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**TACKLING THE ILLICIT USE OF
CRYPTOCURRENCY: A COMPARATIVE
STUDY OF THE FEDERAL RESERVE,
THE EUROPEAN CENTRAL BANK,
AND THE BANK OF ENGLAND**

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TABLE OF CONTENTS

1	<i>Abstract & Keywords</i>	4
1.1	Abstract	4
1.2	Keywords	4
2	<i>Introduction</i>	5
2.1	Research Question	5
2.2	Research Scope and Limitations	5
2.3	Objectives	6
2.4	Methodology	6
3	<i>Literature Review</i>	9
3.1	Illicit Use of Crypto Asset	9
3.2	The Cryptocurrency Phenomenon	10
3.3	Central Bank Mechanisms for Combating Financial Crime	12
3.4	Constraints on Central Bank Authority over Crypto Assets	14
4	<i>Central Bank Institutional Analysis</i>	15
4.1	The European Central Bank	15
4.2	The Federal Reserve	19
4.3	The Bank of England	23
5	<i>Comparative Analysis</i>	28
5.1	Criterion 1: Regulatory Framework and Legal Authority	28
5.2	Criterion 2: AML Requirements for Crypto Firms	30
5.3	Criterion 3: Central Bank Digital Currencies	31
5.4	Key Findings	33
5.4.1	Points of Convergence	33
5.4.2	Points of Divergence.....	33
5.4.3	Explanatory Factors	34
5.4.4	Benchmark Scorecard.....	36
6	<i>Conclusions</i>	38
7	<i>Bibliography</i>	40

LIST OF FIGURES

Figure 1. Benchmark Scorecard.....	36
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1 Abstract & Keywords

1.1 Abstract

This dissertation examines how three of the world's most systemically important central banks – the European Central Bank (ECB), the Federal Reserve (Fed), and the Bank of England (BoE) – regulate cryptocurrency to tackle illicit use. Using doctrinal legal analysis together with International Political Economy theory, the study identifies a key structural similarity: none of the three institutions directly supervise crypto asset service providers (CASPs), creating a shared mandate gap. Despite this shared constraint, the three central banks have adopted significantly divergent regulatory responses. The European Union leads with comprehensive supranational legislation and institutional consolidation, establishing the most stringent regulatory framework. The United Kingdom occupies an intermediate position as it implements mandatory registration with planned full authorisation by 2027, and meeting FATF Travel Rule standards. The United States is the most fragmented, with authority dispersed across three agencies as well as not have any federal licensing requirements and the prohibition of central bank CBDC development. Applying Susan Strange's structural power framework and Bradford's Brussels Effect, this analysis highlights that these divergences reflect underlying political economy factors rather than varied degrees of institutional commitment to combating illicit crypto finance. The study contributes to understanding how structural power dynamics, institutional capacity, and strategic positioning shape regulatory responses to modern day financial crime challenges, with serious implications for global financial governance and the future architecture of digital asset regulation.

1.2 Keywords

Cryptocurrency, Illicit finance, Anti-money laundering, Central banks, Financial governance, Political economy, Regulatory divergence

2 Introduction

2.1 Research Question

This dissertation is guided by a central research question:

How do the three most systemically important central banks (the European Central Bank, the Federal Reserve, and the Bank of England) differ in their regulatory approaches to tackling illicit use of cryptocurrencies, and what political economy factors explain these divergences?

The rapid expansion of crypto assets has given rise to an ever-evolving challenge facing the global financial system. The pseudonymous nature of cryptocurrencies along with their borderless transferability and operation outside traditional banking infrastructure has made them attractive instruments for illicit financial activity, including money laundering, terrorist financing, and sanctions evasion. While illicit financial transactions represent a minority of overall crypto activity, the values in absolute terms are significant, and the structural characteristics of blockchain technology create challenges that conventional regulatory frameworks were not designed to tackle.

As the preservers of monetary and financial stability, central banks find themselves at the forefront of this challenge, even though their mandates were created long before digital assets existed. The main contribution of this study is to demonstrate that these divergences are not just random variations or the result of differing institutional competence, but instead reflect fundamental differences in political economy structures, specifically surrounding the EU's supranational legislative capacity, the US's institutional fragmentation that is deeply rooted in decades of financial industry lobbying, and the UK's post-Brexit strategic positioning.

This study will compare the three institutions' regulatory frameworks, anti-money laundering and counter terrorist financing (AML/CFT) requirements, and Central Bank Digital Currency (CBDC) strategies through a doctrinal legal and International Political Economy lens, applying Susan Strange's structural power framework and Bradford's Brussels Effect to shed light on why these divergences exist.

2.2 Research Scope and Limitations

This dissertation examines regulatory approaches to the illicit use of cryptocurrencies, defined as the utilisation of digital assets in unlawful economic transactions including money laundering, terrorist financing, and sanctions evasion. Even though illicit transactions represent

a small percentage of total cryptocurrency trading, the absolute dollar amounts are significant, with approximately \$72 billion of unlawful activities annually for Bitcoin alone, warranting focused regulatory attention (Khan et al., 2024).

It is important to acknowledge specific limitations. Firstly, unlike the United States and the UK, the ECB and the EU do not have a single FATF mutual evaluation as a bloc. Instead, the ECB's assessment draws on individual EU member state reports, reflecting the unique architecture of the ECB/EU framework. Secondly, the regulatory landscape for cryptocurrency is rapidly evolving. This analysis captures the global state as of May 2026, with significant recent developments noted where relevant, including the US SEC-CFTC Memorandum of Understanding (March 2026) and the UK's planned FSMA regime (October 2027). Finally, this study focuses on three major central banks in developed economies and does not examine regulatory approaches in emerging markets or smaller jurisdictions.

2.3 Objectives

This comparative study is guided by the following objectives:

- To identify and outline the regulatory frameworks and legal authority the European Central Bank, the Federal Reserve, and the Bank of England in relation to crypto asset regulation and AML/CFT compliance.
- To analyse each central bank's specific measures for addressing the illicit use of crypto assets, including AML requirements, CASP supervision, and Travel Rule implementation.
- To compare the similarities and differences among the three institutions' approaches through a structured comparative analysis benchmarked against FATF standards.
- To evaluate the effectiveness of each institutions regulatory approach and assess the extent to which jurisdictional fragmentation creates opportunities for regulatory arbitrage in the illicit use of crypto assets.

2.4 Methodology

This study adopts a qualitative research approach that combines doctrinal legal analysis with an International Political Economy (IPE) theoretical framework. The doctrinal analysis provides the legal groundworks necessary to describe each central bank's mandate, supervisory authority, and regulatory obligations clearly. Only relying on a doctrinal approach does not explain why these frameworks differ, nor what the differences mean for governance of illicit crypto finance globally. Therefore, IPE theory is utilised alongside doctrinal analysis to aid the

interpretation of political economy forces that cause and sustain the divergences identified via legal comparison (Zetzsche, Buckley and Arner, 2020).

An important methodological strength enhancing this study is its reliance on primary source material rather than secondary interpretation. This study examines official legal texts including the EU's Markets in Crypto-Assets Regulation (MiCA), the Transfer Funds Regulation, the United State's Bank Secrecy Act, FinCEN guidance documents, the UK's Financial Services Act 2012, and the Money Laundering Regulations. Additionally, primary institutional guidance from the ECB, Fed, and BoE such as official reports, speeches, consultation documents, and regulatory notices, provides direct and clear evidence of institutional positioning and regulatory intent.

This direct engagement with primary documentation ensures strong analytical credibility. By grounding the findings in authoritative sources rather than secondary interpretation, this dissertation avoids the irregularities that arise when regulatory frameworks are explained via third-party analysis. This methodology allows for accurate identification of divergences between institutions rather than relying on filtered or interpreted sources.

The institutional analysis examines all three central banks using a consistent internal structure applied identically across each institution to ensure clear comparability. These features include analysis of each bank's mandate and legal authority, AML/CFT frameworks, and CBDC and technology responses

The comparative element will follow the functional method of comparative law, as explained by Zweigert and Kötz (1998), which states that in-depth comparisons are solely possible between legal provisions or institutional arrangements that perform equivalent functions across different systems. Therefore, the ECB, the FED, and the BoE are not being compared as generic institutions, but rather by their shared functional ability as regulators of the financial system in relation to AML/CFT compliance for crypto assets. A benchmark scorecard will be utilised to evaluate the performance of each institution against FATF Recommendations. The FATF has been selected because all three jurisdictions are member states that are formally committed to implementing standards, providing a binding and externally validated reference point. The IPE dimension draws on two main theoretical contributions: Susan Strange's (1988) structural power framework and Bradford's (2020) Brussels Effect. These frameworks are utilised interpretively to help explain the political economy factors that have produced the divergences identified through legal comparison, highlighting why the world's most influential central

banks have different positions and perspectives on the governance of illicit crypto finance internationally.

