to the earth*".

patents, copyrights and trade-marks, which along with leases, servitudes and securities are described as incorporeal property. The expression "movable property" is stated to include (Page 421) corporeal as well as incorporeal property. Debts, contracts and other chose-in-action are said to be chattels, no less than furniture or stock-in-trade. Similarly, patents, copyrights and other rights in rem which are not rights over land are also included within the meaning of movable property."[181]

In this case, the Supreme Court held that import license is a good, and sales tax could be levied on sale of the import license. This judgment aids in extension of property to include intangible property.

5.2.4. VDA as property under the Insolvency and Bankruptcy Code, 2016

As per the Insolvency and Bankruptcy Code, 2016 ("**IBC**") "property" includes *money, goods, actionable claims, land and* ***every description of property situated in India or outside India and every description of interest including present or future or vested or contingent interest arising out of, or incidental to, property***.[182] Internationally, as discussed in sub section 5.2.2, there is a growing recognition of crypto-assets as a form of "property"; meanwhile Indian jurisprudence has interpreted "property" to include intangible assets. In this context, it is submitted that the definitional scope of "property" under the IBC looks sufficiently expansive to encompass VDAs.

Under the IBC, "debt" means a liability or obligation in respect of a claim which is due from any person and includes a financial debt and operational debt.[183] The term "financial debt" has been defined as a debt along with interest, if any, which is disbursed against the consideration for the **time value of money,** and this definition lists certain events that can be considered financial debt[184]**.** In *Utsav Securities Pvt. Ltd v Timeline Buildcon*, the National Company Law Tribunal held that the "*legislature has included such financial transactions in the definition of 'Financial debt' which are usually for a sum of money*

[181] *Vikas Sales Corporation and Ors. vs. Commissioner of Commercial Taxes and Ors.* (1996) 4 SCC 433 at ¶ 21.
[182] Insolvency and Bankruptcy Code, 2016, § 3(27).
[183] *Id.* at § 3(11).
[184] *See*, Insolvency and Bankruptcy Code, 2016, § 5(8).

received today to be paid over a period of time in a single or series of payments in future. It may also be a sum of money invested today to be repaid over a period of time in a single or series of instalments to be paid in future. In Black's Law Dictionary (9th edition) the expression 'Time Value' has been defined to mean "the price associated with the length of time that an investor must wait until an investment matures or the related income is earned". In both the cases, the inflows and outflows are distanced by time and there is compensation for time value of money." [185]

Purchasing VDAs does not mean that a certain amount will be repaid to the purchaser, and any profit gained is solely dependent on demand and supply forces of the crypto market. Therefore, in our view, holding VDAs and trading them on a VDA exchange cannot be categorized as a "financial debt".

Under the Sale of Goods Act, 1930, "goods" include **all kinds of movable property, <u>except</u> actionable claim and money.**[186] Therefore, one may argue that if VDA is considered as property, it could be considered as "goods" and therefore fall in the category of "operational debt", that is, claim in respect of the provision of goods or services.[187] However, crypto was initially developed as a private "currency"[188] and the Supreme Court of India in IMAI Case has also recognized virtual currency(or VDA) as "*intangible property that can act under certain circumstances as money"*.[189] The functional equivalence of VDA to "money" excludes it from the statutory definition of "goods." In light of the foregoing, under the current legal framework of the IBC, users of VDA SPs do not fall within the category of either financial creditors or operational creditors.

[185] *Utsav Securities Pvt. Ltd v Timeline Buildcon Pvt. Ltd*, (2020) (NCLT Principal Bench - C.P. NO. IB-1559(PB)/2019).
[186] Sale of Goods Act, 1930, § 2(7).
[187] Insolvency and Bankruptcy Code, 2016, § 5(21).
[188] T. Rabi Sankar, *supra* note 1 at ¶ 19.
[189] *Internet and Mobile Association of India v Reserve Bank of India* (2020) SCC Online SC 275, ¶ 6.87.

