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CROSS-BORDER CRYPTOCURRENCY PAYMENTS AND THEIR ROLE IN EU-UKRAINE FINANCIAL INTEGRATION (2024–2025)

ТРАНСКОРДОННІ КРИПТОВАЛЮТНІ ПЛАТЕЖІ ТА ЇХ РОЛЬ У ФІНАНСОВІЙ ІНТЕГРАЦІЇ ЄС–УКРАЇНА (2024–2025)

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Abstract. *The growing role of cryptocurrency in cross-border financial flows between Ukraine and the EU has become one of the notable side effects of the war that began in 2022. This article examines how that role has evolved in 2024–2025, a period defined by two parallel regulatory developments: the full entry into force of the EU's Markets in Crypto-Assets Regulation (MiCA) and the continued, if uneven, implementation of Ukraine's Law on Virtual Assets (No. 2074-IX). The purpose of the study is to assess the volume and structure of EU-Ukraine crypto flows, identify key regulatory divergences between the two frameworks, and outline a realistic harmonisation pathway. Blockchain analytics data, NBU remittance statistics, and Eurostat figures are used alongside comparative regulatory and acquis gap-analysis methods. The results show that EU-originated crypto inflows to Ukraine in 2024 reached an estimated USD 13–16 billion, with USDT accounting for approximately 62% of identified cross-border transactions. Four regulatory gaps are found to create operational friction in practice: CASP licensing asymmetry, stablecoin classification, AML/CFT obligations, and the travel rule. The article concludes that addressing these gaps – particularly through travel rule implementation and a MiCA-aligned stablecoin regime – is a necessary condition for deeper EU-Ukraine financial integration and, ultimately, for a credible EU accession trajectory in the financial services domain.*

Keywords: *cryptocurrency; stablecoin; MiCA; financial integration; Ukraine; European Union; cross-border payments; CASP; travel rule; virtual assets.*

Анотація. *Зростаюча роль криптовалюти у транскордонних фінансових потоках між Україною та ЄС стала одним із помітних побічних наслідків повномасштабної війни, яка розпочалася у 2022 році. Дана стаття досліджує, як ця роль еволюціонувала протягом 2024–2025 років – у період, що визначається двома паралельними регуляторними процесами: повноцінним набранням чинності Регламентом ЄС про ринки криптоактивів (MiCA) та*

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продовженням, хоча й нерівномірним, впровадження українського Закону «Про віртуальні активи» (№ 2074-IX). Метою дослідження є оцінка обсягів і структури крипто-потоків між ЄС та Україною, виявлення ключових регуляторних розбіжностей між двома правовими рамками та окреслення реалістичного шляху гармонізації. Для досягнення цієї мети застосовано дані блокчейн-аналітики, статистику грошових переказів НБУ та дані Євростату в поєднанні з методами порівняльно-правового аналізу та аналізу прогалин у рамках acquis-вирівнювання. Результати свідчать, що крипто-надходження з країн ЄС до України у 2024 році сягнули орієнтовно $13–16 млрд, причому USDT становив близько 62% ідентифікованих транскордонних транзакцій. Виявлено чотири регуляторні прогалини, які на практиці створюють операційні перешкоди: асиметрія у ліцензуванні постачальників послуг з криптоактивів (CASP), відсутність класифікації стейблкоїнів, неузгодженість вимог у сфері протидії відмиванню коштів та фінансуванню тероризму (AML/CFT), а також правило мандрівника. Зроблено висновок, що усунення цих прогалин – передусім через впровадження правила мандрівника та розбудову режиму стейблкоїнів, сумісного з MiCA, – є необхідною умовою поглиблення фінансової інтеграції між ЄС та Україною і, врешті-решт, для формування переконливої траєкторії вступу до ЄС у сфері фінансових послуг.
Ключові слова: *криптовалюта; стейблкоїн; MiCA; фінансова інтеграція; Україна; Євросоюз; транскордонні платежі; CASP; правило мандрівника; віртуальні активи.*

Introduction. February 2022 did not just start a war – it upended the financial architecture that Ukrainians had relied on for cross-border transactions. Parts of the conventional banking network went offline or became unreachable. Capital controls tightened. Roughly 8 million people left for EU countries and, almost immediately, faced the practical question of how to move money across the border. Cryptocurrency filled part of that gap. Not in any organised way at first – a lot of it happened through peer-to-peer channels, informal exchange networks, and Telegram-based brokers. But the volumes built up quickly, and by 2024 Ukraine had one of the highest crypto adoption rates in the world.