3 Literature Review

3.1 Illicit Use of Crypto Asset

The illicit use of crypto-assets refers to the utilisation of digital assets in unlawful economic transactions including laundering money, payments for goods traded on the dark web, fraud or sanctions evasion (Europol, 2021). Illicit financial flows more broadly refer to the “cross border transfer of money or assets connected with some unlawful activity” (Musselli and Bürgi Bonanomi, 2020).

While the use of cryptocurrencies for criminal activities, as stated in a Europol report, represents a small share of the total cryptocurrency economy, and illicit crypto flows remain comparatively less than criminal activity in traditional financial systems, the unique characteristics of blockchain technology and the rapid evolution of crypto markets warrant a focused regulatory examination (Europol, 2021).

Understanding the difference between the two dominant types of illicit finance, money laundering and terrorist financing, helps explain regulatory design choices. Money laundering, formally defined by the 1988 United Nations Vienna Convention Article 3.1 as: “the conversion or transfer of property, knowing that such property is derived from any offense(s), for the purpose of concealing or disguising the illicit origin of the property” (United Nations Office on Drugs and Crime, n.d.). It follows a circular pattern: funds are generated illicitly, then laundered back to the originator. Terrorist financing, on the other hand, follows a linear pattern where funds are raised and then transferred to support terrorist groups and their operations (United Nations Office on Drugs and Crime, n.d.). These structural differences create divergent regulatory needs. Money laundering prevention emphasises the traceability of transactions and beneficiary identification, while terrorist financing prevention focuses on monitoring the flow of funds and originator verification.

Cryptocurrencies complicate both challenges. The blockchain technology that provides the backbone for crypto-assets, with its identity flexibility, transactional pseudonymity, cross-border transferability, and lack of deterrence, allows illicit actors to exploit both money laundering and terrorist financing operations (Khan et al., 2024). This technological reality creates a shared regulatory constraint across all three jurisdictions examined in this study. All three central banks must address the common problem of how to trace transactions in a pseudonymous system, while pursuing divergent policy objectives.

The international response to these challenges occurs within AML and CTF frameworks, coordinated globally through the Financial Action Task Force (FATF), which establishes standards designed to identify, prevent and disrupt illicit financial flows (Financial Action Task Force, 2025). Yet as the study shows, institutional implementation of these standards diverges significantly despite the general consensus on the underlying threat.

Understanding the magnitude of illicit financial activity is vital for contextualising the role that crypto-assets play within the broader financial crime landscape. Although it is difficult to find an exact value that represents the amount of funds linked to financial crime and illicit financial flows, organisations like the UK National Crime Agency and the United Nations present estimations regarding the sheer value associated with this type of criminal activity.

Global illicit financial flows are estimated at between \$800 billion and \$2 trillion US dollars annually, amounting to roughly 2-5% of global GDP (United Nations Office on Drugs and Crime, n.d.). Within the UK specifically, the National Crime Agency estimates that more than £100 billion flows annually through money laundering schemes operating in or through the country, including those involving UK-registered corporate structures. Between November 2021 and December 2024, UK authorities seized a total of £20 million in combined cash and crypto assets (National Crime Agency, 2025).

Bitcoin, which dominates the illicit cryptocurrency use, accounts for approximately “\$72 billion in unlawful activities per year” (Khan et al., 2024). Even though it may only represent a minority of total financial crime, this large absolute value is a key reason for legitimate regulatory concern and enforcement attention.

3.2 The Cryptocurrency Phenomenon

The concept of digital assets and cryptocurrencies stem from the broader idea of tokenization. An academic journal defines tokens as legally recognised representations of a share of an asset, a set of permissions, or claims held by the token’s bearer (Van der Linden & Shirazi, 2023). This digital representation of value can then be transferred or traded within a network. Contemporary financial systems increasingly depend on digital tokens, from the authorisation of electronic payments to dematerialised securities. Cryptocurrencies constitute a further evolution of this phenomenon. These digital tokens are secured through cryptography and recorded on distributed ledger technology (DLT) and are neither issued nor guaranteed by centralised intermediaries.

According to Article 3(2) of the EU's Markets in Crypto-Assets Regulation (MiCA), a crypto asset is defined as "a digital representation of value or rights that can be transferred and stored electronically, using distributed ledger technology or similar technology" (European Parliament and Council, 2023). In contrast to fiat currency, crypto-assets are not backed by a central bank or public authority. Many sceptical stakeholders from the financial services sector state that crypto-assets are "assets that are yet to be defined and have an unclear legal status" (Van der Linden & Shirazi, 2023), which has led to fragmented regulations across jurisdictions, contributing to regulatory inconsistencies and enforcement gaps.

Bitcoin, the world's most well-known digital asset, was introduced in 2009 in the aftermath of the global financial crisis by the pseudonymous Satoshi Nakamoto (Nakamoto, 2008). Designed to provide an alternative payment method, Bitcoin's peer-to-peer electronic cash system enables online transactions without reliance on trust and traditional intermediaries. The timing of Bitcoin's emergence was rather fitting, coming in a period where widespread instability and distrust in traditional centralised financial institutions and monetary authorities was on the rise (European Central Bank, 2012).

As seen in the journal article 'A systematic review of blockchain' (Xu et al. 2019), many researchers believe that blockchain research is still in its infancy. The technology is still considered highly important, however, due to its decentralised, transparent and secure features that allow for transactions to be recorded immutably on its system (Shaqif, 2024). Crypto users transact through digital wallets identified by cryptographic codes rather than personal identity. This feature creates pseudonymity rather than full anonymity. Transactions on the platform are irreversible and can be performed irrespective of borders, avoiding the need for traditional banking infrastructure.

Due to a clear lack of intrinsic value and sovereign backing for crypto-assets, its price movements are heavily influenced by speculative demand and perceived scarcity (Shaqif, 2024). Known for its volatility, financial stability and consumer protection are obvious regulatory concerns for central banks.

For regulatory purposes, distinction between different crypto-asset types is critical. Cryptocurrencies like Bitcoin and Ethereum act as an alternative to traditional fiat currencies, although they are considered "highly volatile and unpredictable" (Van der Linden & Shirazi, 2023). Stablecoins, pegged to another stable asset like gold or major fiat currencies, were created to provide more stability and address the high price volatility associated with regular

cryptocurrency (Mita et al., 2020). However, with stablecoins come a range of other issues regarding how they “dominate” illicit money movements according to a news article published in the Financial Times (Asgari, 2026). As explained in the institutional analysis of this study, central banks’ response to these challenges includes the development of CBDCs as state-issued alternatives to private cryptocurrencies.

Although cryptocurrencies were initially perceived to be financial innovation tools and harness decentralisation, their pseudonymous nature and borderless architecture have in essence facilitated illicit activity, such as money laundering, terrorist financing, ransomware payments and sanctions evasion. The challenge facing monetary authorities is complex, having to balance technological innovation with financial integrity and overall stability. This responsibility lies heavily on three of world’s most powerful and influential central banks: the ECB, the Fed, and the BoE.

Central banks’ supervisory mandates, which were established long before cryptocurrency existed, assume authority over regulated financial institutions. The shared structural constraint results in an identical regulatory gap across all three central banks examined in this study. Yet, as the institutional analysis of this study demonstrates, their responses to this gap differ greatly, showing how political economy factors, more so than technical capacity or commitment to AML/CFT standards, influence regulatory outcomes.

3.3 Central Bank Mechanisms for Combating Financial Crime

Central banks possess numerous mechanisms to combat the illicit use of cryptocurrencies. Central banks exercise a direct supervisory position, overseeing commercial bank and financial institution activities within their jurisdiction, requiring strong anti-money laundering and counter-terrorist financing compliance for crypto related transactions (Financial Action Task Force, 2021). Central Banks also participate on a coordinated international level, through the FATF, which has established standards for combating money laundering and terrorist financing in crypto markets that have been agreed and recognised internationally (Financial Action Task Force, 2021). The FATF provides continuously updated guidance on virtual assets and virtual asset service providers (VASPs), serving as a foundational reference for central banks to utilise when developing domestic crypto regulation. The Bank for International Settlements (BIS) enables cross-border coordination among central banks on financial stability and illicit flow monitoring. One of their main objectives is to provide the harmonious, safe and efficient transfer of money across borders (Bank for International Settlements, 2020).