In the case of liquidation proceedings of crypto exchange Cryptopia,[190] the New Zealand High Court ruled that crypto assets were property based on Ainsworth Principles;[191] and Cryptopia held the crypto assets of users on trust.[192] To demonstrate that Cryptopia held crypto assets merely on trust, and did not own the assets, the New Zealand High Court amongst other evidence, relied on Cryptopia terms and conditions; internal financial accounts and GST returns wherein Cryptopia did not mention customer assets as owned assets. [193]

Therefore, if it can be proven that the crypto assets are the property of the users and not of the VDA SP, then the Indian insolvency framework also has appropriate provisions to ensure that users can assert their claims. Under Section 18(f) of IBC, the assets that an interim resolution professional has the right to take over in a corporate insolvency resolution process excludes "*assets owned by a third party in possession of the corporate debtor held under trust or under contractual arrangements*".[194] As per Section 36(4)(a) of IBC, assets owned by a third party which are in possession of the corporate debtor are not made part of liquidation estate and not used for recovery in the liquidation.[195]

That said, these provisions are unhelpful when there is no arrangement between users and the VDA SP denoting ownership[196], or the terms and conditions of a VDA SP are unclear on ownership. The following section discusses the ambiguous drafting by crypto exchanges, and suggestions for their interpretation.

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[190] *Ruscoe and Moore v Cryptopia Limited (In Liquidation)* [2020] NZHC 728, https://www.grantthornton.co.nz/globalassets/1.-member-firms/new-zealand/pdfs/cryptopia/civ-2019-409-000544---ruscoe-and-moore-v-cryptopia-limited-in-liquidation.pdf. Cryptopia was a New Zealand based crypto exchange, that was placed into liquidation in May 2019 after suffering a cyber hack and the loss of $30 million of cryptocurrency from its exchange.
[191] *Id.* at ¶ 120.
[192] *Id.* at ¶ 187.
[193] *Id.* at ¶ 165(d).
[194] Insolvency and Bankruptcy Code, 2016, Explanation to § 18.
[195] *Id*., § 36(4)(a).
[196] For example, WazirX claims that "*There is no special arrangement between general users of the Platform and the Platform in that the Platform holds any specific tokens deposited with the Platform on trust for the general users, and thus, no proprietary claim (i.e., a claim for specific identifiable property) arises*." See WAZIRX, *supra* note 79.

6. Issues arising in crypto insolvencies

6.1. Rights of crypto users

In the absence of a legislative framework for crypto assets, a contract between the crypto platform and its users becomes the only avenue to assess the rights of the users. UKJT has also stated that to determine if crypto assets are subject of a trust, the principal evidential factor will be an express contractual term between the two parties that includes either an express declaration of trust or similar language clarifying that the custodian holds the assets "for the benefit of the client". [197] We explore the case of Celsius to discuss the validity and interpretation of contractual terms of crypto platforms.

6.1.1. Can Terms of Use be considered a valid contract?

As per the US Bankruptcy Court, a valid, enforceable contract requires mutual assent (i.e., one party makes an offer and the other party accepts the offer), consideration (i.e., each party exchanges a service or good), and intent to be bound (i.e., both parties intended to enter into the contract).[198] Initially, Celsius only offered "Earn Program", wherein account holders deposited (lend) crypto-assets to Celsius and Celsius paid a fee called "rewards" in form of crypto-assets. For making an account on Celsius platform, one was required to click yes on "Terms of Use", and one could not advance to the next page and complete sign up unless they agreed to the Terms of Use. The US Bankruptcy Court held that clickwrap contracts are sufficient to prove *mutual assent*, and the account holders understood that they were assenting to the Terms of Use even if the account holders chose to read some or none of the provisions.[199] In exchange of loaning assets to Celsius, the Earn account holders received a financing fee called "rewards", that is, a "*consideration*". The US Bankruptcy Court held that there was no evidence to state that account holders did not *intend to be bound* by the Terms of Use. The fact that a lot of account holders had a different

