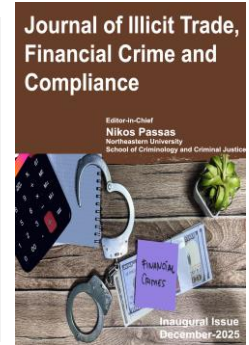




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Strengthening AML/CFT Cooperation for Cryptoassets in Latin America: Comparative Analysis of Chile, Argentina, and Peru (2020–2025)

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ABSTRACT

The expansion of cryptoasset usage in Chile, Argentina and Peru between 2020–2025 has driven regulatory reforms aligned with FATF recommendations, yet with uneven effects on anti-money laundering enforcement and cross-border financial investigations. Based on documentary and comparative analysis, this study identifies three critical gaps that limit cooperative effectiveness in the region: non-equivalent legal definitions for virtual assets and service providers (VASP), partial implementation of the Travel Rule and persistent challenges in generating digital evidence that meets interoperable admissibility standards. These gaps reduce transactional traceability and the reliability of Suspicious Transaction Reports, while enabling high-risk practices such as illicit use of stablecoins, mixers and low-visibility cross-border crypto transfers.

The article argues that the formal adoption of international standards has progressed faster than operational capacity within AML/CFT systems, creating conditions for regulatory arbitrage and crypto-enabled financial crime. A phased strengthening agenda is proposed, focusing on minimum conceptual harmonization, improved evidentiary interoperability, and the development of technical capacities for supervision, VASP compliance and digital legal cooperation among financial intelligence units, market supervisors and central authorities.

1. Introduction

The growing presence of cryptoassets is reshaping how value circulates beyond traditional jurisdictional boundaries. Their accelerated transaction speed, reduced intermediation, and reliance on distributed ledgers challenge regulatory designs built around centralized financial infrastructures [1]. Existing scholarship argues that these characteristics expand opacity, facilitate cross-border settlement, and complicate the detection of illicit flows when layered over fragmented supervision and uneven institutional capacity [2].

Comparative analyses show that institutional responses evolve asymmetrically. In the European Union, the Markets in Crypto-Assets (MiCA) framework has been interpreted as an effort to harmonize supervisory criteria and reduce cross-jurisdictional disparities [3]. However, implementation studies indicate that regulatory alignment alone is insufficient without operational systems capable of supporting identification, monitoring, Travel Rule compliance, and timely reporting [4,5]. This regulatory–capacity interaction becomes particularly relevant in states where AML/CFT mandates are distributed across multiple agencies rather than centralized [6].

In the Southern Cone, these tensions emerge with particular intensity. Chile, Argentina, and Peru have advanced in the recognition of Virtual Asset Service Providers (VASPs) and in the adoption of core FATF recommendations, yet they have done so at different speeds and with uneven maturity in technological infrastructure and supervisory readiness [7]. Between 2020 and 2025, all three countries attempted regulatory modernization, but institutional pathways diverged—especially in FIU–supervisor cooperation and evidentiary handling in cross-border cases [8].

Recent evidence emphasizes that blockchain traceability does not, on its own, produce admissible evidence; digital data require standardized documentation, metadata preservation, and verifiable integrity protocols to be court-usable [9]. Likewise, FATF mutual evaluation findings consistently identify deficiencies in inter-agency coordination, STR/ROS quality, and evidentiary interoperability across emerging markets [10,11].

Against this backdrop, the article analyzes three dimensions shaping international AML/CFT cooperation on cryptoassets: (i) normative coherence, (ii) operational alignment, and (iii) evidentiary interoperability. The central hypothesis remains that while regulatory definitions have improved, the effectiveness of these reforms is limited by institutional fragmentation and the absence of shared technical standards for producing and transferring blockchain-based evidence across jurisdictions.

This study contributes to ongoing debates in four ways: first, by articulating a conceptual framework linking regulatory-governance design, financial supervision, and digital evidentiary standards; second, by reconstructing recent regulatory trajectories in Chile, Argentina, and Peru; third, by identifying divergence patterns that explain why formal upgrades have not translated into cooperative efficiency; and fourth, by proposing a cooperation roadmap oriented toward strengthening technical capacity, evidentiary interoperability, and cross-agency coordination.

2. Theoretical framework

The advent of crypto-assets—a heterogeneous ecosystem encompassing cryptocurrencies, stablecoins, and utility tokens—has strained the boundaries of traditional legal frameworks globally. This phenomenon represents not merely a technological challenge but a fundamental crisis of categorization: the hybrid nature of these assets complicates their classification within classical definitions of property, money, or value, severely conditioning the design of tax, financial, and Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) policies [12]. In this vein, Schmidt proposes a conceptual shift, suggesting the abandonment of the term “cryptocurrencies” in favor of “cryptographic tokens” differentiated by economic function. Under this lens, assets such as Bitcoin would be understood as intangible goods with a *de facto* monetary use, despite lacking legal recognition as currency in the vast majority of jurisdictions [13,14].

This conceptual indeterminacy has immediate practical implications. In Chile, for instance, the absence of an explicit taxonomy and the inherent decentralization of these systems prevent their unequivocal classification as

securities or means of payment. This perpetuates a state of regulatory uncertainty that hinders both market supervision and the enforcement of tax obligations [13].

In response to this void, the global reaction has been markedly asymmetric. Europe has opted for normative harmonization through the Markets in Crypto-Assets Regulation (MiCA), overcoming the fragmented, partial solutions previously applied by member states [15,16]. This regulation establishes a robust standard: it defines crypto-assets, segregates token categories, and imposes strict governance and reserve requirements [17]. However, the sheer velocity of innovation threatens to render the rule obsolete before its full implementation; areas such as Decentralized Finance (DeFi), certain NFTs, and emerging token configurations persist in regulatory grey zones, demonstrating that normative coherence is a necessary yet insufficient condition [17,18].

