CRYPTO'S CASE AGAINST INTERNATIONAL LAW: HOW HARMONISATION FAILS A BORDERLESS MARKET

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ABSTRACT

CA & GSC assets present a material disruption to international financial governance and enforcement frameworks. The CA market worldwide has reached a cap of $3.08 trillion USD. This encourages regulators to impose frameworks for regulation which are *territorially* and *jurisdictionally* bound. This uneven regulation gives birth to an empirically verifiable *regulatory arbitrage*, as highlighted in the FSB's 2025 report. I argue that this arbitrage is an inevitable phenomenon, so long as legal coercion is jurisdictionally bound. In light of the international community's inability to harmonise the differences about the very rubrics of this asset, I argue that the only viable solution to prevent this arbitrage is legal exceptionalism.

This paper, *first*, performs an analysis of the asset itself and establishes that CAs are structurally shielded from jurisdictionally bound regulation. I argue that harmonisation of regulation fails in both the definitional and the enforcement level, and that partial regulation shifts, rather*, relocates* the risk, instead of eliminating it.

This paper advances the case for legal exceptionalism for CA as a legally honest approach to architecturally uncontrollable assets.

Keywords: Crypto-assets (CA), Global Stablecoin (GSC), Distributed Ledger Architecture, Decentralisation, Private Keys, Regulatory Arbitrage, Jurisdictional asymmetry, Financial Security Board (FSB), GENIUS Act, MiCA, Kimchi Premium, Deterritorialisation, Legal Coercion, Digital Assets, UNIDROIT, Legal Exceptionalism

[A] Introduction

The material systems of fiat currencies were disrupted with the publication of the Bitcoin Whitepaper in 2008.[1] In just 17 years, the global market capitalisation of Cryptocurrency Assets (CA) has reached $3.08 trillion USD.[2] CA operates, unlike traditional fiat currencies, as a unified global market, transcending geographical jurisdictions.[3] In 2022, the Financial Security Board (FSB) released a set of guidelines for the next 3 years to come, on the regulation of CA.[4] Recently, the FSB released its 2025 report, summarising its findings on the regulation of CA & other Global Stablecoins (GSCs).[5] The report acknowledges that regulation remains uneven and territorially restricted to national jurisdictions. Only 11 national jurisdictions had finalized a regulatory framework for CA, while only a meagre 5 for GSC activities.[6] This uneven and meagre implementation exposes a larger question about *regulatory arbitrage* in place. Traders exploit the asymmetry of jurisdicitionally confined regulation, as was observed empirically by the FSB report 2025.[7]

This regulatory arbitrage persists in the global markets, in light of uncoordinated efforts in the international community, as evidenced by lack of consensus for International Institute for Unification of Private Law's (UNIDIORT) definition of "*digital assets*".[8] This raises a deeper question about whether regulation is even possible for assets that by their very design are mutant and resistant to law's coercion.

I methodologically argue that a regulatory arbitrage in the global markets is inevitable for CA, therefore making a case for CA's *legal exceptionalism*.

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[1]Satoshi Nakamoto, '*Bitcoin: A Peer-to-Peer Electronic Cash System*' (Bitcoin.org 2008) <https://bitcoin.org/bitcoin.pdf> accessed 5 January 2026.
[2]Forbes Digital Assets, *Cryptocurrency Prices Today By Market Cap* (Forbes, 2024). <https://www.forbes.com/digital-assets/crypto-prices/> accessed 5 January 2026.
[3]Praveen Kumar Verma, '*Cryptocurrency: A Global Need to Make One World, One Currency*' (2024) 15(5) IOSR Journal of Economics and Finance 71.
[4]Financial Stability Board, *Regulation, Supervision and Oversight of Crypto-Asset Activities and Markets: Consultative Report* (11 October 2022) <https://www.fsb.org/2022/10/regulation-supervision-and-oversight-of-crypto-asset-activities-and-markets-consultative-report/> accessed 5 January 2026.
[5]Financial Stability Board, *Thematic Review finalisedonfinalised FSB Global Regulatory Framework for Crypto-asset Activities: Peer Review Report* (16 October 2025) <https://www.fsb.org/uploads/P161025-1.pdf> accessed 5 January 2026.
[6]Financial Stability Board (n 4) 3, table 1.
[7]Financial Stability Board (n 4) 2.
[8]Sohini Banerjee and KS Roshan Menon, *Defining Digital Assets for Private Law: Perspectives from the Global South* (IJLT Blog, 10 October 2023) <https://forum.nls.ac.in/ijlt-blog-post/defining-digital-assets-for-private-law-perspectives-from-the-global-south/> accessed 5 January 2026.