[197] LEGAL STATEMENT ON DIGITAL ASSETS AND ENGLISH INSOLVENCY LAW, *supra* note 168 at 17.
[198] In Re: Celsius Network LLC, et al., *Memorandum Opinion And Order Regarding Ownership Of Earn Account Assets*, U.S. Bankruptcy Ct. S.D. of N.Y., Jan. 4, 2023, Case No. 22-10964 (MG), at 31 (U.S.), https://www.nysb.uscourts.gov/sites/default/files/opinions/312902_1822_opinion.pdf.
[199] *Id*. at ¶ 33

interpretation of the Terms of Use; that is the account holders owned the Earn Assets, was a contract interpretation issue, and did not prove a lack of intent. [200]

6.1.2. Who owns the crypto assets under the contract?

The 'Terms of Use' of 'Earn Program' included a clause that account holders "*grant Celsius . . . all right and title to such Digital Assets, including ownership rights*" … "*once such Eligible Digital Assets are received by Celsius . . . they shall be Celsius' property, in every sense and for all purposes*."[201] The US Bankruptcy Court ruled that the plain language of the Terms of Use unambiguously provides that the crypto assets in the Earn Program are the property of the estate of Celsius.[202] This ruling did not affect the users' rights with respect to breach of contract, fraud and other forms of liability.[203] This was seen as a relief in light of previous misrepresenting statements by Celsius founder Alex Mashinsky, where he claimed that customers owned crypto assets in the Earn accounts. [204]

After facing regulatory action from US state regulators that deemed the interest-earning crypto products of Earn program as unregistered securities,[205] Celsius offered a new "Custody" program that did not provide any rewards to the customer (i.e., no securities benefit).[206] Celsius in its new Terms of Use stated that "*title to any of your Eligible Digital Assets in a Custody Wallet shall at all times remain with you and not transfer to Celsius…. Celsius will not transfer, sell, loan or otherwise rehypothecate Eligible Digital Assets held in a Custody Wallet unless specifically instructed by you...*" [207] Therefore, the title of assets

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[200] *Id*. at ¶ 34
[201] *Id*. at ¶ 10, 41.
[202] *Id.* at ¶ 39
[203] *Id.* at ¶ 45.
[204] In re: Celsius Network LLC, et al, U.S. Bankruptcy Ct. S.D. of N.Y, Jan. 31, 2023, Case No. 22-10964 (MG), (U.S.), https://www.jenner.com/a/web/aag4HeVaPPyEsfWyTp9N5G/4SaB6v/celsius-final-report-shoba-pillay.pdf, at 10.
[205] Celsius Ord., N.J. Bureau of Securities, Sept. 17, 2021, New Jersey Bureau of Securities Orders Cryptocurrency Firm Celsius to Halt the Offer and Sale of Unregistered Interest-Bearing Investments, (U.S.), https://www.njoag.gov/new-jersey-bureau-of-securities-orders-cryptocurrency-firm-celsius-to-halt-the-offer-and-sale-of-unregistered-interest-bearing-investments/.
[206] In re: Celsius Network LLC, et al, *Interim Report of Shoba Pillay, Examiner*, U.S. Bankruptcy Ct. S.D. of N.Y., Nov. 19, 2022, Case No. 22-10964 (MG), at 8 (U.S.), https://www.govinfo.gov/content/pkg/USCOURTS-nysb-1_22-bk-10964/pdf/USCOURTS-nysb-1_22-bk-10964-16.pdf.
[207] *Id.* at 51.

that were directly deposited in the Custody account was relatively uncontested compared to assets in Earn account.[208]

Celsius was barred by nine US states[209] from offering Custody services. In response, Celsius restricted customers in these nine states from making additional deposits into its Earn program. Instead, any transfers made after April 15, 2022, were redirected into newly established "Withhold Accounts." There were no Terms of Use governing these Withhold Accounts, and assets held therein were not eligible to earn rewards.[210] The legal status and ownership of the assets in Withhold Accounts remain unresolved and uncertain.