Conversely, the Latin American landscape is defined by fragmentation and forced pragmatism. Here, crypto adoption is driven not solely by speculation but by structural failures: informal dollarization, institutional distrust, and financial exclusion [19]. While nations like El Salvador have spearheaded disruptive experiments regarding legal tender, others have attempted to regulate Virtual Asset Service Providers (VASPs) following international standards, though often retaining fiscal gaps that facilitate regulatory arbitrage [13,19,20]. As an intermediate mechanism to manage this uncertainty, jurisdictions such as Mexico, Brazil, and Colombia have implemented regulatory sandboxes—controlled testing environments that allow regulators to “learn by doing” and reduce information asymmetry vis-à-vis technological developers [21].

Within this architecture, stablecoins and Central Bank Digital Currencies (CBDCs) represent two sides of the same coin in the dispute for monetary hegemony. The former act as essential liquidity bridges, although their stability is precarious and heavily dependent on reserve quality, a fact that has justified MiCA's capital requirements and increased scrutiny regarding their potential use for corporate tax evasion [17,22,23]. CBDCs, on the other hand, emerge as the state's response to preserve monetary sovereignty and modernize payment systems, with pioneering experiences in the Caribbean and pilot programs in the region's largest economies facing the complex trilemma of balancing efficiency, privacy, and cybersecurity [19,24].

Finally, the dimension of illicit and fiscal risk permeates the entire ecosystem. Taxation oscillates between the adaptation of general principles and the risk of base erosion, with disparate treatments in Income Tax and VAT influenced by international jurisprudence [20]. Simultaneously, regarding AML/CFT, the extension of FATF recommendations to virtual assets seeks to replicate banking surveillance—such as the Travel Rule and due diligence—in the digital realm [17,25]. Nevertheless, this intermediary-centric approach reveals shortcomings as criminal activity shifts toward censorship-resistant segments like mixers, privacy coins, and cross-chain bridges [25,26].

Although blockchain technology offers powerful forensic tools for flow traceability, their probative value demands rigorous digital chain-of-custody protocols [27,28]. The literature concludes that without fluid international cooperation and flexible, risk-based regulatory mechanisms, technological development will continue to outpace institutional response capacity, exacerbating the risks of financial exclusion and de-risking [25,29,30].

The regulatory evolution of cryptoassets in Chile, Argentina and Peru reflects divergent institutional pathways shaped by pre-existing regulatory architectures, AML/CFT supervisory capacities, and each country's degree of internalization of FATF recommendations and multilateral guidance. A comparative chronological reconstruction allows us to identify the starting points from which current frameworks were formed and, consequently, the structural conditions influencing transnational cooperation. These differences are directly relevant to cross-border laundering exposure, since fragmented definitions and uneven reporting standards create openings for regulatory arbitrage and criminal exploitation.

In Chile, regulatory development has followed a gradual trajectory moving from interpretive fragmentation toward a more sectoralized legal framework. Until the early 2020s, cryptoassets were addressed through dispersed administrative criteria: the Internal Revenue Service was an early mover in recognizing their tax treatment, while the Financial Analysis Unit included cryptocurrency operations in its typologies, without consolidating stable legal definitions. The substantive shift occurred between 2021 and 2023, during the parliamentary debate that culminated in the enactment of Law 21.521. This instrument introduced, for the first time, a legal category of “virtual

asset” and established a regulatory perimeter for Virtual Asset Service Providers. This development represented a step toward greater conceptual coherence, although its effectiveness still depends on technical regulations to be issued by the Financial Market Commission. In practice, the absence of fully operational guidance for transaction traceability and Travel Rule implementation has slowed investigative cooperation, particularly when blockchain evidence must be standardized for foreign requests.

Chile’s institutional landscape is therefore in an implementation phase that combines robust legal definitions with supervisory capacities still being adjusted, particularly in technological auditing and transaction traceability.

The Argentine trajectory displays a different pattern, characterized by prioritizing the AML/CFT approach in the absence of a comprehensive financial framework. Doctrinal analyses on taxation, legal nature, and risks associated with the use of stablecoins show that the country maintains heterogeneous interpretations among state bodies and lacks a legal definition of cryptoasset. The most relevant milestone materialized only in 2022, with UIF Resolution 300/2022, which incorporated providers of services linked to virtual assets as obligated entities required to report suspicious transactions. This incorporation strengthened the country’s anti-money-laundering supervisory capacity but left unresolved the conceptual asymmetries among the Central Bank, the National Securities Commission, and the UIF itself. Such asymmetry directly affects Mutual Legal Assistance (MLA), as requests involving VASPs may be processed under inconsistent criteria, delaying evidence exchange or generating admissibility disputes in foreign courts.

Argentina’s evolution thus leans toward mitigating operational risks without developing the regulatory foundations needed to reduce legal uncertainty or promote regulatory interoperability. This creates risk windows where mixers, stablecoin off-ramps, and informal P2P intermediaries operate with minimal oversight.

In Peru, the incorporation of cryptoassets into the AML/CFT regime is recent, though it follows a more coherent institutional sequence. Until 2022, the country lacked direct legal provisions, and references to cryptoassets were limited to isolated statements from financial supervisors. The turning point occurred in 2023 with Supreme Decree 006-2023-JUS, which provided an operational definition of Virtual Asset Service Providers and formally integrated them into the anti-money-laundering system. The subsequent SBS Resolution 02648-2024 refined supervisory operational criteria, establishing registration, due diligence, and technological control requirements.

Cryptoasset adoption trends in Latin America show that these changes were partly driven by the rapid growth of stablecoin transactions and economic informality, generating regulatory pressure to strengthen traceability and improve inter-agency coordination. However, early implementation reports indicate that Suspicious Transaction Reports from VASPs remain heterogeneous in format and probative quality, limiting Peru’s capacity to contribute actionable intelligence in transnational cases.