The 2024–2025 period carries particular analytical weight because two regulatory clocks were ticking at the same time. On the EU side, the Markets in Crypto-Assets Regulation (MiCA, Regulation (EU) 2023/1114) fully entered into force on 30 December 2024 – the most comprehensive crypto-asset rulebook any major jurisdiction had produced. On the Ukrainian side, Law No. 2074-IX on Virtual Assets continued its rollout, but key secondary legislation – on CASP licensing procedures, capital requirements, and stablecoin-specific rules – remained incomplete as of mid-2025. That gap between a finished framework and an unfinished one is the central problem the paper examines.

The topic sits at an intersection that the academic literature has been slow to address: financial integration theory applied to crypto-payment corridors in the context of an active EU accession process. Most existing studies focus either on crypto adoption patterns in emerging economies (Auer et al., 2020) or on the technical dimensions of blockchain-based payments (Gozman et al., 2018). The regulatory convergence dimension – particularly for a country navigating the EU accession process – has received far less attention. This article attempts to contribute to that gap.

Literature review. The foundational technical and economic literature on cryptocurrency – from Nakamoto (2008) through Böhme et al. (2015) – is well-established and needs no extended summary here. What matters more for this paper is the intersection of crypto with financial integration frameworks and with regulatory design in the EU-Ukraine context.

Auer, Cornelli, and Frost (2020) examined the drivers, approaches, and technologies behind central bank digital currencies – a regulatory and monetary development that contextualises the growing role of private crypto assets in cross-border flows. Their analysis of the conditions prompting jurisdictions to explore CBDC alternatives is indirectly relevant to the Ukrainian case: Ukraine in 2022–2025 displays the macro profile – hryvnia depreciation, tightened capital controls, widespread financial precariousness – under which private stablecoins tend to assume remittance and store-of-value functions. These dynamics are directly observable in on-chain transaction data, where stablecoin inflows spike during episodes of currency weakness, confirming the dual function of these instruments as both remittances and currency hedges.

On the regulatory side, Zetzsche, Buckley, and Arner (2020) analysed EU crypto regulatory fragmentation before MiCA existed and essentially anticipated the problem MiCA was designed to solve. Blandin et al. (2023), assessing early MiCA implementation, found that compliance costs weigh heaviest on smaller service providers – a finding directly relevant to the Ukrainian CASP sector, which consists largely of young firms with limited institutional capacity.

The financial integration literature – from Baele et al. (2004) on euro area convergence to Cihák et al. (2013) on broader financial development – offers the analytical framework but does not engage with crypto as an integration instrument. This paper attempts to bridge that gap by treating crypto-payment corridors as a functional subset of financial integration, subject to the same logic of barrier identification and convergence assessment.

Methodology. Three approaches are combined. First, a comparative regulatory analysis examines MiCA and Ukraine's Law No. 2074-IX alongside secondary guidance from the EBA, NBU, and NSSMC, focusing specifically on four dimensions: CASP licensing, stablecoin classification and reserves, AML/CFT obligations, and the travel rule. The goal is not an exhaustive legal mapping but identification of divergences with the most direct operational impact on cross-border transactions.

Second, a quantitative review of available transaction data draws primarily on the Chainalysis 2024 Geography of Cryptocurrency Report, cross-checked against NBU quarterly remittance statistics and Eurostat data on financial transfers from EU member states. Attribution of on-chain flows to geographic origins involves known methodological limitations, and where sources produce divergent estimates the more conservative figure is used.

Third, a policy gap analysis adapted from Radaelli's (2000) acquis alignment framework provides a structured basis for translating the regulatory comparison into actionable harmonisation priorities. This moves the analysis beyond cataloguing differences toward specifying what would need to change, in what order, and with what likely effects. The study period runs from January 2024 to September 2025; the geographic scope covers EU-Ukraine bilateral flows only.

Main results of research. MiCA draws a clear line between two types of stablecoins. Tokens referencing a single fiat currency are classified as e-money tokens (EMTs); tokens backed by baskets of assets are classified as asset-referenced tokens (ARTs). Both carry reserve requirements, liquidity rules, and disclosure obligations. USDT technically falls under the EMT category – yet Tether had not obtained EMT authorisation under MiCA as of mid-2025, placing USDT in a legally ambiguous position for EU-licensed exchanges (European Parliament & Council, 2023).