I first establish the technological underpinnings of this argument by evidencing how CA alchemy births assets that are structurally uncontrollable and are resistant to regulation. I then explain the current CA arbitrage in the global market through case studies. Finally, I make a claim for legal exceptionalism of CA assets by identifying the blind spot in law, and make the case for the futility of harmonisation.

[B] How the Crypto Alchemy Births Increasingly Uncontrollable Assets

Fiat currency allows efficient commerce through an intermediated exchange of tender, which has no intrinsic value.[9] The propositions for such exchange include arguments about its '*legality'*, and *'trust'*.[10] I argue that more than legality itself, *trust* serves as a prerequisite for exchange during commerce. This *trust* is seldom in the fiat currency itself, and more so in the sovereign authority or the intermediary regulating the printing and circulation of the same.

The reason why *trust* serves as a major impediment in efficient commerce is due to the virtue of *'reversibility'*.[11] Even withstanding a significant reliance placed on the intermediary itself, the virtue of '*reversibility of transactions*' cannot be eliminated.[12] The virtue of reversibility is further complicated by probabilistic finality.

The very ideation of a decentralised cryptographic asset helps solve the problem of trust in transactions. The trust placed on legal intermediaries and centralised institutions is replaced by distributed consensus and cryptographic verification.[13] The challenge of authentication, which was earlier countered by placing trust in intermediaries, is displaced and refocused on the code. Thus Byzantine Generals' Problem,[14] is solved, not by achieving institutional recognition and independent opaque verification of the transaction, but by exercising control over each asset by possession of private keys.[15] Thus, I argue that structurally cryptographic assets replace the very requirement of having a trusted intermediary in the transaction while placing this burden on the Distributed Ledger Architecture (DLA) of cryptographic currencies. The placement of this burden on the DLA warrants an investigation of its technological makeup.

[9]NorthRow, *What is a fiat currency? Definition and AML compliance meaning* (NorthRow AML glossary) <https://www.northrow.com/aml-glossary-fiatcurrency> accessed 5 January 2026.
[10]NorthRow (n 8).
[11]Nakamoto (n 1) 1 (abstract).
[12]Nakamoto (n 1) 1.
[13]Nakamoto (n 1) 5.
[14]Mark O'Dair, 'From Bitcoin to Blockchain' in Mark Deuze (ed), *Distributed Creativity* (Springer 2019) 16.
[15]Nakamoto (n 1) 6.

Every node acquires new transactions via broadcast, and each node gathers all of them into a block. Therefore, given that legitimate nodes collectively control more CPU power than any group of attacker nodes, the system is secure.[16] Thus, the ledger of an asset would, contingent on the size and volume of mined assets, be fragmented across the globe. For the asset to be effective and provide value, the ledger mandates that the nodes operate simultaneously and sufficiently for continuity of the system. Although the system would still be rendered effective, even if thousands of nodes (or blocks) are compromised, any mechanical or technological intervention against nodes present in a particular geographical location would still not be sufficient to ensure a system-wide compliance.[17]

The first transaction in the blockchain, which gives effect to this system, actually creates a new coin (a new asset).[18] Nodes in the system assume the longest chain to be the correct one and work on extending the chain. Thus, the entity which gave effect to the first transaction, mines, or validates, gains possession of the new coin. Since the miner in this situation is the validator of that particular transaction, entities have an incentive to keep running these transactions and adding nodes to the chain. The point of control, thus, which was traditionally an intermediary, shifts to an intermediary-less system wherein entities hold their assets themselves. This direct control that removes the necessity of legal intermediaries is established through *private keys,* which allows users to access their assets without traditional intermediaries, which are often the points of control.

Furthermore, blockchain transactions employ tokenisation to produce functions which are infinitely recombinable.[19] Tokens serve as both means of exchange and tools of speculation and help access credentials. The very identity (and by extension value) of such an asset is programmable rather than having an intrinsic value proposition that remains unchanged.[20] Thus, I argue that such assets become deliberately, by nature, mutation-oriented and are reactive to the programming encoded in them, as opposed to a conceptual fiat currency, which is ordained to have a specific value and classification.