Unlike Chile, Peru has not advanced toward a sectoralized financial framework; and unlike Argentina, it has succeeded in establishing more homogeneous operational definitions for VASPs, providing greater clarity to the AML/CFT perimeter.

The historical comparison highlights three differentiated patterns. Chile has moved toward comprehensive legislative regulation, though still conditioned by technical implementation. Argentina has reinforced its anti-money-laundering architecture without resolving structural conceptual problems or developing a coherent financial framework. Peru, in turn, has pursued a gradual incorporation process centered on formalizing VASPs and strengthening institutional capacities for detecting and analyzing cryptoasset transactions. Across the three jurisdictions, the principal cooperation barriers arise not from the absence of regulation but from the lack of standardized evidentiary protocols, uneven Travel Rule enforcement, and inconsistent supervisory expectations—conditions systematically exploited by cross-border laundering networks.

3. Methodological framework

This article adopts a qualitative, analytical-documentary research design aimed at examining how regulatory frameworks and institutional capacities condition the effectiveness of international cooperation in financial

investigations involving cryptoassets. The study relies exclusively on peer-reviewed academic literature, technical reports issued by the Financial Action Task Force (FATF), regional bodies such as GAFILAT, and specialized legal documents [31–34]. All sources correspond to publications from 2021–2025 and were selected based on conceptual relevance, methodological rigor, and thematic pertinence for the study of virtual assets, stablecoins, financial regulation, and AML/CFT systems [31,33].

The analytical strategy consists of a structured examination of the selected texts, with the objective of identifying theoretical patterns and conceptual tensions across three dimensions: normative coherence—referring to the degree of alignment among definitions, obligations and regulatory perimeters; operational alignment—linked to the capacity of institutions to implement, supervise and coordinate the application of such norms; and evidentiary interoperability—concerning the use and admissibility of digital evidence in transnational investigative processes [32,35].

The analysis was conducted through a process of thematic coding that enabled the grouping of similar content, the identification of divergences and the mapping of relationships among the conceptual elements present in the texts [33–35].

4. Institutional context and regulatory timeline in Chile, Argentina and Peru

The regulatory evolution of cryptoassets in Chile, Argentina and Peru reflects divergent institutional pathways shaped by pre-existing regulatory architectures, AML/CFT supervisory capacities and each country's degree of internalization of FATF recommendations and guidance issued by regional and multilateral organizations [36–38]. Comparative chronological reconstruction allows us to identify the starting points from which current regulatory frameworks were formed and, consequently, the structural conditions influencing transnational cooperation [36,39].

In Chile, regulatory development has followed a gradual trajectory moving from interpretive fragmentation toward a more sectoralized legal framework. Until the early 2020s, cryptoassets were addressed through dispersed administrative criteria: the Internal Revenue Service was an early mover in recognizing their tax treatment, while the Financial Analysis Unit incorporated cryptocurrency operations into its typologies, without consolidating stable definitions [40]. The substantive shift occurred between 2021 and 2023, during the parliamentary debate that culminated in the enactment of Law 21.521, which introduced a legal category of “virtual asset” and established a regulatory perimeter for Virtual Asset Service Providers [41]. This represented a step toward greater conceptual coherence, although its effectiveness still depends on technical regulations to be issued by the Financial Market Commission [41,42]. Chile's institutional landscape is therefore in an implementation phase combining robust legal definitions with supervisory capacities still being adjusted, particularly in technological auditing and transaction traceability [42].

The Argentine trajectory displays a different pattern, characterized by prioritizing the AML/CFT approach in the absence of a comprehensive financial framework. Doctrinal analyses on taxation, legal nature and the risks associated with stablecoin use show that the country maintains heterogeneous interpretations among state bodies and lacks a unified legal definition of cryptoasset [43,44]. The most relevant milestone materialized only in 2022, with UIF Resolution 300/2022, which incorporated virtual-asset-related service providers as obligated entities required to report suspicious transactions [45]. This strengthened Argentina's AML architecture but left unresolved the conceptual asymmetries among the Central Bank, the National Securities Commission and the UIF itself [44–46]. Literature on stablecoins confirms that the expansion of USDT and USDC in a context of informal dollarization has intensified operational pressure on Argentina's AML/CFT system without resulting in regulatory harmonization comparable to European models [43,46]. Argentina's evolution thus leans toward mitigating operational risks without developing the regulatory foundations needed to reduce legal uncertainty or promote regulatory interoperability.

In Peru, the incorporation of cryptoassets into the AML/CFT regime is recent, though it follows a more coherent institutional sequence. Until 2022, the country lacked direct legal provisions, and references to cryptoassets were limited to isolated statements from financial supervisors [47]. The turning point occurred in 2023 with Supreme

Decree 006-2023-JUS, which provided an operational definition of Virtual Asset Service Providers and formally integrated them into the national AML system [48]. The subsequent SBS Resolution 02648-2024 refined supervisory operational criteria, establishing registration, due diligence and technological control requirements [49]. Adoption trends in Latin America demonstrate that these reforms were partly driven by rapid growth of stablecoin transactions and high levels of economic informality, which increased pressure to strengthen traceability and improve inter-agency coordination [43,47,49]. Unlike Chile, Peru has not advanced toward a sectoralized financial framework; and unlike Argentina, it has succeeded in establishing more homogeneous operational definitions for VASPs, providing greater clarity to the AML/CFT perimeter [49].

The historical comparison highlights three differentiated patterns. Chile has moved toward comprehensive legislative regulation, though still conditioned by technical-implementation gaps. Argentina has reinforced its anti-money-laundering architecture without resolving structural conceptual inconsistencies or developing a coherent financial framework. Peru, in turn, has pursued a gradual incorporation process centered on formalizing VASPs and strengthening institutional capacities for detecting and analyzing cryptoasset transactions [36,47-49].