6.2. Ambiguous contracting and approach for a fairer interpretation

If the contracts are the only way for a user to assert their ownership over the crypto assets, it may be worthwhile discussing the quality of the contracts drafted by crypto exchanges. The Terms of Use of crypto exchanges are usually standard adhesion contracts or clickwrap contracts and there is no scope of negotiation. For example, as discussed in Section 3.2, the modifications related to counterparty and applicable law in the Celsius' Terms of Use were never negotiated with the customers, instead customers were bound to either accept the modification or withdraw their funds and close their Celsius accounts. [211]

Ilya Kokorin, Assistant Professor, Leiden University analyzed the terms and conditions of major crypto platforms like Binance, Kraken, Voyager, Celsius, and FTX, and concluded

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[208] In re: Celsius Network LLC, et al, *Order (i) Authorizing the Debtors to Reopen Withdrawals for Certain Customers with Respect to Certain Assets Held in the Custody Program and Withhold Accounts and (ii) Granting Related Relief*, U.S. Bankruptcy Ct. S.D. of N.Y., Dec. 20, 2022, Case No. 22-10964 (MG), (U.S.), https://cases.stretto.com/public/x191/11749/PLEADINGS/1174912202280000000099.pdf.

[209] In re: Celsius Network LLC, et al, *Interim Report of Shoba Pillay, Examiner*, U.S. Bankruptcy Ct. S.D. of N.Y., Nov. 19, 2022, Case No. 22-10964 (MG), at 8 (U.S.), https://www.govinfo.gov/content/pkg/USCOURTS-nysb-1_22-bk-10964/pdf/USCOURTS-nysb-1_22-bk-10964-16.pdf, at footnote 8. The nine states were: Connecticut, Louisiana, Nebraska, Nevada, New York, North Carolina, Ohio, Vermont, Washington.

[210] *Id.* at 9, 75.

[211] In re Celsius Network LLC et al, *Memorandum Opinion Regarding Which Debtor Entities Have Liability for Customer Claims under the Terms of Use*, U.S. Bankruptcy Ct. S.D. of N.Y., Mar. 9, 2023, Case No. 22-10964 (MG), at 10, https://www.nysb.uscourts.gov/sites/default/files/opinions/312902_2205_opinion.pdf.

that these contracts tend to be long, complex, ambiguous, subject to frequent and material unilateral modifications, and may contain internal inconsistencies. [212]

Kokorin argues that the nature of a contract (e.g., standard-form adhesion contract) and the identity of contracting parties (e.g., consumers, micro and small businesses) should be taken into account in the interpretative process, and a fairer approach would be to interpret in favour of consumer.[213] He also states that a custody presumption should be taken, that is, when crypto assets are deposited to a crypto exchange, the crypto exchange is holding them as a custodian merely on behalf of customers.[214] This would mean that ownerships of assets will lie with customers, unless explicit language provides that ownership lies with the crypto exchanges.

Another way to secure the rights of crypto assets beyond unfair contracts is to create a statutory tool that crypto exchanges can use in its contracts. Section 8-503(a) of the US Uniform Commercial Code [215] provides that a customer with an asset on an exchange retains ownership of that asset (not the exchange) if (1) the exchange is a securities intermediary; (2) the securities intermediary has agreed with the customer to treat the asset as a financial asset; and (3) the securities intermediary has credited the financial asset in a securities account.[216] It is not a prerequisite that the crypto asset should be considered a security or commodity under other law for the asset to be a financial asset under Article 8 of the US Uniform Commercial Code.[217] Currently, Article 8 is referenced by CoinBase in

[212] Ilya Kokorin, *Crypto Failures: Contract, Property and Regulatory Law*, OXFORD LAW BLOGS (Mar. 14, 2024), https://blogs.law.ox.ac.uk/oblb/blog-post/2024/03/crypto-failures-contract-property-and-regulatory-law.
[213] Kokorin, *supra* note 64, at 14.
[214] Kokorin, *supra* note 219.
[215] The Uniform Commercial Code (UCC) is a comprehensive set of laws governing all commercial transactions in the United States. It is not a federal law, but a uniformly adopted state law. UCC § 8- 503 provides for property interest of entitlement holder in financial asset held by securities intermediary.
[216] Shantanu Surpure, *Bankruptcy in the Crypto-Space and Ownership of Crypto-Assets*, INVENTUS LAW (Jan. 18, 2023), https://www.inventuslaw.com/bankruptcy-in-the-crypto-space-and-ownership-of-crypto-assets/.
[217] Carl S. Bjerre et al., *Missing an Opportunity: Cryptocurrency Exchanges and Their Customers Should Consider Using UCC Article 8*, AMERICAN BAR ASSOCIATION (Apr. 3, 2023), https://www.americanbar.org/groups/business_law/resources/business-law-today/2023-april/missing-opportunity-cryptocurrency-exchanges-their-customers/.