Unlike consensus amongst sovereign states, backed by consistent metrics for valuation of currencies for international trade, cryptographic currencies are informed by cryptographic

[16]Nakamoto (n 1) 1.
[17]Nakamoto (n 1) 1.
[18]Nakamoto (n 1) 4.
[19]O'Dair (n 13) 23.
[20]O'Dair (n 13) 15.

consensus independent of state consent. Therefore, notwithstanding national protocols or international consensus, deterritorialised participation and the PoW (Proof of Work) model deliver assets that by nature cannot be subject to geographic and node-specific restrictions.

Any control over cryptographic assets can only be exercised by possession of private keys. Whereas the idea of private keys is informed by protocol rules for that cryptographic asset, legal control, on the other hand, is informed by enforceability and state-backed potential for coercive action. These versions of asset control can not align, rendering the argument for legal control of cryptographic assets conceptually flawed.[21] I argue herein that, while technological control is definitively absolute and binary, it is fundamentally opposed to the adjudication-oriented, contestational, and relational nature of rights and duties in a legal system. Since law lacks the capacity to legally enforce coercion and sanction on cryptographic currencies, regulation becomes varied and uninformed of the mutative capacity of the asset in question, giving birth to an inevitable regulatory arbitrage.

[C] Mechanics of the Crypto Arbitrage

The FSB classifies implementation into 5 broad categories, contingent on their CA recommendations.[22] Per the 2025 edition of the report, out of a total of 190 members, only 11 had a finalised regulatory framework for CA.[23] 14 jurisdictions either had no framework at all or a partial regulation in the consultative stage. I argue here that the categorisation of CA cannot be done in silos, without taking a holistic approach. The CA market of the world today stands at a staggering cap of $ 3.08 trillion, bypassing localised and geographic jurisdictions.[24] Thus, these classifications, I argue, coexist simultaneously in a single global CA market which is integrated via blockchains. Regulatory arbitrage, as recognised by the FSB report, is structurally produced in the global world through an unsystemized and uncoordinated regulation regimen governing the same class of asset, which by nature is borderless. It is to be noted herein that the regulatory arbitrage noted herein is not hypothesised, rather observed and informed by empirical data.[25]

[21]Banerjee and Roshan Menon (n 7).
[22]Financial Stability Board (n 4) 3–4.
[23]Financial Stability Board (n 4) 3.
[24]Forbes Digital Assets (n 2).
[25]Financial Stability Board (n 4) 35.

There are 3 conditions which may give birth to arbitrage of a commodity, namely trading of an asset at different prices (1), assets with similar cash-flow being traded at different prices (2), and an asset with a known future price being traded at a different value than the expected value of the future cash flow (3).[26] I argue that the CA markets satisfy the conditions of arbitrage with the help of the following case studies.

Case Studies

The foremost example of the resultant arbitrage due to uneven regulations is the Kimchi Premium phenomenon observed in South Korea.[27] Traders have historically exploited this regulatory arbitrage, with the Premium nearing 50% in 2017.[28] Kimchi Premium violates the one price law in CA markets, a unique characteristic, exposing its non-linear dynamics.[29] Thus, traders having legal access to the financial markets in South Korea, and other markets, can validly exploit this difference, selling the CA at a higher premium on South Korean trading platforms.

Regulated Stablecoin CAs under US payment of stablecoin frameworks or MiCA must maintain a 1:1 ratio for a high-quality reserve for hooruing the par redemption on demand which helps systematically peg the coin value to an exact unit of the corresponding fiat currency like USD.[30] Stablecoins add to the worries of regulators due to their increased usage as alternative to fiat currency due to their unique feature of being pegged to a fiat currency.[31] The resultant condition in the backdrop of their constant integration in the global markets is a regulatory push by jurisdictions like the European Union (MiCA), the US and Singapore (PSN02), et cetera. This increased level of regulatory oversight and legal recognition as e-money or an alternative to traditional methods of payment creates cross-chain bridges that obscure transaction trails. Traders register accounts in jurisdictions outside the reach of