5. Comparative analysis

Chile stands out as the country with the most structured regulatory definition to date. Law 21.521 not only introduces the concept of “virtual financial assets” but also places VASPs directly under the authority of financial supervisors, bringing the Chilean framework close to FATF alignment [50]. The model is promising, yet not fully mature: effective enforcement still depends on the development of secondary regulations and the operational capacity of the CMF and UAF to monitor thousands of high-speed blockchain transfers in real time [51]. Without such capacity, illicit proceeds may transit through compliant surfaces before controls activate, lowering the preventive value of regulation [52].

Argentina presents a very different trajectory. Progress exists—mainly through UIF Resolution 300/2022, which integrates VASPs into the suspicious reporting perimeter—but it unfolds without a single legal definition of cryptoassets, meaning that the Central Bank, CNV and UIF continue to regulate through separate logics [45,53]. As a result, stablecoin-based liquidity often moves through informal circuits with uneven KYC checks, incomplete metadata transfer and STRs of limited evidentiary value [54]. Criminal networks take advantage of this fragmentation by using OTC brokers, mixers or cross-chain bridges, where identity is obscured and Travel Rule compliance becomes optional rather than mandatory [55]. Argentina, then, has supervision, but not conceptual closure.

Peru occupies an intermediate space. Its regulatory incorporation of cryptoassets is recent yet more sequential than Argentina's: Supreme Decree 006-2023-JUS and SBS Resolution 02648-2024 define VASPs, demand registration and formalize due diligence requirements [48,49]. However, this clarity does not extend to taxation or asset classification, leaving unresolved the standards for evidence preservation, storage and admissibility in judicial cooperation [56]. For international investigations, a missing hash timestamp or a non-preserved metadata string may invalidate entire blockchain reconstructions abroad [57]. This is not a theoretical risk—it is procedural fragility.

Viewed jointly, the region shows convergence in discourse but divergence in enforcement depth. FATF vocabulary is present everywhere, but application is uneven. Where definitions are incomplete, taxation becomes porous; where Travel Rule deployment is partial, privacy coins and unregistered liquidity pools expand; where evidentiary formats differ, blockchain forensics cannot cross borders [55,57,58]. Fragmentation does not prevent regulation, it prevents results.

The weakest layer is procedural alignment. Chile has architecture yet lacks standardized templates for MLA requests and digital chain-of-custody guidelines [51,59]. Argentina shows continuous deficiencies in STR quality and inter-supervisory coordination [54]. Peru advances but still struggles with the operational pairing of AML systems and judicial transmission of digital proof [56,57]. Even when countries investigate effectively domestically, evidence may not travel well.

One additional risk stems from technological acceleration. Stablecoins grow faster than supervisory capacity, particularly in Argentina and Peru. Decentralized applications multiply, mining-linked flows disperse, and the

evidentiary footprint becomes increasingly volatile. Regulatory lag becomes a criminal window of opportunity: assets are bridged, mixed, layered and fragmented before enforcement bodies reach analytical maturity [55,60]. The challenge is not regulatory absence—it is regulatory delay.

Thus emerges a clear diagnosis: the region faces a regulatory–operational decoupling. Southern Cone jurisdictions incorporate FATF standards formally, but without the forensic, technological and evidentiary infrastructure necessary for real cross-border enforcement. Regulation moves forward, enforcement remains behind. The result is a system where crypto compliance exists on paper, yet asset tracing, freezing and recovery remain structurally impaired [58-60].

Although the individual examination of each jurisdiction provides valuable insight into regulatory trajectories, it does not fully expose the structural contrasts that determine their capacity for effective cooperation. A comparative reading highlights three critical factors:

1. the degree of legal definition assigned to the cryptoasset,
2. the formal and operational incorporation of Virtual Asset Service Providers into the supervisory perimeter, and
3. the ability to generate and exchange admissible digital evidence in cross-border investigations [59].

These dimensions are relevant because, when incomplete, they create zones of opacity in which value traceability becomes fragile and cross-border laundering risks intensify, providing operational opportunities for criminal networks and high-risk intermediaries. To illustrate this architecture in a systematic manner, Table 1 summarizes the main convergences and regulatory gaps observed in Chile, Argentina and Peru between 2020 and 2025, helping evaluate how legal incorporation of AML/CFT standards does not automatically translate into institutional capacity, procedural alignment or evidentiary interoperability.

Table 1: Comparative regulatory matrix for Chile, Argentina and Peru (2020-2025).

Dimension	Chile	Argentina	Peru
Legal definition of virtual asset	Recognized in Law No. 21.521; explicit categorization.	Functional recognition through obligated entities (UIF Res. 300/2022); definitions still dispersed.	No comprehensive legal definition; categories under development.
VASP	VASPs within CMF supervisory perimeter + reporting to UAF.	VASPs classified as obligated entities (UIF 300/2022).	VASPs subject to AML/CFT obligations (Supreme Decree 006-2023-JUS; SBS Resolution 02648-2024).
Travel Rule	Gradual implementation subject to technical regulations.	Provided for in UIF 300/2022, uneven application.	Incipient alignment; regulatory framework not fully finalized.
Obligated entities and STRs	Expanded through law; need for standardized templates and evidentiary criteria.	Low-quality STRs; limited coordination among UIF–BCRA–CNV.	KYC/STR obligations for VASPs; definitional gaps limit STR quality and usability.
Sanctions / Enforcement	Formal design is robust; operability depends on technical rules.	Sanctioning framework exists, but resources and coordination restrict enforcement.	Sanctions provided under general AML/CFT regime; indeterminacy reduces predictability.
Mutual Legal Assistance (MLA) / Central authority	Existing capacities; lacking digital evidentiary protocols and chain-of-custody mechanisms.	Legal and practical basis exists; heterogeneity in timing and quality of responses.	MER (GAFILAT, 2019): strong legal basis for criminal cooperation, but UIF lacks supervisory powers.
UIF / UAF cooperation	Strengthened UAF; interoperability with CMF still under development.	UIF is central actor but weak exchange with BCRA/CNV.	FIU–Peru produces intelligence, but STR quality and standards require improvement.
Financial supervisors	CMF with explicit post-2023 role; relevant technical coordination.	BCRA and CNV with sectoral roles; insufficient coordination.	SBS/SMV with AML/CFT mandates; gaps in crypto-specific oversight.
Documentary interoperability / evidentiary standards	Deficit of standardized templates and digital admissibility criteria.	Lack of uniform protocols and uneven document quality.	Legal indeterminacy hinders traceability and evidentiary use.