Central banks are beginning to develop CBDCs as a strategic tool to reduce their reliance on unregulated private cryptocurrencies. This enables them to improve transaction monitoring and overall traceability, by providing a trusted and “safe means of digital payment” (Bank for International Settlements, 2020). A survey conducted in 2020 by the Bank of International Settlements, discovered that 80% of central banks were engaged in the investigation and research of CBDCs, with the BoE, the ECB and the FED along with other central banks, coming together to coordinate and consolidate this research. CBDCs would operate within the confines of the central bank, enabling constant monitoring and easier identification of suspicious activity compared to pseudonymous blockchain systems. CBDCs would incorporate AML/CFT compliance as a design feature. However, issues have come to the fore regarding the impact these CBDCs may have when it comes to monetary policy decisions and traditional central bank operations (Kahn, Singh and Alvazir, 2022).

Beyond institutional supervision and CBDC development, central banks have begun implementing regulatory frameworks for stablecoins and other digital assets to monitor and tackle these financial instruments that have the potential to undermine monetary sovereignty and payment system stability (Malloy and Lowe, 2021; European Central Bank, 2021). These frameworks establish capital requirements, reserve backing rules, and sharp monitoring of transactions, designed to prevent unlawful activity while maintaining financial system integrity.

A modern trend sees central banks coordinating with financial intelligence units (FIUs) and using blockchain analysis services to “assist with their supervision” and to trace illicit financial flows across crypto networks (Financial Action Task Force, 2021). The integration of these modern technologies is vital as they can help central banks to identify suspicious transaction patterns, strengthen money laundering detection and terrorist financing schemes.

However, these mechanisms display a key structural constraint. Central banks can only supervise what falls within their regulatory scope. They exercise direct authority over commercial banks and regulated financial institutions, but not over CASPs, which are the very entities most directly involved in facilitating illicit crypto transactions. This shared regulatory gap, as demonstrated in the following analysis, exists not as a technical oversight but as a structural feature of central banking itself. Comprehending how each jurisdiction has responded to this shared challenge reveals political economy factors that shape modern financial regulation.

3.4 Constraints on Central Bank Authority over Crypto Assets

Central banks face significant constraints in tackling illicit cryptocurrency use. The fundamental constraint is structural. Central banks' supervisory authority is confined to financial institutions and regulated markets within their jurisdictions, excluding peer-to-peer cryptocurrency transactions and decentralised finance (DeFi) platforms operating outside their regulatory perimeter. As stated in a report by the European Parliament Policy Department, the current cross-border coordination between supervisory authorities and law enforcement agencies "leaves much to be desired" (Houben and Snyers, 2020). This shared mandate boundary creates a regulatory gap, leaving room for regulatory arbitrage opportunities. Illicit actors can exploit the gaps between jurisdictions by routing their activities through less regulated jurisdictions (Bank for International Settlements, 2020).

Although organisations like the Financial Action Task Force establish international standards to coordinate global regulatory responses, implementation across jurisdictions remains inconsistent resulting in central banks facing constraints when it comes to combatting financial crime. As noted in a joint report by Ernst & Young's and OMFIF, all central bank mandates must be "clear-cut and avoid fuzziness" particularly when combatting an issue such as financial crime that has numerous cross-border repercussions into countries and regions with different jurisdictions and standards (Marsh et al., 2020, p. 40).

The speed of blockchain-based transactions (often executed within seconds or minutes) poses significant challenges to traditional regulatory frameworks. By the time central banks develop and implement new policy frameworks and regulations to contain crypto, the technology has likely evolved to create new loopholes. Therefore, central banks must adapt crypto regulation continuously in order to keep up with these new technological innovations (Bank for International Settlements, 2020). As these crypto-assets allow for instant transfer of value across borders, this creates prime opportunities for illicit actors to move funds through different jurisdictions before regulatory authorities can intervene (Financial Action Task Force, 2021).

Importantly, these constraints are identical across all three central banks. All three face the same mandate boundary, technological speed challenges, cross-border enforcement difficulties, and the same international standards coordination issues. However, as the analysis that follows highlights, their regulatory responses diverge significantly. This suggests that institutional differences drive regulatory outcomes rather than technical capacity or commitment to international standards.

4 Central Bank Institutional Analysis

4.1 The European Central Bank

The European Central Bank's primary objective is to maintain price stability through its monetary policy. As the central bank for all eurozone countries, they must make sure that inflation remains low, controlled and predictable (European Union, 2016). The ECB's Governing Council decides on monetary policy strategy, to which they consider that price stability is best served by maintaining 2% inflation over the medium term (European Central Bank, 2025a). Its secondary objectives include supporting financial stability and ensuring smooth operation of payment systems.

The ECB has direct supervisory authority over credit institutions under the Single Supervisory Mechanism (SSM) established in 2014, that comprises of both the ECB and national supervisory authorities, as they ensure the safety and stability of the European banking system (European Central Bank, 2026). The ECB's oversight of payment systems functions leads to their indirect influence on crypto regulation. The SSM allows for the central bank to have supervisory power over commercial banks, but not over CASPs. Therefore, AML/CFT supervision does not fall within the ECB's formal mandate, as stated in a speech by Frank Elderson (Member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB); "the ECB does not and cannot have any mandate to exercise anti-money laundering and countering the financing of terrorism (AML/CFT) supervision" (European Central Bank, 2022, para. 3). As a result, the ECB's influence over crypto AML remains indirect, stemming from its oversight of banks that interact with crypto firms under the SSM rather than through any direct CASP supervision.

EU AML/CFT supervision is the primary responsibility of national authorities that are coordinated by the European Banking Authority (EBA). Prior to 2026, the EBA was the primary EU-level AML/CFT coordinator, as they undertook a "leading, coordinating and monitoring role at Union level to prevent the use of the financial system ... for money laundering or terrorist financing abuses of the financial sector" (European Parliament and Council of the European Union, 2019, Recital 14)(EBA, n.d.). Through their European Single Rulebook for EU banks, the EBA worked to ensure that financial institutions and their supervisors effectively applied AML/CFT controls across the eurozone. Despite the EBAs coordination role, AML supervision in practice across Europe remained fragmented at national

level, as seen on many occasions where fragmentation and failures in the application of the EBA legal frameworks posed serious threats to the EU's financial system security (European Commission, 2019, para. 19).

However, to close this gap, as of the 1st of January 2026, the EU began its move away from the fragmented national AML/CFT supervision mandate that the EBA coordinated, towards a more centralised model now anchored by the Authority for Anti-Money Laundering and Countering the Financing of Terrorism (AMLA) (European Banking Authority, 2026). The new AML authority will now directly supervise 40 of the most complex high-risk financial institutions operating in the EU. A set of harmonised AML/CFT rules will be in effect which will allow for a robust centralised supervisory power at EU level (EBA AMLA AML/CFT transition factsheet, 2026). The AMLA, using a hybrid supervisory model of both direct and indirect supervision, will also oversee non-financial sector entities to ensure a consistent application of rules across industries. Due to this data-driven approach and harmonisation of standards in the EU, the era of jurisdictional variation that financial institutions once experienced, is now narrowing significantly.

A key component of the EU's AML/CFT framework for crypto is the Transfer of Funds Regulation (Regulation (EU) 2023/113, 2023), which came into force in December 2024, implementing the FATF Travel Rule across the EU. In contrast to other major jurisdictions, the TFR applies a zero threshold, therefore all crypto asset transfers irrespective of their value, require the collection, verification, and transmission of both originator and beneficiary information. This zero-threshold approach exceeds the FATF Recommendation 16's standard of EUR/USD 1,000 and demonstrates the strictest Travel Rule implementation globally.

An evolution from fragmented national supervision under the EBA toward the AMLA's centralised framework highlights a broader dynamic in European integration. The fractured supervision that the AMLA intends to fix, is aptly described in a report published by Ernst & Young; "Imagine a sprawling city where numerous law enforcement agencies operate in isolation, each with its own rules and methods – Now, picture a high-tech command centre that brings all these agencies together, providing a unified strategy and state-of-the-art technology to boost coordination and crack down on crime more effectively" (Delgado and Schmitz, 2025, para. 1).