its user agreement.[218] This assures CoinBase users that their assets will not be affected if CoinBase ends up in bankruptcy court.

In context of stablecoins specifically, the recently passed GENIUS Act of USA, provides that in an insolvency proceeding of a payment stablecoin issuer, the claim of a payment stablecoin holder shall have priority over all other claims against the payment stablecoin issuer.[219] The required reserves maintained in compliance with the GENIUS Act are excluded from the property of the estate of payment stablecoin issuer.[220] Nonetheless, in the bankruptcy proceedings, if a payment stablecoin holder is not able to redeem their claims from the reserves maintained by the payment stablecoin issuer, any such remaining claim will be a claim against the estate and shall have first priority over any other claims including administrative claims of the bankruptcy trustee.[221] This departure from the traditional priority framework under U.S. bankruptcy law has raised concerns on whether effective bankruptcy process is possible when administrative expenses come second to claims of stablecoin holders.[222]

6.3. Proposed reforms for crypto asset insolvency

MiCAR in the European Union (as elaborated in section 4.2.3 and below) and the GENIUS Act of USA (as elaborated in section 6.2) include specific provisions that safeguard user rights during insolvency or bankruptcy of a crypto asset service provider. This section highlights select issues observed in prior insolvency cases that could be addressed through targeted legislative intervention in India.

6.3.1. Segregation of crypto assets of customers

[218] *Coinbase User Agreements*, COINBASE (June 13, 2025), https://www.coinbase.com/legal/user_agreement/united_states. *See*, "Individual User Agreement", Point 2.72 (Application of the Uniform Commercial Code).
[219] GENIUS Act, § 11(a).
[220] GENIUS Act, § 11(e)(3).
[221] GENIUS Act, § 11(e).
[222] Edwin E. Smith et al., *The Proposed GENIUS Act Raises Concerns Over Insolvency Provisions*, MORGAN LEWIS (July 2, 2025), https://www.morganlewis.com/pubs/2025/07/the-proposed-genius-act-raises-concerns-over-insolvency-provisions.

Crypto platforms offering custodial services can either store each user's assets on individual wallet addresses on the blockchain or pool all customer assets into one collective or omnibus wallet address.[223] Omnibus wallets can expose a client to risks arising from the crypto platform's *other* clients, whose assets are pooled inside the same wallet. Therefore, robust accounting practices should be mandated for crypto custodians to ensure that a cyber hack of the platform or insolvency of a particular client, does not adversely impact the entitlement of unaffected users. [224] The International Organization of Securities Commissions, an international policy forum for securities regulators, has also recommended mandating crypto platforms to disclose the extent to which client assets are aggregated or pooled within omnibus client accounts, the rights of individual clients with respect to the aggregated or pooled assets, and the risks of loss arising from any pooling or aggregating activities. [225]

Crypto platforms like FTX[226] and Binance[227] have also been accused of keeping client assets and assets of the crypto platform in the same wallet i.e., commingled corporate funds with customer funds, and then abused the commingled funds for their own gains. MiCAR in European Union provides that the crypto assets held in custody should be legally and operationally segregated from the crypto asset service provider's estate.[228] This ensures that the creditors of the crypto asset service provider have no recourse to crypto assets held in custody by the crypto-asset service provider in the event of insolvency. [229]