6. Discussion

The combined review of Chile, Argentina, and Peru demonstrates that the regulatory landscape for cryptoassets in the Southern Cone evolves in an environment where law, institutional capacity, and international cooperation expand at dissimilar speeds. FATF standards have been progressively internalized across the three jurisdictions, yet this formal alignment rarely translates into equivalent operational capacity. The result is a structural gap: regulatory convergence without procedural convergence, particularly visible when financial flows move through low-intermediation digital rails such as stablecoins, decentralized exchanges, or cross-chain infrastructure.

Although Chile exhibits the most advanced legal taxonomy, while Argentina and Peru rely on sectoral norms and incremental reforms, these differences narrow substantially when examined from an enforcement perspective. Legal definition does not automatically imply traceability, and the ability to implement Travel Rule requirements, authenticate blockchain metadata, or reconstruct transaction paths remains limited across all three jurisdictions. Chile benefits from a clearer statutory basis, yet Argentina and Peru experience similar enforcement bottlenecks, suggesting that regulatory precision is insufficient when technical capacity is lacking.

Institutional fragmentation reinforces these limitations. AML authorities, financial supervisors, and central MLA units frequently operate under mandates that do not intersect cleanly, generating parallel information flows rather than integrated supervision. Mutual Evaluation Reports already identified this coordination deficit, but comparative analysis reaffirms that the problem becomes more acute under crypto-native conditions. When evidence must cross borders, differences in documentation formats, chain-of-custody protocols, and admissibility thresholds reduce the value of shared intelligence, even where cooperation mechanisms formally exist.

This dynamic becomes even more evident when examining recent cases in the region, which provide concrete illustrations of how regulatory asymmetry materializes into operational vulnerabilities. In Chile, for example, the country's first criminal conviction for money laundering with cryptoassets in 2022 demonstrated both the promise and the limitations of blockchain-based investigations. Although authorities effectively traced illicit flows using on-chain analytics, the case also revealed persistent obstacles in standardizing metadata, documenting digital evidence, and meeting the admissibility requirements demanded by foreign FIUs. Several MLA requests had to be reformulated because partner jurisdictions required additional validation steps that Chilean agencies lacked, delaying cooperation and evidentiary exchange [61]. This case shows that even a relatively advanced regulatory framework can falter when evidentiary interoperability is not fully institutionalized.

A similar pattern appears in Argentina. The Generación Zoe / Zoe Cash scheme (2022–2023) exposed how fragmented regulatory responsibilities enable criminal exploitation across borders. Operating across multiple provinces with inconsistent supervisory criteria, the scheme leveraged gaps between national agencies, while flows routed through Paraguay and Brazil became opaque due to the absence of unified VASP definitions and incomplete Travel Rule implementation. As a result, authorities were forced to manually reconstruct parts of the transaction chain, which significantly delayed domestic prosecutions and obstructed the issuance of international freezing orders [62]. This case exemplifies the operational consequences of conceptual asymmetry: when supervisory criteria diverge, cross-border laundering thrives.

Peru offers yet another illustration of how procedural weaknesses undermine cooperation. According to SBS supervisory reports from 2023–2024, Suspicious Transaction Reports submitted by VASPs often lacked essential metadata such as hash values, timestamp sequences, or source–destination information—elements required to reconstruct blockchain paths or validate evidence externally. In several instances, Peruvian intelligence alerts could not be integrated into regional investigations because partner jurisdictions required technical documentation that Peru had not preserved, directly weakening the country's contribution to transnational laundering cases [63]. This demonstrates how evidentiary deficits cascade into diminished cooperation capacity.

Taken together, these cases highlight that regulatory asymmetry creates “opportunity structures” for criminal economies. Stablecoins provide frictionless liquidity in partially dollarized markets; mixers, privacy coins, and cross-chain bridges enable layering that bypasses supervised VASPs; and weak Suspicious Transaction Reports produce intelligence blind spots where laundering can occur with a low probability of detection. In Argentina and Peru, these

risks are further magnified by large informal economies and persistent cash-crypto interaction points. Without forensic blockchain capacity, criminal actors exploit regulatory delay as an operational advantage.

Technology, therefore, is not a neutral environment but a multiplier of institutional asymmetries. The rapid evolution of DeFi protocols, unhosted wallets, and high-speed settlement chains introduces detection challenges more akin to high-frequency market abuse than to traditional banking crime. Even when legislative reforms are ambitious, investigative agencies often lack the analytical tools necessary to extract, freeze, or authenticate digital evidence. Thus, the gap is not legislative—it is procedural and technical.

Across the three jurisdictions, a shared constraint becomes apparent: international standards have been adopted faster than institutional capability has matured. This does not imply systemic failure, but it underscores that AML/CFT effectiveness increasingly depends on the capacity to integrate technology, cross-reference metadata, and preserve evidentiary integrity across borders. While formal MLA mechanisms exist in all three countries, their practical performance is conditioned by heterogeneous formats, uneven reporting quality, and divergent admissibility thresholds. The regional cases confirm that these deficiencies are not abstract—they materially shape investigative outcomes.

In sum, the Southern Cone has made meaningful regulatory progress, yet on a foundation that remains insufficient for crypto-enabled crime. Moving from normative adoption to operational enforcement requires more than new legislation: it demands automation, interoperability, and the professionalization of digital forensics. Until these components mature, cooperation will continue to exist legally but perform unevenly in practice, particularly in cross-border investigations where speed, technical depth, and shared evidentiary standards determine case outcomes.