This is a significant move forward. Historically, EU member states have openly worked together when it comes to monetary sovereignty, evidence of which is embodied by the ECB

and the Euro. However, on the topic of supervisory sovereignty, EU countries have acted in a more reluctant and individual manner. As previously mentioned, the FATF has developed a set of common standards and promoted coordination between national authorities, however, major disparities remained due to differing degrees of enforcement according to independent countries institutional capacity, political commitment and supervisory culture (European Parliament, 2025). As clearly outlined in a European Council timeline on EU action against money laundering and terrorist financing, there has been a decade long gap between recognising AML fragmentation and actually creating and implementing AMLA, highlighting a difficult and lethargic enforcement process, persuading EU member states to cede supervisory sovereignty (Council of the European Union, 2025). It is important to note that this perceived slow progress is largely down to the EU's architecture. This reflects the EU's "constitutional and institutional framework" which imposes limitations on the conferral of powers to agencies (like the AMLA for example), from the principles of conferral, institutional balance and democratic legitimacy (Lo Schiavo and Türk, 2016). These principles constrain fast and efficient decision-making in the European Union.

The introduction of the AMLA means that these once "divergent national approaches" are no longer, and the AMLA's plans to promote convergence in national AML/CFT supervision are being put in action (AMLA, 2025).

Beyond supervisory reform, the ECB has also responded to the digitalisation of money through its introduction of the digital euro project. As part of the ECB's strategic response to the rise of private crypto assets, is the development of a retail CBDC which serves as a digital equivalent to cash. Building on the preparation phase that ran from November 2023 to October 2025, the ECB's Governing Council decided to progress its technical readiness and support the legislative process, with the possibility of a digital euro issuance as early as 2029 (European Central Bank, n.d.). This project is especially relevant to the illicit use of crypto assets with the ECB embedding AML/CFT compliance as a core design requirement. Payment service providers would only be able to access online transactions of the digital euro to the extent required to comply with existing EU law, including AML regulations. The ECB is also exploring pseudonymisation, hashing, and message encryption to achieve this privacy-by-design approach (European Central Bank, 2025b). This approach intends to combine two contrasting imperatives: protecting user privacy while ensuring transaction traceability to comply with AML obligations. The inclusion of strict privacy features such as anonymous

offline transactions and no ability for the Eurosystem to link transactions with individuals, would be balanced with standard AML/CFT compliance checks performed by intermediaries whenever users fund or defund their digital euro wallets (KPMG, 2026). The ECB views the digital euro not merely as an experimental payment innovation, investing heavily in its development with first issuance costs estimated at approximately €1.3 billion (European Central Bank, 2025c), but as a strategic instrument to protect European monetary sovereignty and provide a state-backed trusted alternative to pseudonymous private crypto.

4.2 The Federal Reserve

The Federal Reserve's dual mandate originates from the Federal Reserve Act, instructing the FED to conduct monetary policy "so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates" (Federal Reserve Board, 2021, para. 1). The decisions that directly affect the dual mandate of maximum employment and price stability are made at meetings involving the Federal Open Market Committee (FOMC). The FOMC determines that low and stable inflation at 2% per year is the optimal scenario in order to achieve both parts of the dual mandate (Federal Reserve Board, 2021).

The FED's supervisory authority of financial institutions and oversight of the banking industry in the USA, falls under the Bank Holding Company Act (BHCA) of 1956. The act gives the FED broader regulatory powers over bank holding companies (Mahon, 2013). However, the FED does not hold primary crypto AML/CFT supervisory authority, as the BHCA does not extend to crypto as CASPs are not considered bank holding companies, therefore are not covered and subject to prudential regulation (Bank for International Settlements, 2025).

The Financial Crimes Enforcement Network (FinCEN) has the highest level of control and influence when it comes to AML/CFT regulation, under the Bank Secrecy Act (BSA). FinCEN sits within the US Treasury Department, and its mission is to "safeguard the financial system from illicit activity" (Financial Crimes Enforcement Network, n.d.). By combatting money laundering and terrorism financing, FinCEN wishes to maintain the national security of the USA. Under the BSA, FinCEN implements regulation on money services businesses (MSBs) (Financial Crimes Enforcement Network, 2011). The 2013 "Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies" document establishes how the BSA applies to virtual currencies. This official document states that while users of virtual currencies are not considered MSBs under FinCEN's regulations, administrators and exchangers of cryptocurrencies are considered MSBs. Therefore, those administrators and exchangers of virtual currency are subject to MSB regulations that include registration, reporting and recordkeeping (Financial Crimes Enforcement Network, 2013).

Although FinCEN has applied the BSA on virtual currency administrators, this act is not dedicated to crypto legislation. FinCEN only offers guidance surrounding the application of the BSA to some virtual currency activities (Financial Crimes Enforcement Network, 2013). Thus, FinCEN's crypto AML supervision relies on guidance that is two full steps removed from crypto regulation itself. FinCEN's guidance interprets rules found in the Code of Federal

Regulations, which in turn interpret regulations derived from the BSA, a 1970 law designed for traditional currencies (Van Valkenburgh, 2017). The lack of dedicated crypto legislation is a structural weakness, resulting in gaps surrounding DeFi platforms, and unhosted wallets that are not subject to AML/CFT obligations (Financial Action Task Force, 2026).

More gaps appear in FinCEN's crypto regulatory framework in the context of the criminal transmittal of funds through the "Travel" rule. The US travel rule for crypto states that only the transfer of funds that are equal to or greater than \$3,000 are subject to providing a transmittal order, consisting of in-depth information about the monetary transaction, to a relevant financial institution (Financial Crimes Enforcement Network, 2010). This figure is significantly above the FATF Recommendation 16's standard of EUR/USD 1,000. A Notice of Proposed Rulemaking to reduce the cross-border threshold to \$250 was published in 2020 but has yet been finalised (Federal Reserve Board, 2020).

Unlike the European unified crypto asset classification and supervisory framework (MiCA), the US does not have a clear equivalent. Regulatory bodies like the Commodity Futures Trading Commission (CFTC) and the Securities and Exchange Commission (SEC) have jurisdiction over a crypto firm depending on how the underlying asset is classified. The CFTC operates as a regulatory authority supervising the US derivatives market (Commodity Futures Trading Commission, n.d. a). The SEC has broad authority over all aspects of the securities industry in America, with their mission being to protect investors and maintain fair and orderly markets (Securities and Exchange Commission, n.d.). The CFTC has authority to regulate commodities under the Commodity Exchange Act (CEA) (Commodity Futures Trading Commission, n.d. b) while the SEC has statutory authority to regulate securities. Issues have arisen due to both agencies' divergent pursuits of regulatory enforcement over cryptocurrencies to which they believe to be within their jurisdiction. This of course leaves a grey area between commodity and security regulation, as "for decades, regulatory turf wars, duplicative agency registrations, and different sets of regulations between the SEC and CFTC have stifled innovation and pushed market participants to other jurisdictions" (U.S. Securities and Exchange Commission, 2026) (Commodity Futures Trading Commission, 2026). The US crypto industry was therefore fragmented, weak and uncoordinated leading to a lack of supervision of crypto firms.

Recent developments, however, suggest a more coordinated approach is coming, albeit through a joint initiative rather than actual legislation. The CFTC and SEC jointly announced on March 11th, 2026, a landmark Memorandum of Understanding between the agencies regarding a new

era of harmonisation and commitment from both agencies to co-deliver clear rules and regulations surrounding crypto assets (U.S. Securities and Exchange Commission, 2026). Unlike the EU's AMLA which is grounded in primary EU legislation (2024/1620) (European Union, 2024), and therefore binding on all EU member states, the US harmonisation initiative relies on this interpretive MoU that doesn't carry any real statutory force and is vulnerable to political reversal. Due to its administrative nature, the MoU is only as durable as the political alignment between both the CFTC and SEC (U.S. Securities and Exchange Commission, 2026).

Susan Strange's idea of structural power is defined as "the power to shape and determine the structures of the global political economy within which other states, their political institutions, their economic enterprises and their scientists and other professionals have to operate" (Shukla, 2022). Through Strange's structural power framework, it's clear that the US possesses great relational power over global crypto flows, through dollar dominance and sanctions. However, its structural power to set binding domestic rules is conflictingly constrained by its own institutional architecture.