[26]Corporate Finance Institute, *Arbitrage* (CFI). <https://corporatefinanceinstitute.com/resources/career-map/sell-side/capital-markets/arbitrage/> accessed 5 January 2026.
[27]Corporate Finance Institute, *Kimchi Premium* (CFI). <https://corporatefinanceinstitute.com/resources/cryptocurrency/kimchi-premium/> accessed 5 January 2026.
[28]Corporate Finance Institute (n 26).
[29]Myung Hwan Seo, Bonsoo Koo and Yangzhuoran Fin Yang, '*Nonlinear Dynamics of Kimchi Premium*' (2024) 135 *Economic Modelling* 106726 <https://www.sciencedirect.com/science/article/pii/S0264999324000828> accessed 5 January 2026.
[30]Luke Owain Boult, *Global Stablecoin Compliance: GENIUS Act, MiCA, Hong Kong, Singapore, and More Key Rules*(Sumsub Blog, 20 November 2025) <https://sumsub.com/blog/global-stablecoin-compliance-guide/> accessed 5 January 2026.
[31]ChainUp Academy, *Stablecoin Regulation: The Future of Digital Dollar Laws* (ChainUp Academy, 24 October 2025)<https://www.chainup.com/academy/stablecoin-regulation-digital-dollar-laws/> accessed 5 January 2026.

traditional banking rails, in offshore accounts with little to no oversight.[32] This regulatory arbitrage causes significant confusion when it comes to cross-jurisdiction trading of CAs. Consider a trader domiciled in a low-regulation offshore haven, operating the portfolio at a 1:1 reserve, avoiding strict auditing and redemption guarantees. The US GENIUS Act § 3(e),[33] explicitly grants regulators the power to ensure compliance in cross-border trades by mandating an offshore seller (issuer, in this case) to follow the provisions of the GENIUS Act even if not domiciled in the United States. This will inevitably cause any offshore seller to be in compliance with US standards for reserve requirements, registration and liquidity thresholds. These conflicting regulatory standards destabilise the common market, causing offshore traders to see a token at a discounted rate, say $0.97, whereas their US counterparts would demand a near-par or rather a GENUIS mandated and legally enforceable reserve and redemption at $1. This meets condition 2 for arbitrage, wherein the same asset shows patterns of deviation from its reasonably expected future value in offshore jurisdictions.

In both examples, the mispricing and conditional arbitrage exist solely due to artificially manufactured conditionalities caused by jurisdictional asymmetry, which traders explicitly use, weakening or already weaker markets as their jurisdictional domicile. While the GENUIS Act is aspirationally extraterritorial in its aims and objectives, it can not, locally, ensure global harmonisation of standards as is the need for elimination. The same is evidenced by the FSB report 2025, which establishes that arbitrage in the stablecoin market arises from quantifiable divergences in the prudential standards of regulations across jurisdictions (only 5 jurisdictions have finalised frameworks for GSC assets), thereby allowing traders to *'choose'* low-compliance jurisdictions for domicile accounts while trading in the global markets.

[D] The Blind Spot & The Case for Legal Exceptionalism

The FSB report for 2025 is methodologically premised on the principle of "*same activity, same risk, same regulation*".[34] The objectives of the FSB presume that CA are regulatorily, within reach of law enforcement, in the same way as traditional legal activities have been. The report significantly undermines whether traditional legal enforcement models are even equipped in the first place to address the needs of an ever-evolving asset, which, architecturally, has been

[32]ChainUp Academy (n 30).
[33]S.1582, *Guiding and Establishing National Innovation for U.S. Stablecoins Act* (Public Law No 119-27, 139 Stat. 419, 18 July 2025).
[34]Financial Stability Board (n 4) 6.

decentralised since inception. Thus, the flaw lies in the presumption of CA as controllable, whereas the technology itself resists regulation and rejects enforcement by centralised enforcement authorities.

The methodology of this report is flawed *ab initio* because it aims to study regulatory frameworks without a detailed investigation of protocol design, CA consensus mechanisms and technological governance. By overlooking causation at the level of protocol and consensus mechanisms, the report undermines the principle of causation in international law.[35] Since the report investigates regulatory mechanisms around the globe, its approach inherently suffers from insufficiency since it does not account for the potential damage to traders due to regulatory arbitrage.

I argue that, by engaging with both the technology, i.e. the consensus mechanisms and protocol technology of CA, while also investigating potential losses caused due to regulatory arbitrage at play, the FSB fails to comprehensively address and engage with the very alchemy of CA, which makes them unique from traditional forms of fiat currency.