7. Conclusions and recommendations

The comparative evidence from Chile, Argentina, and Peru (2020–2025) demonstrates that progress in cryptoasset regulation has been significant yet uneven, generating structural gaps that directly shape the region's exposure to crypto-enabled financial crime. Chile stands out for its explicit legal recognition of virtual assets and regulated inclusion of VASPs, while Argentina and Peru continue to rely on sector-specific instruments, transitional frameworks, and incomplete taxonomies. These differences are not merely institutional—they translate into asymmetric vulnerability, enabling regulatory arbitrage, inconsistent supervision, and exploitable blind spots for cross-border laundering.

A second finding is that international cooperation is hindered less by the absence of laws and more by insufficient procedural alignment. Financial intelligence units, securities and banking supervisors, and central MLA authorities still exchange information using incompatible formats, timeframes, and evidentiary standards. When suspicious activity moves through privacy-enhancing channels—such as mixers, unhosted wallets, or cross-chain bridges—the lack of standardized reporting templates and forensic-ready metadata significantly reduces evidentiary value, including in cases already documented across the region [1–3]. Even where regulation is advanced, the absence of operational coherence continues to undermine cross-border investigations.

Third, the rapid expansion of stablecoin-based liquidity, decentralized finance, and high-speed settlement protocols exposes AML/CFT systems built around traditional intermediaries. Much of the region's compliance architecture presumes the existence of identifiable gatekeepers; however, laundering techniques increasingly bypass them. This has produced what must be understood as a regulatory-operational misalignment: rules exist, but institutional capacity to enforce them has not reached the same level of maturity.

Taken together, these findings show that the core regional challenge is not only regulatory but also analytical, technical, and forensic. To strengthen crypto-related AML/CFT enforcement, the Southern Cone must transition from formal adoption of standards to operational capability, especially in international evidence exchange.

7.1. Roadmap for digital cooperation

Based on the above, three instrument clusters emerge as central pillars for cooperative effectiveness:

Digital supervision and reporting mechanisms

- STR automation for blockchain-based transactions
- Secure transmission channels between VASPs and FIUs
- Integration of forensic analytics for pattern detection, address clustering and risk scoring

Legal assistance and evidentiary interoperability tools

- Standard MLA templates for digital evidence
- Regional chain-of-custody protocols and metadata preservation rules
- Shared admissibility criteria to prevent rejection of blockchain-based evidence in court

Regional governance and standardization structures

- Joint risk-classification models for stablecoins, mixers and DeFi tools
- Interagency task forces with real-time alert capability
- Shared secure platforms for STR exchange and evidentiary transfer

These instruments directly target the weaknesses detected in current cooperation mechanisms and convert fragmented reforms into a coordinated regional architecture.

7.2. Minimum standards for coordination and traceability

Four baseline conditions are proposed for interoperability across Chile, Argentina, and Peru (Table 2).

Table 2: Condition v/s impact

Condition	Impact on AML/CFT Enforcement
Shared definitions of cryptoasset, VASP, governance perimeter	Prevents classification ambiguity and data misreporting
Unified data-exchange formats and urgency levels	Reduces delay in cross-border freezing orders
Evidentiary chain-of-custody guidance	Enhances admissibility of digital artifacts in transnational litigation
Basic forensic capacity in every FIU + supervisory body	Enables tracing despite mixers, bridges, privacy coins

7.3. Prioritized recommendations by actor

These elements require neither major budgets nor new legislation, only aligned operational criteria and institutional discipline.

For regulators

- Convert conceptual taxonomies into enforceable financial classifications
- Mandate traceability-ready reporting for stablecoins and DeFi gateways
- Condition licensing of VASPs to Travel Rule compliance and auditability

For financial intelligence units

- Deploy address-clustering automation and anomaly-detection tools
- Enforce quality control for STR submissions (minimum metadata fields)
- Create MLA-optimized evidence packages for blockchain-based cases

For supervisory authorities

- Establish continuous-monitoring models rather than periodic inspection
- Issue technical circulars on metadata integrity and hashing standards
- Integrate crypto-risk mapping into prudential supervision routines

For Virtual Asset Service Providers (VASPs)

- Adopt Travel Rule-compliant messaging standards (IVMS-101 or equivalent)
- Implement blockchain analytics internally rather than outsourcing risk
- Facilitate evidence export with verifiable timestamps and signatures

The Southern Cone has reached a point where the question is no longer whether to regulate cryptoassets, but whether regulation can be executed at the operational speed required to counter transnational laundering. Recent cases in Chile, Argentina and Peru demonstrate that regulatory design alone is insufficient when forensic, technological and evidentiary capacities do not mature at the same rate. The effectiveness of AML/CFT cooperation will depend on the ability to transition from paper-based compliance to forensic-capable digital infrastructure. Only by closing this regulatory-operational gap will countries in the region enhance their capacity to trace, freeze and recover value in a financial landscape that continues to accelerate.