The FED's limited and background role in tackling the illicit use of crypto through AML, is seen not as a failure of ambition or intent, but actually as a by-product of the US financial regulation framework. The US financial regulatory system has long been described as "fragmented", highlighting not only large gaps in authority but also overlapping and duplicative authority (Congressional Research Service, 2023). Over time, industry interests have dictated how federal oversight frameworks were established, which has led to this fragmented cryptocurrency supervision in the US. As stated in a report by the Volcker Alliance (2015), the system for regulating financial institutions in the US is "riddled with regulatory gaps, loopholes, and inefficiencies". There have been over 25 official regulatory reform proposals since World War 2, from both democratic and republican administrations. However, very few proposed reforms have experienced any success to date, due to fierce opposition from stakeholders, who benefited from the existing status quo (Volcker Alliance, 2015). Without congressional action, it's unlikely that current fragmentation and overlap in the US financial regulatory system can be reduced or eliminated. Evidence of this was seen with the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), which introduced a range of reforms to the US financial system but overall had little impact leaving the regulatory structure unchanged (Government Accountability Office, 2016).

The age-old debate of whether or not existing regulatory authorities are suitable or new authorities are needed to oversee the US financial sector has never been more relevant. The speed of growth of the crypto industry, has shed light on these questions regarding which or if any current state or federal regulator in America is suited to effectively regulate the industry (Congressional Research Service, 2023).

In addition to this fragmented supervisory environment, the Fed's position on a retail CBDC stands in great contrast to other central banks. Its stance is quite constrained for political rather than technical reasons. In January 2025, President Donald Trump issued Executive Order 14178 on digital financial technology prohibiting agencies from undertaking any action to establish, issue, circulate or promote a CBDC and confirmed the termination of any agencies plans or initiatives related to CBDC creation (The White House, 2025). This executive decision of prohibition formalised a position that US Congress had been moving towards for some time. In July 2025, the US House of Representatives passed the Anti-CBDC Surveillance State Act, specifically banning the Fed from both issuing and testing a retail CBDC without Congressional approval (United States Congress, 2025). Supporters of the Act cited government surveillance risks and programmable money as key concerns. The legislation prohibits the Fed from offering any CBDC products to individuals and veto the use of any CBDC as a tool for monetary policy. As a result of this Congressional opposition, the Fed currently has no active retail CBDC programme and no plans of developing one in the near future. Both the Anti CBDC Act and the GENIUS Act, which established a regulatory framework for private stablecoins, depict a key policy choice by rejecting sovereign digital currency while welcoming private alternatives. This estranges the United States from global trends in which more than "130 countries, representing 98% of global GDP, are exploring or piloting CBDCs" (Krause, 2025, para. 7). Therefore, the US has no CBDC-based response to the AML challenges presented by crypto assets, depending on existing BSA and FinCEN architecture instead of creating new digital monetary instruments with integrated compliance features.

America's fragmented national supervision remains an open constitutional and political question, whereas in Europe, the EU have already begun the transition from fragmented supervision to AMLA, representing an institutional response to AML fragmentation.

4.3 The Bank of England

The Bank of England's primary mandate is to maintain monetary and financial stability. The core objective of the BoE is to keep inflation at 2% over the medium term (Bank of England, 2026a). The Monetary Policy Committee (MPC), an elected group consisting of nine individual members, are responsible for deciding what monetary actions to take targeting inflation, while the Financial Policy Committee (FPC) assess systematic risk that threatens the UK financial system (Bank of England, 2025).

The BoE's supervisory architecture was largely restructured following the 2008 financial crisis where over half a dozen big banks collapsed in London during that period (Financial Times, 2013). Following the introduction of the Financial Services Act 2012 (UK Parliament, 2012), replacing the old system was the establishment of a new regulatory framework consisting of a "twin peaks" model. The Act gives the BoE a macro-prudential responsibility through the FPC, as it works to ensure the safety and soundness of individual institutions within the UK financial system (Bank of England, 2025a). Two new regulatory bodies were also created as part of the Act. The Prudential Regulation Authority (PRA), a subsidiary of the BoE, is responsible for the prudential supervision and regulation of financial organisations, supervising 1,292 banks, insurers, credit unions and large investment firms (Bank of England, 2026b). The Financial Conduct Authority (FCA) supervises and regulate even more financial services firms and markets in the UK, protecting investors, policing markets, and promoting competition (Financial Conduct Authority, 2025a) (Financial Times, 2013). The FCA holds responsibility over the supervision of financial crime that includes both AML and CFT, equipping the UK so to ensure they can fight against such illicit financial activity (Financial Conduct Authority, 2025b)

A clear division of responsibility is evident, between the BoE/PRA and the FCA. This carries direct implications for the BoE's relationship with supervising crypto, as its influence over crypto AML is purely indirect in nature. The PRA actively gathers information from firms that have current or expected future crypto asset exposure, in order to monitor the implications of these assets on financial stability (Bank of England, 2024). Therefore, the BoE remains an indirect supervisor of crypto AML through the PRA's oversight of financial organisations that interact with crypto firms, as opposed to any direct supervisory authority over CASPs. As stated in the BoE's Financial Stability in Focus report 2022: "There is a broader set of risks posed by crypto assets and DeFi beyond financial stability, relating to consumer protection, market

integrity, money laundering and terrorist financing” (Bank of England, 2022, Section 2). The report continues by stating that even though the FCA holds primary responsibility for the risks mentioned, hazards still remain as they pose indirect threats to UK financial stability, mainly via their influence on confidence.

The FCA is the single designated AML/CFT supervisor for UK crypto firms. Under the Money Laundering, Terrorist Financing and Transfer of Funds (Information on the payer) Regulations 2017 (MLRs), the FCA wants to make the UK financial system a “hostile environment for illicit finance” while protecting legitimate businesses (HM Treasury, 2017, para. 7.1). Over 100,000 companies, including banks, building societies, credit unions and crypto asset businesses, are obliged to register with the FCA before doing business, showing adequate AML policies, customer due diligence measures, and fit and proper management, to limit the risk of criminal financial activity.

A key development within the MLR framework is the implementation of the Travel Rule, which came into force on 1 September 2023 under Part 7A of the MLRs, as amended by the Money Laundering and Terrorist Financing (Amendment)(No.2) Regulations 2022 (HM Government, 2022). Crypto asset businesses operating in the UK are required to collect, verify, and share originator and beneficiary information for transfers at or above EUR/USD 1,000.

Challenges surrounding implementation remain, particularly relating to transfers involving unhosted wallets, as addressed by the FCA through risk-based supervisory guidance requiring business to document steps taken to access wallet ownership and apply due diligence procedures according to the level of risk involved (Financial Conduct Authority, 2023).

FCA registration under the MLRs is not equal to full authorisation. FCA responsibility under the regime is solely focused on AML/CFT registration, supervision and enforcement. Registered crypto firms do not carry all regulatory obligations that authorised firms hold under the Financial Services and Markets Act 2000 (FSMA), therefore are unlike fully authorised organisations that are subject to meet a list of regulatory requirements (Financial Conduct Authority, 2026a). Crypto asset firms are required to inform their customers if their service fall outside the scope of the jurisdiction of the Financial Ombudsman Service or the Financial Services Compensation Scheme, meaning that customers will not benefit from these protection mechanisms (HM Government, 2017, reg 60A). It is important to note that the UK is adopting a forward-looking approach as preparation for the launch of the new full authorisation regime for crypto asset regulation under the FSMA is underway (Financial Conduct Authority, 2026b).

The UK is in the process of addressing these current crypto related regulatory gaps by establishing a comprehensive crypto asset authorisation regime under the Financial Services and Markets Act 2023 (Campbell, 2023). The new regime regulating in-scope crypto asset services is expected to come into force in October 2027, when crypto organisations will require full FCA authorisation rather than MLR registration alone (Financial Conduct Authority, 2026b).

This approach intends to integrate crypto into pre-existing financial services architecture rather than establish an independent purpose-built crypto regulation. As stated by a financial services partner from the global law firm Norton Rose Fulbright, the UK's new regulatory crypto proposals "do not constitute an entirely new regime in the same way that the European Commission has approached MiCA", instead the UK treasury is planning to work on and expand existing frameworks to this asset class (Schickler and Shumba, 2023, para. 9). This principles-based approach of extending existing laws rather than creating new crypto legislation reflects the UK's rationale post Brexit, that prioritises "flexibility, competitiveness, growth, and innovation" as it diverges away from EU regulatory approaches (Beck and Petit, 2023, para. 4). Included in this new regulatory architecture, the BoE retains the role of systemic stablecoin oversight. Stablecoins are to be regulated as payment systems following the introduction of the new asset category, Digital Settlement Asset (DSAs), under the Banking Act 2009 (Bank of England, 2023). The BoE have devised a framework focusing on systemic sterling-denominated stablecoins, with a view to protecting and enhancing UK financial system stability.