The FSB's recognition of domestic legal definitions for CASPs and CA further exacerbates this unevenness. Banerjee-Menon has already demonstrated the conflicts in harmonising the definitions of "digital assets" across jurisdictions.[36] The case to be made, thus, is that when the UNIDIROT itself is not able to harmonise the differences in the definition of the very asset which is sought to be regulated uniformly across markets, the international markets cannot avoid an arbitrage unless there is uniformity, either by treaty or by lack of regulations thereof.

The FSB itself establishes that a regulatory arbitrage is undesirable in the global markets since its operating principle is that of "*same activity, same regulation*".[37] Thus, it can be normatively understood to be breaking the regulatory link which establishes a causation between risk and oversight. Therefore, per the aims and objectives of the FSB, identical risks to escape identical equivalent regulation should normatively be avoided while enforcing regulation.

While having noted stark differences in municipal laws, and the lack of a binding treaty for the

[35]Gambarini Camilla (ed), *Causation in International Investment Law* (Jusmundi, 27 August 2025) <https://jusmundi.com/en/document/publication/en-causation-in-international-investment-law> accessed 5 January 2026.
[36]Banerjee and Roshan Menon (n 7).
[37]Financial Stability Board (n 4) 6.

same in the international realm, incorporation of any regulatory schema would inevitably subject municipal jurisdictions to either over, or under regulation which would cause institutional resistance from the technological makeup of the CA themselves.

A binding treaty for uniform regulation would, at the outset, at least, require consensus of the international community on the definitional aspects of the asset.

Since harmonization would inherently seek out stable definitions, fixed control, possession and transfer mechanics and would aspirationally classify the CA into neat categories, as is evident in both the UNIDRIOT principles as well as the FSB report; it is thus impossible to achieve the same with an asset which by nature is programmable to resist regulation and functionally mutate itself thereby possessing the capability of recombinng economic roles (tokenisation would ensure the identity of the asset does not remain stable)[38]. In the absence of viable mechanics to actually give effect to a harmonised, or at least a harmonizable regulatory framework, the only resultant is a structurally manufactured arbitrage.

Thus, I argue that instead of extending ineffective and practically unenforceable control over technologically mutant assets, international law should adopt an approach of descriptive honesty while being cognizant of its jurisdictional limits and preventing a systemic erosion of financial trust and legitimacy in an ever-evolving financial market.

[E] Conclusion

Fiat-based currency systems rely on trust in intermediary institutions, yet fear the virtue of reversibility of transactions. CA systemically removes the virtue of reversibility by shifting this reliance from intermediary institutions to the asset code itself. This shift in the foundational rubrics of CA as a medium of transactions eliminates the need for legal intervention of intermediaries, thereby placing trust in node consensus.

Traditional legal enforcement, contingent on enforceability of norms and coercion for violation, fails when implemented in CA since they are conceptually incompatible with the alchemy, producing irreconcilable differences.

I argue that the distributed node architecture of CA inherently possesses the virtue of

[38]O'Dair (n 13).

deterritorialized participation, thus defying a geographically bounded enforcement. Thus, legal intervention, which is jurisdiction-specific, cannot be achieved in the absence of international compliance and uniformity. Thus, the traditional methods of law enforcement become inherently insufficient in light of the jurisdictionally sparse architecture of the asset.

The FSB report recognises the principle of "*same activity, same risk, same regulation*", which is undermined by the regulatory arbitrage caused by divergence in the implementation of regulation coexisting in a single, integrated, global CA market. This arbitrage breaks the causal link between potential and perceived risk, and its corresponding regulatory oversight. This is further problematised by the international community's inability to harmnose the the differences in the definition of digital assets. These conflicting opinions and the inability to harmonise the same reveal the stark differences which exist in the municipal understandings of CA and the corresponding international law frameworks.

I argue that this harmonisation, although desirable, cannot be achieved for CA assets due to their virtue of being mutant and resistant to legal coercion. Harmonisation presumes stable categories and fixed control over the same, thereby advancing the cause of predictability. Thus, increased regulation in some areas, while close to none in others, does not reduce risk to the international community from such assets; it relocates it.

This places the international regulatory regime on unstable conceptual grounds, thus making the case for legal exceptionalism. Legal exceptionalism recognises the boundaries of law and its jurisdictional limits when faced with technological resistance. Thus, when the asset in question is by nature architecturally uncontrollable, and uniform regulation cannot be achieved in a single and unified market, partial regulation produces regulatory arbitrage. International law must acknowledge that the harmonisation of regulation in CA assets is futile, while exceptionalism is a more honest response, preventing an exposure of the law's limits.

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