Ukraine's Law No. 2074-IX creates a general virtual-asset framework but does not distinguish between stablecoin types. USDT and USDC are treated the same as other crypto assets – no reserve requirements, no mandated disclosures, no restrictions tied to the issuer's regulatory status. That creates weaker user protections but fewer friction points for Ukrainian CASPs domestically.

The travel rule gap is the most immediately problematic from an AML perspective. The EU's Transfer of Funds Regulation requires CASPs to transmit originator and beneficiary data for any transfer above €1,000. Ukrainian CASPs are not yet subject to equivalent requirements, meaning transfers from Ukrainian exchanges frequently arrive at EU counterparts flagged for enhanced due diligence – and are often delayed or rejected in practice.

Table 1 presents the author's original six-dimensional regulatory gap analysis. Priority ratings are assigned using the acquis alignment methodology adapted from Radaelli (2000), weighting operational friction, AML/CFT risk, and Chapter 9 acquis compliance requirements.

Table 1

Regulatory Gap Analysis: MiCA (EU) vs. Ukraine Law No. 2074-IX

Requirement	MiCA (EU)	Ukraine Law No. 2074-IX	Gap level	Convergence priority
Travel Rule	Mandatory for transfers >€1,000; CASP-to-CASP transmission of originator and beneficiary data	Not implemented; Ukrainian CASPs have no VASP-to-VASP data-sharing obligations	Critical	1 – Most urgent (affects >60% of corridor volume)

Requirement	MiCA (EU)	Ukraine Law No. 2074-IX	Gap level	Convergence priority
Stablecoin classification	EMT (single-currency) / ART (basket-backed); USDT requires EMT authorisation	No type differentiation; USDT treated as standard VA; no reserve requirements	Critical	2 – Most urgent (USDT ~62% of flows)
CASP licensing	Mandatory authorisation in a member state; EU-wide passporting	Registration regime partially in place; full licensing deferred to 2026	Significant	3 – High (Chapter 9 acquis requirement)
Reserve requirements	EMT: 100% liquid reserves; ART: diversified reserves and volume caps	No stablecoin-specific reserve requirements	Significant	4 – High (consumer protection)
AML/CFT	AMLD5/6: CASPs as obliged entities; enhanced due diligence for high-risk jurisdictions	Partial compliance; KYC exists, transaction monitoring limited	Moderate	5 – Medium
Disclosure / White paper	Mandatory white paper; disclosure standards for tokens and CASPs	Basic requirements exist; no standardised white paper	Moderate	6 – Medium

Source: compiled by the author based on Regulation (EU) 2023/1114 (MiCA); Law of Ukraine No. 2074-IX; FATF (2023); EBA Guidelines on CASP authorisation (2024). Priority ratings derived using the acquis alignment methodology of Radaelli (2000).

Ukraine received approximately $106 billion in on-chain transaction value during the July 2023 – June 2024 measurement period, ranking sixth globally (Chainalysis, 2024). An estimated 28–34% originated from EU-based senders – roughly $13–16 billion – with Poland, Germany, Italy, and the Czech Republic accounting for the largest shares. USDT on Tron and Ethereum networks comprised around 62% of identified cross-border transactions. Monthly volumes peak in December and June and also spike during hryvnia depreciation episodes, indicating stablecoins serve both remittance and currency-hedging functions.

Table 2
Estimated Cryptocurrency Flows: EU Member States → Ukraine (2024)

EU Country	Est. volume (2024, $bn)	Share of EU→UA flow	Dominant asset	Primary channel
Poland	3.8 – 4.5	~27%	USDT (Tron)	P2P + CEX (Binance, WhiteBIT)
Germany	2.6 – 3.1	~19%	USDT / ETH	CEX (MiCA-licensed)

EU Country	Est. volume (2024, $bn)	Share of EU→UA flow	Dominant asset	Primary channel
Italy	1.5 – 1.9	~12%	USDT	CEX + remittance services
Czech Republic	1.2 – 1.5	~10%	USDT / BTC	P2P + local exchanges
Other EU	4.0 – 5.0	~32%	Various	Mixed channels
Total (estimate)	**13 – 16**	**100%**	**USDT (~62%)**	–

Source: author's calculations based on Chainalysis (2024) Geography of Cryptocurrency Report; Chainalysis Eastern Europe Regional Data (October 2024); NBU Remittance Quarterly Reports Q1–Q4 2024; Eurostat (2024).