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[223] Dirk Zetzsche & Areti Nikolakopoulou, *Crypto Custody: An Empirical Assessment*, 11 J. FIN. REGUL. 73, § IV, Pt. 3 (2025), https://doi.org/10.1093/jfr/fjaf004.
[224] *Id*.
[225] THE BD. OF THE INT'L ORG. OF SECS. COMM'NS, POLICY RECOMMENDATIONS FOR CRYPTO AND DIGITAL ASSET MARKETS FINAL REPORT, FR11/2023,
at 35 (2023), https://www.iosco.org/library/pubdocs/pdf/IOSCOPD747.pdf.
[226] In re: FTX Trading Ltd., et al, *Notice of filing Second Interim Report of John J. Ray III to the Independent Directors: The Commingling and Misuse of Customer Deposits at FTX.com*, U.S. Bankruptcy Ct. For The District Of Del., June 26, 2023, Case No. 22-11068 (JTD),
(U.S.), https://restructuring.ra.kroll.com/FTX/ExternalCall-DownloadPDF?id1=MTUzNzc0OA==&id2=0&cid=0.
[227] Press Release, SEC Files 13 Charges Against Binance Entities and Founder Changpeng Zhao, 2023-101, (June 5, 2023), https://www.sec.gov/newsroom/press-releases/2023-101.
[228] Markets in Crypto-Assets, Regulation (EU) 2023/1114, May 31, 2023, art. 75(7) (European Union), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02023R1114-20240109.
[229] *Id*.

In context of securities, Securities and Exchange Board of India has issued circular that mandates stockbrokers to keep separate accounts for client's securities and to keep such books of accounts, as may be necessary, to distinguish such securities from his/their own securities.[230] The Securities Contracts (Regulation) Act, 1956 also provides that if a registered stock broker or sub - broker, fails to segregate securities or moneys of the client(s) or uses the securities or moneys of a client for self or for any other client, he shall be liable to a penalty between one lakh rupees to one crore rupees.[231] Guidance can be taken from existing provisions of the securities law of India to ensure that VDA SPs also store assets and funds of clients in separate accounts, and do not mix them with funds and assets of VDA SP. This will enable customers to effectively assert proprietary claims on their VDAs during insolvency or liquidation of the VDA SP.

6.3.2. Cross border nature of crypto insolvencies

During the bankruptcy proceedings of Celsius, the US Bankruptcy Court had to assess its jurisdiction over users based out of USA, who withdrew their funds in the 90-day period immediately prior to the bankruptcy filing of Celsius.[232] The Litigation Administrator of Celsius estate claimed that the international users purposefully availed themselves of the US by agreeing to the Terms of Use that was governed under US law and designated New York courts as the exclusive forum for dispute resolution. [233] In July 2025, the US Bankruptcy Court held that it had personal jurisdiction over all the Celsius users (in or out of US), and that as the property (crypto assets) is transferred from a U.S. bank account to

[230] Securities and Exchange Board of India, Regulation of transactions between clients and brokers, SMD/SED/CIR/93/23321 (Issued on Nov. 18, 1993), ¶ 2, https://www.sebi.gov.in/legal/circulars/nov-1993/regulation-of-transactions-between-clients-and-brokers_19445.html.
[231] Securities Contracts (Regulation) Act, 1956, § 23 D.
[232] As per 11 U.S. Code § 547, a trustee is permitted to avoid any transfer of an interest of the debtor that was (i) to the benefit of a creditor, (ii) on account of an antecedent debt, (iii) made while the debtor was insolvent (iv) on or within 90 days before the Petition Date, and (v) that enables the creditor to receive more than it would under a hypothetical liquidation if the transfer had not been made, and the creditor received payment of such debt.
[233] In re Celsius Network LLC et al, *Memorandum Opinion and Order on Phase One Issues*, U.S. Bankruptcy Ct. S.D. of N.Y., July 29, 2025, Case No. 22-10964 (MG), at 11, https://frblaw.com/wp-content/uploads/decision-7.29.25.pdf.

a creditor, such transfer is a domestic activity and is subject to the preference avoidance provisions of the US bankruptcy law.[234]

The US Bankruptcy Court did not acknowledge the consumer nature of the relationship between Celsius and its customers, and the fact that parties lack equal bargaining power. [235] Legal experts of European Union (EU) claim that EU consumers remain entitled to the consumer protections provided by EU laws, even if Celsius attempted to bypass them by including a specific choice of law clause into their Terms of Use. [236] A US judgement will not be automatically enforceable in a foreign jurisdiction, and a foreign jurisdiction will only allow its enforcement if it is compatible with the foreign jurisdiction's own legal system. Therefore, aside from the legitimacy concerns of the claw back suits against international consumers of Celsius, their enforceability also remains a challenge.