Complementing this regulatory approach to stablecoins and digital assets, the BoE's work on a digital pound illustrates its stance on the evolving digital payments landscape and the challenges posed by crypto alternatives. The BoE is exploring the case for a retail CBDC called a digital pound, that would serve as a digital complement to banknotes. The project is currently in its design phase, with the BoE and HM Treasury conducting technical experiments testing feasibility and specific use cases via the Digital Pound Lab that was launched in August 2025 and discussions with key stakeholders (Bank of England, 2025b). The prevention of financial crime has been acknowledged as a central design consideration. The digital pound would not be anonymous due to the need for authority's to be able to identify and verify users to prevent financial crime, although the BoE and UK government would not have access to personal user data (MIT Media Lab, 2024). Through its collaboration with the Massachusetts Institute of

Technology's Digital Currency Initiative, the BoE has investigated privacy-enhancing technologies, showing how pseudonymisation and zero-knowledge proofs could limit the sharing of data while ensuring AML compliance (Bank of England and MIT Digital Currency Initiative, 2024). The BoE and HM Treasury have engaged with external experts to explore robust protections for digital pound users (UK Government, 2024). However, in June 2025, Bank of England Governor Andrew Bailey stated publicly that he remained to be convinced of the need for a retail CBDC, indicating the need for continued institutional caution over the project's direction (Human Rights Foundation, n.d.). The digital pound is facing continued scepticism surrounding primary questions on financial stability and monetary architecture, with AML compliance acknowledged as an important design dimension but secondary in the broader context.

The BoE's limited and indirect role in tackling the criminal use of crypto is not purely a result of institutional weakness, but rather a by-product of the UK's post-Brexit regulatory strategy. The UK gained formal financial regulatory freedom from the EU following Brexit. The UK framed this freedom as a path to gain back international competitiveness. The government's plans included the rapid implementation of a more agile set of financial rules to stimulate activity and growth across the UK (UK Parliament, 2022). The UK aims to position itself as a global crypto asset technology hub, using its regulatory flexibility and agility as its competitive advantage (HM Treasury, 2022).

This post-Brexit strategy, however, creates tensions that affect the structural integrity of the UK's crypto AML challenge. Seen through Strange's (1988) framework of structural power in the finance structure, the UK is attempting to "confer the power to decide how things shall be done" (Strange, 1988, p. 25) through market attractiveness, rather than through the setting of strict rules like how the EU projects regulatory power through MiCA. The UK must still maintain sufficient regulatory legislation in accordance with international AML standards to avoid designation by the FATF as a jurisdiction with "strategic deficiencies" (Financial Crimes Enforcement Network, 2017), all while purposely differentiating itself enough from the EU's MiCA model to attract business. Post-Brexit CEPR analysis on UK financial regulation concluded that "the UK aims to become a global centre for fintech and crypto assets through several regulatory and supervisory initiatives... but the EU has a different approach which will lead most likely to active divergence" (Beck and Petit, 2023). Cross-border firms face

regulatory fragmentation as a consequence of this divergence, posing risks surrounding the regulatory arbitrage that illicit actors seek to exploit.

5 Comparative Analysis

The preceding institutional analysis chapters have established how the ECB, the Fed, and the BoE are positioned in relation to the illicit use of crypto assets. This comparative section brings this analysis together to identify the key points of convergence and divergence across three criteria (Regulatory framework and legal authority, AML requirements for crypto firms, and CBDC and technology responses), and to comprehend what these differences and similarities mean through the lens of the International Political Economy (IPE) framework. The analysis is centred around the criteria instead of the institutions, ensuring that the comparison is conducted and consistent at each stage. A benchmark scorecard will be used to assess FATF alignment across all three central banks.

Fundamental Structural Similarity:

All three institutions share one crucial structural similarity that facilitates the entire comparative analysis. None of the three central banks directly supervises CASPs. The ECB's mandate is bounded by the Treaty on the Functioning of the European Union (TFEU). The Fed's supervisory authority under the Bank Holding Company Act includes bank holding companies but not crypto firms. The BoE's AML/CFT supervisory mandate was assigned to the FCA under the Financial Services Act 2012. This structural equivalence, that none of the world's three most systemically important central banks directly regulate the entities most responsible for the transmission of illicit crypto flows, is the most important single finding of this work. Everything which follows, is in some way, an analysis of how each jurisdiction has responded to that shared gap.

The analysis reveals a clear hierarchy. The EU is leading the way through legislative power projection, the UK occupies an intermediate position, and the US is lagging behind. This hierarchy has been produced by contrasting political economies rather than varying levels of institutional commitment.

5.1 Criterion 1: Regulatory Framework and Legal Authority

A shared mandate gap, three different responses:

As previously established, all three central banks converge on the fact that they share a mandate boundary that excludes direct AML/CFT supervisory authority over CASPs. However, the manner in which each jurisdiction has responded to this shared gap differs significantly, and

these differences reveal divergent regulatory philosophies rooted in their respective political economies.

The EU's response has been legislative and supranational. The combination of MiCA (Regulation (EU) 2023/1114) and the AML Regulation provide a unified regulatory framework that integrates AML/CFT requirements into the centre of digital finance regulation. Through MiCA alone, a single EU-wide licensing system for CASPs has been established, along with harmonised AML/CFT obligations and a passporting mechanism that allows a CASP licensed in one member state to operate across all 27 (ESMA, 2024, para. 57). This approach reflects what Bradford (2020) calls the Brussels Effect, where the EU uses its large single market to exercise structural influence and project regulatory standards globally. Any crypto company wanting to access the EU's 450 million consumers, are compelled to comply with EU jurisdictional requirements, regardless of where they are incorporated. Therefore, the EU has filled its central bank mandate gap through its projection of regulatory power rather than institutional reform.

The US response has been quite the opposite structurally. Instead of centralising legislation, the US operate with a fragmented multi-agency framework. AML/CFT authority for crypto is dispersed across FinCEN, the SEC, and the CFTC. The Fed's role on the fringes is not a cause of this system but rather a symptom. The March 2026 SEC-CFTC MoU represents the first major coordinated movement toward harmonisation. However, unlike the European AMLA, which is backed by primary EU legislation and legally binding across all member states, the MoU carries minimal statutory force and is vulnerable to reversals, being as strong and durable as the political alignment between the two agencies at any given point in time. As the Volcker Alliance (2015) documents, more than 25 reform attempts since World War II have been unsuccessful in consolidating the US regulatory architecture, reflecting the deeply rooted power of institutional interests that reap all the benefits from the status quo.

The UK occupies an intermediary structural position, influenced and shaped by the unique post-Brexit strategic context identified previously. The UK's institutional architecture consisting of the twin peaks shared between the BoE/PRA and the FCA has produced a cleaner approach compared to the US multi-agency system, as there is one designated AML/CFT crypto supervisor as opposed to three competing ones. However, the UK's intentional choice of extending existing financial services law to crypto, instead of creating a new purpose-built framework, similar to how the EU did through MiCA, presents regulatory uncertainty that is

avoided with more prescriptive frameworks. As Beck and Petit (2023) observe, this reflects a deliberate post-Brexit idea of prioritising flexibility and competitiveness over regulatory certainty.

Applied through Strange's (1988) structural power framework, these regulatory divergences take on a deeper meaning. The EU exercises structural influence through legislative rule-setting, thus shaping the terms on which the international crypto industry must operate in order to enter its market. The US exercises structural power through its traditional role as a hegemonic power embracing the dollar hegemony and sanctions enforcement. FinCEN adopts an aggressive stance towards crypto enforcement, targeting sanctions evasion rather than CASP licensing, which reflects the primary US interest of protecting the dollar-dominated financial system from crypto-facilitated evasion. The UK tries to exercise power through market attractiveness, but as Bradford (2020) predicts, the gravitational pull of EU standards via the Brussels Effect constrains the practical freedom of post-Brexit divergence. UK companies seeking access to the EU market must comply with MiCA requirements irrespective of the UK's domestic regulatory framework, limiting the practical autonomy associated with post-Brexit regulatory independence.