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Conflicts of interest

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References

- [1] Adrian T, Mancini-Griffoli T. The rise of digital money. IMF Fintech Note. 2019. <https://doi.org/10.5089/9781498324908.063>
- [2] Foley S, Karlsen JR, Putniņš TJ. Sex, drugs, and bitcoin: How much illegal activity is financed through cryptocurrencies? *Rev Financial Stud*. 2019; 32(5):1798-853. <https://doi.org/10.1093/rfs/hhz015>
- [3] Marilynne Ordekian, Ingolf Becker, Tyler Moore, Marie Vasek, Raising the bar: Assessing historical cryptocurrency exchange practices in light of the EU's MiCA and DORA regulation, *Computer Law & Security Review*, Volume 59, 2025, 106227, ISSN 2212-473X, <https://doi.org/10.1016/j.clsr.2025.106227>.
- [4] Von Hafe F, Wagle Y, Guede-Fernández F, et al. Legal frameworks for blockchain applications: A comparative study with implications for innovation in Europe. *Front Blockchain*. 2025; 8:1655230. <https://doi.org/10.3389/fbloc.2025.1655230>
- [5] Bespalova O, Appendino M, Bhattacharya R, et al. Crypto assets and CBDCs in Latin America and the Caribbean: Opportunities and risks. *Lat Am J Cent Bank*. 2025; 6:100157. <https://doi.org/10.1016/j.latcb.2024.100157>
- [6] Pavlidis G. The dark side of anti-money laundering: Mitigating the unintended consequences of FATF standards. *J Econ Criminol*. 2023; 2:100040. <https://doi.org/10.1016/j.jeconc.2023.100040>
- [7] Hernández del Valle G, et al. CEMLA's survey on central bank digital currencies in Latin America and the Caribbean. *Lat Am J Cent Bank*. 2024; 5:100135. <https://doi.org/10.1016/j.latcb.2024.100135>
- [8] Marcelino S, Lian W, Geng N, Yakhshilikhov Y, Komatsuzaki T, Appendino M, et al. Crypto Assets and CBDCs in Latin America and the Caribbean: Opportunities and Risks. IMF Working Papers [Internet]. 2023 Feb;2023(037):1. <http://dx.doi.org/10.5089/9798400234804.001>

- [9] Atlam HF, Ekuri N, Azad MA, Lallie HS. Blockchain forensics: A systematic literature review of techniques, applications, challenges, and future directions. *Electronics*. 2024; 13(17):3568. <https://doi.org/10.3390/electronics13173568>
- [10] GAFI/GAFILAT. Informe de Evaluación Mutua: Chile. Grupo de Acción Financiera Internacional; 2021.
- [11] GAFI/GAFILAT. Informe de Evaluación Mutua: Argentina. Grupo de Acción Financiera Internacional; 2024.
- [12] Pierluigi Freni, Enrico Ferro, Roberto Moncada, Tokenomics and blockchain tokens: A design-oriented morphological framework, *Blockchain: Research and Applications*, Volume 3, Issue 1, 2022, 100069, ISSN 2096-7209, <https://doi.org/10.1016/j.bcr.2022.100069>.
- [13] Schmidt WC. Tokens criptográficos: criptoactivos, evolución conceptual, naturaleza jurídica y medio de pago. *Rev Blockchain Inteligencia Artif*. 2024; 5:26–45. [https://doi.org/10.22529/rbia.2024\(5\)03](https://doi.org/10.22529/rbia.2024(5)03)
- [14] Bech, M., & Garratt, R. 2017. Central Bank Cryptocurrencies: 55–70. Basel: BIS.
- [15] Ferreira A, Sandner P. EU search for regulatory answers to crypto assets and their place in the financial markets' infrastructure. *Comput Law Secur Rev*. 2021; 43:105632. <https://doi.org/10.1016/j.clsr.2021.105632>
- [16] Benson V, Adamyk B, Chinnaswamy A, Adamyk O. Harmonising cryptocurrency regulation in Europe: Opportunities for preventing illicit transactions. *Eur J Law Econ*. 2024; 57(1):37–61. <https://doi.org/10.1007/s10657-024-09797-w>
- [17] Waerzeggers C, Aw I, Cheng J. Taxing Stablecoins. *IMF Fintech Notes*; 2023. <https://doi.org/10.5089/9798400227226.063>
- [18] De Simone L, Jin P, Rabetti D. Tax Avoidance with DeFi Lending. *SSRN*; 2024. <https://doi.org/10.2139/ssrn.4764605>
- [19] AFI Global. Activos virtuales e inclusión financiera para américa latina y el caribe. 2024.
- [20] Aurazo J. Merchant internalization and tax evasion. *Res Econ*. 2020; 74:273–76. <https://doi.org/10.1016/j.rie.2020.06.002>
- [21] Guthrie Solís H. Los sandbox regulatorios financieros como herramienta de control a la potestad regulatoria discrecional de los Estados: Una reflexión desde Latinoamérica. *Rev Chil Derecho Tecnol*. 2024; 13:e72293. <https://doi.org/10.5354/0719-2584.2024.72293>
- [22] Eichengreen B, Nguyen MT, Viswanath-Natraj G. Stablecoin devaluation risk. *Eur J Finance*. 2025; 31(11):1469–1496. <https://doi.org/10.1080/1351847x.2025.2505757>
- [23] DeBacker JM, Heim BT, Tran A. Importing corruption culture from overseas: Evidence from corporate tax evasion in the United States. *J Financ Econ*. 2015; 117:122–38. <https://doi.org/10.3386/w17770>
- [24] Li D, Han D, Weng T, et al. On Stablecoin: Ecosystem, architecture, mechanism and applicability as payment method. *Comput Stand Interfaces*. 2024; 87:103747. <https://doi.org/10.1016/j.csi.2023.103747>
- [25] OCEDIC. Guía para la Regulación ALA/CFT de Activos Virtuales y Proveedores de Servicios de Activos Virtuales en la Región del GAFILAT. 2023.
- [26] Benson V, Turksen U, Adamyk B. Dark side of decentralised finance: A call for enhanced AML regulation based on use cases of illicit activities. *J Financ Crime*. 2024. <https://doi.org/10.1108/jfrc-04-2023-0065>
- [27] Moura de Carvalho R, Inácio HC, Marques RPF. Ledger to ledger: Off- and on-chain auditing of stablecoin. *Int J Digital Account Res*. 2022; 22:129–61. https://doi.org/10.4192/1577-8517-v22_5
- [28] Martínez Boada J, Rejas Muslera RJ. Protección jurídica de Blockchain: Un análisis desde su funcionalidad y naturaleza jurídica según el ordenamiento jurídico español. *Rev Chil Derecho Tecnol*. 2024; 13:e73869. <https://doi.org/10.5354/0719-2584.2024.73869>
- [29] Arner DW, Buckley RP, Zetzsche DA, Veidt R. Sustainability, FinTech and Financial Inclusion. *Eur Bus Organ Law Rev*. 2020; 21(1):7–35. <https://doi.org/10.1007/s40804-020-00183-y>
- [30] FSB. Crypto-asset markets—Potential channels for future financial stability implications. Basel: FSB; 2018.
- [31] FATF (GAFI). Guidance for a Risk-Based Approach Virtual Currencies. París: FATF; 2014.
- [32] Pol RF. Anti-money laundering: The world's least effective policy experiment? Together with 125 years of anti-money laundering policy? *J Money Laund Control*. 2020; 23(2):383–404. <https://doi.org/10.1080/25741292.2020.1725366>
- [33] Chainalysis. The 2023 Geography of Cryptocurrency Report: Everything You Need to Know about Regional Trends in Crypto Adoption. 2023.
- [34] Chainalysis. The 2022 Geography of Cryptocurrency Report.
- [35] FATF (GAFI). Regulation of virtual assets. París: FATF; 2018.
- [36] Cuevas Contreras AJ. ¿Cuál es la naturaleza jurídica de las criptomonedas en Chile? *Derecho Público Iberoamericano*. 2023; 22:115–142. <https://doi.org/10.52611/rdpi.num22.2023.878>
- [37] UAF. Plan de supervisión con EBR de LA/FT/FP: resultados 2004 y énfasis y alcances 2025. Chile: Unidad de Análisis Financiero; 2025.
- [38] Banco Mundial. Guía manual para activos virtuales y proveedores de servicios de activos virtuales. 2022.
- [39] Consejo de Estabilidad Financiera (FSB). Regulaciones, supervisión y vigilancia de las actividades y mercados de criptoactivos. 2022.
- [40] Silva Irrázaval J, Ibáñez Morel F. Tratamiento tributario de los criptoactivos en Chile: certezas e incertidumbres. *Rev Derecho (Coquimbo)*. 2021; 28:e4598. <https://doi.org/10.22199/s07189753.2007.0002.00009>
- [41] Biblioteca del Congreso Nacional de Chile. Ley 21.521. Marco regulatorio para plataformas de financiamiento colectivo. 2023.
- [42] CMF. Ley Fintec: Avances en la Regulación de Criptoactivos. Chile: Comisión para el Mercado Financiero; 2023.
- [43] La Rosa Almenara MA. Tributación de criptomonedas y otros criptoactivos: análisis comparado. *THĒMIS-Revista de Derecho*. 2021; 79:193–214. <https://doi.org/10.18800/themis.202101.011>