In insolvency proceedings of a crypto asset service provider, international cooperation is imperative to reach an effective resolution. Section 234 of the IBC provides for signing of bilateral arrangements between India and other countries, to recognize a cross-border insolvency process. Seeking cooperation by first executing an agreement with a country will be time consuming and probably ineffective (considering the dramatic price volatility of crypto assets). The most effective route would be available in the countries which have adopted the UNCITRAL Model Law on Cross Border Insolvency ("**Model Law**"). The Model Law accords recognition to orders issued by foreign courts and addresses cooperation among the courts of States where the debtor's assets are located and coordination of concurrent proceedings concerning that debtor.[237]

In 2014, when Mt. Gox,[238] a Japanese crypto exchange was undergoing bankruptcy in Japan, the Japanese bankruptcy trustee applied to a Canada court to recognize Japanese

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[234] *Id*. at 35-36.
[235] Mindaugas Kiškis, *Celsius Clawbacks Against EU Consumers: A Real-World Test Of EU Law On Online Consumer Contracts*, 14 INTERNET POL'Y REV. (2025), Https://Doi.Org/10.14763/2025.3.2013.
[236] *Id*.
[237] United Nations Comm'n On Int'l Trade L., UNCITRAL MODEL LAW ON CROSS-BORDER INSOLVENCY (1997), https://uncitral.un.org/en/texts/insolvency/modellaw/cross-border_insolvency.
[238] *Mt Gox Co., Ltd (Re)*, 2014 ONSC 5811(Canada), https://www.canlii.org/en/on/onsc/doc/2014/2014onsc5811/2014onsc5811.html?searchUrlHash=AAAAAQAFbXRnb3gAAAAAAQ&resultIndex=1. MtGox was a Japan based crypto exchange, that suffered

proceedings as foreign main proceedings and obtained a stay from the Canada court on the class action filed against Mt. Gox in Canada. Canada had adopted the Model Law in 2009 and amended its law accordingly[239] and Japan adopted the Model Law in 2000[240], and therefore the Canada court had the legal authority to recognize the Japanese proceedings and order stay on Canada proceedings. India has not yet adopted the Model Law. Effective cross-border provisions are critical to insolvency regime in India, and more so in case of crypto-insolvencies, with debtors, and creditors spread across jurisdictions.

6.3.3. Valuation timeline

The issue of valuing price volatile assets like crypto assets could be illustrated from the liquidation proceedings of Mt. Gox. The Japanese bankruptcy trustee calculated a certain price of Bitcoin, and the payment was to be made in fiat currency after converting at the decided price.[241] The significant time taken for approving the claims of creditors meant that by the time creditors were to be actually repaid, the value of Bitcoin had increased by almost 18 times from its 2014 value.[242] In June 2018, Mt. Gox's liquidation was converted to rehabilitation, which meant that creditors could choose to get repaid directly in Bitcoin.[243]

Under IBC, the corporate insolvency resolution process ("**CIRP**") is required to be mandatorily completed within a period of three hundred and thirty (330) days from the insolvency commencement date.[244] The Supreme Court of India has struck down the word "*mandatorily*", and held that the adjudicating authority or appellate tribunal may provide exemptions in certain cases where the failure to adhere to timeline of 330 days could not

multiple heists leading to a massive theft of bitcoins held by it. MtGox ultimately entered bankruptcy proceedings in Japan in April 2014.

[239] *Id.* at ¶ 11.

[240] *Id.* at ¶ 27.