5.2 Criterion 2: AML Requirements for Crypto Firms

CASP licensing and registration:

The fundamental question regarding whether crypto firms should be licensed or registered before operating, shows three jurisdictions demonstrating clear and incremental divergence that maps directly onto the FATF benchmark.

The EU leads the way with the most extensive regime. MiCA mandates complete authorisation for CASPs operating in the EU, with a passport-like licence valid across all 27 member states. This development eliminated the previous landscape of 27 divergent national crypto regimes with varying standards and enforcement capabilities. The UK sits between the EU's comprehensive model and the more fragmented US framework. FCA registration under the MLRs has been a mandatory requirement since January 2020 (FCA, 2019) and the FCA has used this registration step as a way of identifying those firms with inadequate AML controls, thus refusing or withdrawing registration from said firms. However, as established previously, MLR registration is not equivalent to full authorisation, and the FSMA 2023 regime expected in October 2027 will be utilised to close this gap. The US sits furthest away from a comprehensive licensing model. FinCEN MSB registration is not a license to operate and the

classification issue between the SEC and CFTC means that certain companies may fall under neither agency's licensing requirements depending on how they classify their assets. The lack of a federal licensing framework is the most obvious point of FATF non-alignment for the US and is a consequential gap for AML effectiveness with unlicensed firms having no obligations to implement AML controls at all.

Travel Rule Implementation:

The Travel Rule comparison provides an empirically precise and analytically powerful finding. The EU applies an exhaustive framework under the Transfer of Funds Regulation with no transaction threshold, while the US implements the rule under the Bank Secrecy Act with a threshold of USD 3,000. The UK implements the rule at a £1,000 threshold. Measured against FATF Recommendation 16, which advises a standard EUR/USD 1,000 threshold, this provides a clear ranked result. The EU exceeds the international standard, the UK meets it, and the US is falling significantly below it. A FinCEN proposal to reduce the cross-border threshold to \$250 is still pending, illustrating that the gap is not purely technical but reflects the same embedded structural and political deadlock associated with the Fed. This three-way divergence is not purely coincidental; it reflects the same structural political economy constraints outlined in the institutional chapters. The EU's zero threshold is a result of its supranational legislative authority. The UK's £1,000 threshold reflects a purposeful alignment with FATF standards, reinforcing its post-Brexit commitment to international regulatory equivalence. The US threshold indicates the legislative stubbornness and industry lobbying that the Volcker Alliance (2015) and Congressional Research Service (2023) identified as the defining features of the US financial regulatory system. The current travel rule threshold in the US has implications aside from the technical compliance score alone. It is the world's largest crypto market and enforces a \$3,000 threshold creating a gap that illicit actors can exploit. This gap persists not as a result of technical difficulties but due to the same legislative gridlock that has shaped US financial regulatory reform for decades.

5.3 Criterion 3: Central Bank Digital Currencies

CBDC development: 3 divergent strategies

The comparison of CBDC projects across the three central banks reveal some of the most striking divergences of the entire analysis, and it carries significantly influential long-term implications for the global governance of illicit crypto finance. This divergence is not driven by regulatory philosophy or systemic architecture, but by political economy.

All three central banks have the capacity to develop a CBDC. The ECB chose to advance with the digital euro, with AML deeply rooted as a core design feature. The BoE is progressing with caution, recognising the prevention of illicit financial activity as a design consideration but lacking the same level of urgency as the ECB. The Fed has been legislatively prohibited from developing a CBDC entirely. This three-way bifurcation is not a question of regulatory ambition but is instead determined by a different set of political economy forces.

A significant point of convergence across the three institutions is the shared recognition that transaction anonymity of any CBDC is not compatible with AML obligations. This has resulted in varying degrees of CBDC user identification requirements in order to prevent financial crime. The ECB's adoption of a pseudonymous approach, the BoE's commitment to a digital pound that will not be anonymous, and the US viewing identify verification as a necessary CBDC feature all arrive at an equivalent design conclusion. This convergence has been reached independently through different institutional processes. This suggests that AML compliance is acting as a structural constraint on the design of CBDCs globally, irrespective of how advanced or politically supported each project may be.

The ECB has embedded AML as a key design feature, where the privacy versus traceability dilemma is not an afterthought but a central challenge that the digital euro project is explicitly tackling. The BoE views the need for AML compliance as one that is a constraint in the design process of the digital pound, treating it as something that the digital pound must adhere to, but is not the main motivation for building it. The Fed, on the other hand, cannot make any choices at all regarding design, due to the Executive Order 14178 (2025) terminating all CBDC development activities and the Anti-CBDC Surveillance State Act passing the House of Representatives. The practical consequences of this divergence are evident. The EU is constructing a monetary system that incorporates AML compliance into its architecture from the ground up, the UK is exploring one that must satisfy AML standards once its design is complete, and the US has purposely decided to have no such instrument at all.

Seen through the lens of Susan Strange's (1988) structural power framework, this divergence displays three different theories of how to exercise power and influence over the structure of digital finance. The EU exerts structural power by influencing and shaping the design standards for state-issued digital currency. These standards, through the aforementioned Brussels Effect, could become global benchmarks. The BoE approach is centred around preserving the UK's position in an everchanging digital payments landscape while managing

the post-Brexit tension between regulatory flexibility and international standards equivalence. The US's choice to reject sovereign digital currency entirely is the most consequential of all three. The favouring of regulated private stablecoins under the GENIUS Act, means that the US is practically outsourcing the digital money creation to private actors while maintaining structural power through its dollar hegemony and sanctions. As mentioned in the Regulatory Review (2025), the US are at odds with more than 130 countries that are actively exploring CBDCs. The US is at risk of being excluded from the technical standard-setting processes that could define the future of global financial infrastructure. This approach, that is of stark contrast to that of the EU, may result in the US finding itself "reacting to standards set by competitors rather than leading their development". The absence of a US public-sector digital currency alternative is not a neutral position; it is in fact a strategic choice that carries significant long-term implications for monetary leadership in the United States, and it leaves the US without any core institutional mechanism through which the Fed could integrate AML compliance into the architecture of digital money.

5.4 Key Findings

5.4.1 Points of Convergence

Three significant points of convergence have been extracted from the comparative analysis. Firstly, all three institutions share the boundary in terms of their structural mandate, with none of the central banks in question directly supervising CASPs and all exercise influence over crypto AML indirectly. This is not a coincidence but rather a systemic feature of central banking globally. Secondly, all three central banks are formally committed to FATF as their benchmark. Even though the three institutions operate under different legal systems and institutional architecture, all three accept FATF mutual evaluation as the authoritative measure of their compliance with global financial standards. Thirdly, all three banks share the opinion that CBDC anonymity is not compatible with AML obligations. Each institution has reached this conclusion independently through separate design processes. This suggests that AML compliance functions as universal constraint on digital money architecture, regardless of how advanced or politically influenced any individual CBDC project is.

5.4.2 Points of Divergence

Significant divergences are evident throughout the analysis, forming a clear regulatory hierarchy. The EU leads with the most comprehensive framework, with MiCA mandating pan-

European authorisation for all CASPs, the Transfer of Funds Regulation applying a zero-threshold Travel Rule (exceeding FATF standards), AMLA centralisation of AML/CFT supervision, and the digital euro embedding AML compliance as a core design requirement. The United Kingdom occupies an intermediate position. In the UK, the FCA registration under MLRs requires demonstrated AML compliance, the £1,000 Travel Rule threshold meets FATF standards, the FCA extends AML/CFT supervisory authority (with FSMA 2023 enhancing these powers), and the digital pound is under development with AML as a central design consideration albeit with continued caution. The US portrays the most fragmented approach. In the US, there is no federal CASP licensing requirement, a \$3,000 Travel Rule threshold is significantly below FATF standards, fragmented AML/CFT authority across FinCEN, SEC, and CFTC with little prospect of centralisation, and legislative prohibition of retail CBDC development.

This three-tier hierarchy is not accidental. These divergences are not only caused by differences in regulatory approach but instead represent a wide scope from the world's most comprehensive crypto AML framework at one end to a clearly institutionally fragmented system with no unified licensing regime or CBDC programme at the other.