- [44] Trujillo M, Cárdenas J, Paredes L, Ruiz A. Tributación de criptomonedas y otros criptoactivos: Análisis comparado. 2022. <https://doi.org/10.18800/themis.202101.011>
- [45] Gobierno de Argentina. Evaluaciones Nacionales de Riesgos de Lavado de Activos y de Financiación del Terrorismo (Versión Pública). 2022.
- [46] Lyons RK, Viswanath-Natraj G. What keeps stablecoins stable? *J Int Money Finance*. 2023; 131:102777. <https://doi.org/10.1016/j.jimonfin.2022.102777>
- [47] SBS. Activos virtuales y Proveedores de servicios de Activos virtuales: Diagnóstico situacional, legislación comparada y exposición a los riesgos de LA/FT en el Perú.
- [48] Compliance Latam. Perú | Criptomonedas y prevención del lavado de activos: se publica norma para la prevención de LAFT. 2024.
- [49] SBS. Resolución SBS N° 02648-2024. Perú; 2024.
- [50] FATF (GAFI). Updated Guidance for a Risk-Based Approach Virtual Assets and Virtual Asset Service Providers. 2021.
- [51] UAF. Informe Estadístico y de Tipologías. Chile: Unidad de Análisis Financiero; 2023.
- [52] Chainalysis. The Chainalysis 2024 Crypto Crime Report. 2024.
- [53] COREDO. Cryptobusiness registration in Argentina rules and process. 2024.
- [54] Moura de Carvalho R, Coelho Inácio H, Marques RP. An empirical analysis of tax evasion among companies engaged in stablecoin transactions. *J Risk Financ Manag*. 2024; 17(9):400. <https://doi.org/10.3390/jrfm17090400>
- [55] FATF (GAFI). Virtual Assets. 2024.
- [56] SBS. Determinants of Digital Financial Services Adoption: Evidence from Peru. 2024
- [57] Martínez Boada J, Rejas Muslera RJ. La protección jurídica de Blockchain: Un análisis desde su funcionalidad y naturaleza jurídica según el ordenamiento jurídico español. *Rev Chil Derecho Tecnol*. 2024; 13:e73869. <https://doi.org/10.5354/0719-2584.2024.73869>
- [58] Alvarez Larrondo FM. Entendiendo al Bitcoin y sus desafíos jurídicos y sociales. 2022.
- [59] GAFILAT. Guía sobre aspectos relevantes y pasos apropiados para la investigación de activos virtuales. 2021.
- [60] Trozze A, Kamps J, Akartuna EA, Hetzel FJ, Kleinberg B, Davies T, et al. Cryptocurrencies and future financial crime. *Crime Sci*. 2022;11(1):1. <https://doi.org/10.1186/s40163-021-00163-8>
- [61] UAF. Informe de Señales de Alerta Indiciarias de Lavado de Activos. Chile; 2022.
- [62] Eichengreen, Barry and T. Nguyen, My and Viswanath-Natraj, Ganesh, Stablecoin Devaluation Risk (May 26, 2023). WBS Finance Group Research Paper , Available at SSRN: <http://dx.doi.org/10.2139/ssrn.4460515>
- [63] SBS. Unidad de Inteligencia Financiera del Perú - Informes de Gestión. 2024.