[241] Alexandra Harney & Steve Stecklow, *Twice burned - How Mt. Gox's bitcoin customers could lose again*, REUTERS (Nov. 16, 2017), https://www.reuters.com/investigates/special-report/bitcoin-gox/.

[242] Adrianne Jeffries, *Inside the bizarre upside-down bankruptcy of Mt. Gox*, THE VERGE (Mar. 22, 2018), https://www.theverge.com/2018/3/22/17151430/bankruptcy-mt-gox-liabilities-bitcoin.

[243] *The Crypto Quandary: Is Bankruptcy Ready?*, 115 NW. U. L. REV. 24, 48 (2020), https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1290&context=nulr_online#:~:text=But%20there%20will%20be%20a,of%20consumer%20and%20business%20bankruptcies.

[244] Insolvency and Bankruptcy Code, 2016, § 12.

be attributed to any fault of the relevant litigants.[245] As per the quarterly newsletter issued by the Insolvency and Bankruptcy Board of India ("**IBBI**") for quarter of April – June 2025, on average, a CIRP took 602 days (after excluding the time excluded by the adjudicating authority) for conclusion of process.[246]

Under the IBBI (Insolvency Resolution Process for Corporate Persons) Regulations, 2016, the "fair value" means the estimated realizable value of the assets of the corporate debtor, if they were to be exchanged on "the insolvency commencement date" between a willing buyer and seller.[247] Crypto assets are extremely price volatile, and therefore, over a prolonged CIRP process period, market conditions and asset values may evolve significantly since the insolvency commencement date. Anchoring valuation to insolvency commencement date is crucial for legal certainty for all stakeholders, however crypto insolvencies warrant flexibility to update valuation as needed, to ensure that it reflects current economic realities. [248]

7. Conclusion

Crypto assets were originally conceived to function outside traditional legal and regulatory frameworks and have largely remained so. The Indian regime has recognized crypto assets as virtual digital assets (VDA), rather reluctantly, and primarily for taxation and anti-money laundering purposes, rather than investor protection. Unlike regulated financial institutions, VDA SPs in India are not presently subject to legal obligations relating to reserve maintenance, mandatory disclosures, or standardized accounting practices. Without substantive regulatory intervention, VDA SPs have little motivation to prioritize user interests.

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[245] *Committee of Creditors of Essar Steel India Limited (through authorized signatory) v. Satish Kumar Gupta and Others*, (2020) 8 SCC 531.
[246]Insolvency & Bankr. Bd. of India, *Quarterly Newsletter for April - June, 2025*, 35, (2025), https://ibbi.gov.in/uploads/publication/3694d8874ee2ac5802de48d293ad5802.pdf.
[247] Insolvency and Bankruptcy Board of India (Insolvency Resolution Process for Corporate Persons) Regulations, 2016, Reg. 2(1)(hb).
[248] Theodora Kostoula, *Valuation of cryptoassets in EU insolvency: Challenges and prospects*, 2023 INT'L INSOLVENCY REV., https://doi.org/10.1002/iir.1490.

In India, VDA SPs register themselves as private companies, and if they become insolvent, the National Company Law Tribunal will be required to address them within the current legal framework, unlike other judicial forums that dismissed VDA disputes citing lack of comprehensive regulations. The IBC empowers the IBBI to frame regulations consistent with IBC. [249] Given the increasing adoption of VDAs in India, it is imperative that the IBBI considers developing specific regulations to address issues unique to insolvency of VDA SP such as classification of VDAs as property, recognition of rights of VDA SP users, development of accounting and valuation standards for VDAs, and also generally establish an effective cross-border insolvency framework. Under the IBBI (Mechanism for Issuing Regulations) Regulations, 2018, any new regulation must be preceded by an economic analysis justifying its necessity[250] and a process of public consultation[251], which will provide an appropriate basis for considering crypto-specific insolvency regulations.

[249] Insolvency and Bankruptcy Code, 2016, § 240.
[250] Insolvency and Bankruptcy Board of India (Mechanism for Issuing Regulations) Regulations, 2018, Reg 5.
[251] *Id*., Reg 4.