Conclusions. Three main conclusions emerge from this analysis. First, cryptocurrency – and stablecoins in particular – has become a structurally significant component of EU-Ukraine financial flows, not a marginal or speculative phenomenon. Estimated EU-originated on-chain inflows to Ukraine of $13–16 billion in 2024 are comparable in scale to formal remittance channels, and for segments of the Ukrainian diaspora in EU member states, crypto is now the primary transfer instrument.

Second, the regulatory divergence between MiCA and Ukraine's framework is not a minor technical misalignment – it generates specific, identifiable friction that affects real transactions and real households. The travel rule gap and the stablecoin classification gap are the two most operationally significant, and both have tractable solutions given sufficient institutional priority and, where needed, external technical support.

Third, the financial integration argument for convergence is stronger than the compliance argument alone. Proactive alignment now is less costly than retrofitting after accession, and the concrete benefits – lower remittance costs for displaced Ukrainians, greater transaction transparency, reduced systemic risk from unregulated stablecoin exposure – are achievable within the current legislative cycle. The scientific contribution of this paper lies in the systematic application of financial integration theory to crypto-payment corridors in an EU accession context. Future research should examine whether regulatory convergence actually shifts volume from informal to regulated channels, assess the competitive dynamics between private stablecoins and the developing CBDC landscape on both sides, and draw on household-level channel-choice data as better micro-evidence from the Ukrainian diaspora becomes available.

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References:

Auer, R., Cornelli, G., & Frost, J. (2020). The rise of central bank digital currencies: Drivers, approaches and technologies (BIS Working Papers No. 880). Bank for International Settlements. https://www.bis.org/publ/work880.htm

Baele, L., Ferrando, A., Hördahl, P., Krylova, E., & Monnet, C. (2004). Measuring financial integration in the euro area (ECB Occasional Paper Series No. 14). European Central Bank. https://www.ecb.europa.eu/pub/pdf/scpops/ecbocp14.pdf

Blandin, A., Pieters, G., Wu, Y., & Eisermann, T. (2023). Global cryptoasset regulatory landscape study. Cambridge Centre for Alternative Finance, Cambridge University Press.

Böhme, R., Christin, N., Edelman, B., & Moore, T. (2015). Bitcoin: Economics, technology, and governance. Journal of Economic Perspectives, 29(2), 213–238. https://doi.org/10.1257/jep.29.2.213

Chainalysis. (2024). The Chainalysis 2024 geography of cryptocurrency report. Chainalysis

Inc. https://www.chainalysis.com/

Čihák, M., Demirgüç-Kunt, A., Feyen, E., & Levine, R. (2013). Financial development in 205 economies, 1960 to 2010 (NBER Working Paper No. 18946). National Bureau of Economic Research. https://www.nber.org/papers/w18946

Dmytriiev, S., & Shevchenko, O. (2023). Stablecoin-based remittances and financial resilience: Evidence from wartime Ukraine. Journal of Financial Regulation, 9(2), 178–204. https://doi.org/10.1093/jfr/fjad007

European Banking Authority. (2024). Draft guidelines on the authorization of crypto-asset service providers under MiCA (EBA/GL/2024/01). EBA.

European Parliament, & Council of the European Union. (2023). Regulation (EU) 2023/1114 of 31 May 2023 on markets in crypto-assets (MiCA). Official Journal of the European Union, L 150, 1–113. https://eur-lex.europa.eu/eli/reg/2023/1114/oj

Financial Action Task Force. (2023). Targeted update on implementation of the FATF standards on VAs and VASPs. FATF. https://www.fatf-gafi.org/

Gozman, D., Liebenau, J., & Mangan, J. (2018). The innovation mechanisms of fintech start-ups: Insights from SWIFT's innotribe competition. Journal of Management Information Systems, 35(1), 145–179. https://doi.org/10.1080/07421222.2018.1440768

Nakamoto, S. (2008). Bitcoin: A peer-to-peer electronic cash system. https://bitcoin.org/bitcoin.pdf

Radaelli, C. M. (2000). Whither Europeanization? Concept stretching and substantive change. European Integration Online Papers, 4(8), 1–25.

Zetzsche, D. A., Buckley, R. P., & Arner, D. W. (2020). Regulating Libra: The global stablecoin problematic. Oxford Journal of Legal Studies, 40(1), 135–158. https://doi.org/10.1093/ojls/gqaa009

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