5.4.3 Explanatory Factors

These differences between the three most influential central banks are due to the structural political economy factors that shape what each institution can do. The EU diverges due to the fact that it has a capacity that neither the US nor the UK can replicate, which is its supranational legislative authority. Through the Brussels Effect, the EU doesn't have to enforce its standards directly onto non-EU firms because incentives such as EU market access do this work instead, pushing global compliance with MiCA and the TFR without needing to enforce rules outside of its own jurisdiction. The US diverges because of its multi-agency architecture. The embedded lobbying power of financial interests has also affected the ability of US institutions to unify legislation in a way that effective crypto AML requires. The Volcker Alliance (2015) and the Congressional Research Service (2023) describe this fragmentation as the defining feature of financial regulatory reform in the US over the last number of decades. The UK diverges as a result of its complex navigation of the post-Brexit tension between regulatory flexibility and complying with international standards. As identified by Beck and Petit (2023), this post-Brexit situation has produced active divergence away from the EU model, but one that

the Brussels Effect highlights as being constrained in practice because of the market access factors that bind UK firms to MiCA compliance regardless of domestic legislation.

Strange's (1988) structural power theory reveals that all three divergences are illustrations of a single underlying dynamic, that being the competition of who holds the most structural power in the financial structure of the international political economy. The EU holds this power through its pan-European rule-setting, while the US holds it through the dollar and sanctions enforcement, and the UK is trying to claim power via its market positioning. Therefore, it is evident that these three diverging theories of regulatory power have resulted in very different regulatory outcomes.

5.4.4 Benchmark Scorecard

To provide a visual representation of the divergences and convergences identified in this comparative analysis, a benchmark scorecard has been constructed to assess the performance of each institution against internationally recognised regulatory standards. The scorecard evaluates the three central banks across five key criteria: CASP licensing requirements, Travel Rule implementation thresholds, the presence of centralised AML/CFT supervisory authority, CBDC development strategies, and overall alignment with FATF Recommendations. These criteria were selected as they represent key mechanisms through which central banks can influence the regulation of illicit crypto finance, and they provide quantifiable points of comparison across the three jurisdictions. The FATF Recommendations serve as the primary benchmark, as all three jurisdictions are formal member states committed to implementing these standards, providing an external validated reference point against which to measure institutional performance. The scorecard demonstrates the extent to which each institution has exceeded, met, or fallen short of these standards, and visually illustrates the regulatory hierarchy identified throughout this study.

Figure 1. Benchmark Scorecard

Criterion	European Union	United Kingdom	United States
CASP Licensing	MiCA Authorisation (Mandatory, EU-wide)	MLR Registration → FSMA Authorisation (Oct 2027)	None (Fragmented: FinCEN/SEC/CFTC)
Travel Rule Threshold	€0 (Exceeds FATF standard of €1,000)	£1,000 (Meets FATF standard)	\$3,000 (Below FATF standard)
Centralised AML Supervisor	AMLA (Jan 2026) – Supervises 40 high-risk institutions directly	FCA with FSMA 2023 (FCA to be enhanced)	None planned (remains fragmented across multiple agencies)
CBDC Development	Digital Euro (AML-by-design core feature; expected launch in 2029)	Digital Pound (AML as design constraint; cautious approach)	Legislatively Prohibited (Executive Order 14178; Anti-CBDC Act)
Overall FATF Alignment	HIGH	MEDIUM-HIGH	LOW

The scorecard supports the idea that three regulatory tiers are present, reflecting institutional capacity. The EU's comprehensive approach projects regulatory power internationally via market incentives, as companies must comply with MiCA to access 450 million EU consumers. The UK's intermediary approach reflects its twin-peaks architecture and post-Brexit strategy as it balances innovation with standards equivalence. The US exhibits the most fragmented position across all criteria. This fragmentation is not a technical oversight. The Volcker Alliance (2015) documents that over 25 major reform attempts since WW2 have failed to influence or change US financial regulation. This indicates that fragmentation persists because institutional interests benefit from the status quo, not due to gaps in capacity.

The scorecard reveals that divergence reflects structural capacity: EU supranational authority enables coordination, UK institutional architecture permits intermediate coherence, US fragmentation persists through deeply rooted interests. The hierarchy directly corresponds to the structural power analysis throughout this dissertation.

6 Conclusions

This comparative analysis reveals that even though all three central banks (the ECB, Fed, and BoE) face the same structural constraint of not directly supervising CASPs, they have adopted divergent regulatory responses highlighting their distinct political economies. The EU leverages its internationally binding cross-state authority to lead with comprehensive frameworks (MiCA, AMLA, Digital Euro). The UK holds an intermediate position, complying with international standards whilst balancing post-Brexit flexibility. The US remains fragmented and disjointed as it is constrained by embedded institutional interests, lacking federal licensing requirements and CBDC development. These divergences are not merely reflections of varying degrees of institutional commitment. They are a result of underlying political economy forces that shape each jurisdiction's regulatory capacity and strategic choices.

The study contributes to understanding how political economy forces influence financial regulation. Rather than treating regulatory divergences as technical differences, this analysis exhibits how structural power relationships produce divergent governance approaches to the same challenge. The practical implications are substantial: jurisdictional fragmentation creates regulatory arbitrage opportunities for illicit actors, the US Travel Rule threshold sits below FATF standards, and the lack of comprehensive CASP licensing enables unlicensed firms to operate without AML controls. The CBDC divergence is significant in the long-term, as it risks US exclusion from standard-setting processes that will likely define global financial infrastructure.

Future research directions could include the examination of how private stablecoins adapt to the three very divergent regulatory systems identified in this study, revealing whether market innovation can fill regulatory gaps or creates new arbitrage opportunities. Additionally, as CBDCs develop and expand globally, their interoperability across different AML features will test if regulatory divergence can be harmonised. Finally, this investigation would address whether the regulatory frameworks identified in this study (licensing, Travel Rule, AML requirements) can even be applied to DeFi, or whether entirely new regulatory philosophies are needed. Understanding this would be essential as DeFi platforms grow in scale and begin competing with traditional crypto firms.

All three central banks share a mandate gap but respond through different structural power mechanisms: EU legislative authority, US dollar hegemony, and UK market positioning. These

divergences reflect embedded institutional interests rather than technical disparities and will persist as central banks design CBDCs and regulate new technologies. Understanding crypto regulation therefore requires going beyond legal doctrine to analyse the political economy forces that fundamentally shape regulatory outcomes.

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Declaración de Uso de Herramientas de Inteligencia Artificial Generativa en Trabajos Fin de Grado

ADVERTENCIA: Desde la Universidad consideramos que ChatGPT u otras herramientas similares son herramientas muy útiles en la vida académica, aunque su uso queda siempre bajo la responsabilidad del alumno, puesto que las respuestas que proporciona pueden no ser veraces. En este sentido, NO está permitido su uso en la elaboración del Trabajo fin de Grado para generar código porque estas herramientas no son fiables en esa tarea. Aunque el código funcione, no hay garantías de que metodológicamente sea correcto, y es altamente probable que no lo sea.

Por la presente, yo, Cathal Guckian, estudiante de E4 de la Universidad Pontificia Comillas al presentar mi Trabajo Fin de Grado titulado "TACKLING THE ILLICIT USE OF CRYPTOCURRENCY: A COMPARATIVE STUDY OF THE FEDERAL RESERVE, THE EUROPEAN CENTRAL BANK, AND THE BANK OF ENGLAND", declaro que he utilizado la herramienta de Inteligencia Artificial Generativa ChatGPT u otras similares de IAG de código sólo en el contexto de las actividades descritas a continuación:

1. **Brainstorming de ideas de investigación:** Utilizado para idear y esbozar posibles áreas de investigación.
2. **Referencias:** Usado conjuntamente con otras herramientas, como Science, para identificar referencias preliminares que luego he contrastado y validado.
3. **Metodólogo:** Para descubrir métodos aplicables a problemas específicos de investigación.
4. **Corrector de estilo literario y de lenguaje:** Para mejorar la calidad lingüística y estilística del texto.
5. **Sintetizador y divulgador de libros complicados:** Para resumir y comprender literatura compleja.
6. **Revisor:** Para recibir sugerencias sobre cómo mejorar y perfeccionar el trabajo con diferentes niveles de exigencia.

Afirmo que toda la información y contenido presentados en este trabajo son producto de mi investigación y esfuerzo individual, excepto donde se ha indicado lo contrario y se han dado los créditos correspondientes (he incluido las referencias adecuadas en el TFG y he explicitado para que se ha usado ChatGPT u otras herramientas similares). Soy consciente de las

implicaciones académicas y éticas de presentar un trabajo no original y acepto las consecuencias de cualquier violación a esta declaración.

Fecha: 02/06/2026

Firma: Cathal Guckian