National College of Ireland

Project Submission Sheet

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Abstract

The introduction of central bank digital currencies (CBDCs) across the eurozone—accelerated by the ECB's 2023–2024 preparatory phase—represents one of the most significant transformations of European monetary infrastructure in decades. This dissertation focuses on the Irish case, exploring how an account-based digital euro model might alter the competitive dynamics between the Central Bank and commercial banks. The study responds to growing concerns about deposit outflows, changes in lending models, and the evolving role of public monetary authorities.

It investigates the central research question: how might the ECB's account-based digital euro reshape the relationship between the Central Bank of Ireland and commercial financial institutions? Adopting a qualitative methodology grounded in interpretivist philosophy, the study draws on semi-structured interviews with key financial stakeholders—including officials from the Central Bank of Ireland and executives from major commercial banks operating in Ireland.

Findings reveal a clear divergence in expectations. Regulatory voices express confidence in safeguards such as holding limits and non-remuneration, while commercial participants anticipate behavioural shifts, competitive disruption, and evolving funding strategies. The analysis suggests that the long-term significance of a retail CBDC lies less in direct competition and more in the gradual redesign of intermediation and monetary governance.

By placing the Irish case within the wider ECB agenda and global CBDC developments, this dissertation shows how state-issued digital currencies may gradually change the structure of national banking—not only through technology, but also by shifting financial roles, regulatory balance, and long-term strategic direction.

1. Introduction

Since 2020, public and institutional interest in central bank digital currencies (CBDCs) has grown significantly, driven by changes in payment technologies, the rise of private digital assets, and concerns over monetary sovereignty.

The European Central Bank (ECB) has been at the forefront of these developments, advancing the design of a Digital Euro. Unlike decentralised cryptocurrencies or anonymous cash, the Digital Euro is envisioned as a regulated, account-based instrument directly issued by the ECB and integrated into the existing banking infrastructure. Although often framed as a technical innovation, its introduction poses fundamental questions for the role of commercial banks in a system where the state becomes both issuer and competitor.

Ireland presents a particularly revealing case. Its banking sector is still consolidating after post-crisis reforms, while private fintech adoption—especially platforms like Revolut—has accelerated the digitalisation of everyday finance. Against this backdrop, the ECB's Digital Euro initiative challenges traditional models of liquidity management, deposit intermediation, and payment governance. This dissertation examines not only whether commercial banks will adapt, but how such adaptation may alter institutional relationships, credit flows, and long-term stability mechanisms.

Rationale

Although public debate often focuses on privacy, accessibility, and usability of digital currencies, the institutional implications of a retail CBDC remain underexplored. This study seeks to address that gap by shifting attention from technological feasibility to strategic interpretation. Specifically, it considers how financial institutions understand, anticipate, and prepare for the introduction of an account-based Digital Euro, and how this may impact competitive dynamics.

The motivation for this research emerged from observing how Irish consumers have embraced digital wallets and neobanks with remarkable speed, often bypassing traditional institutions entirely. If the state now enters that same space, offering a direct alternative to commercial deposits, the result may not only be competition for customers, but a reordering of liquidity relationships and credit distribution. What began as a question about innovation quickly became a deeper investigation into how digital money could silently restructure the foundations of banking itself.

The study formulates two guiding hypotheses. First, that the introduction of an account-based Digital Euro may reduce the volume of deposits held by commercial banks, prompting them to adjust funding and lending strategies. Second, that such pressures could lead the Central Bank of Ireland to take a more active stabilisation role, thereby blurring the institutional boundaries between regulator and competitor. These hypotheses serve as analytical anchors for both data collection and interpretation.

Structure of the Dissertation

This dissertation is organised into five chapters. Following this introduction, Chapter 2 presents a review of the academic and institutional literature, mapping the economic, technological, and governance debates surrounding CBDCs. Chapter 3 outlines the methodological framework, including philosophical assumptions, data collection strategies, and analytical procedures. Chapter 4 provides an in-depth analysis of the interview data, thematically structured around the research question and hypotheses. Chapter 5 discusses the findings in relation to the literature, highlights their broader implications, and identifies areas for future research.

Taken together, the study contributes to the evolving conversation about the role of digital public money, not only by analysing technical possibilities, but by uncovering the institutional dynamics that will shape its adoption and influence in Ireland's financial system.

2. Literature Review

The growing shift away from cash and toward digital payments has pushed central banks to explore Central Bank Digital Currencies (CBDCs) as a public alternative. This trend, accelerated by the COVID-19 pandemic, reflects rising pressure to modernise payment systems. In 2021, the Bank for International Settlements (BIS) reported that 86% of central banks were working on CBDC initiatives, citing the need for resilient infrastructure in times of crisis (BIS, 2021). By 2023, that figure had risen to 94% ***BIS 2023 CBDC Survey*** , showing just how rapidly CBDCs have gained ground. Major financial institutions including the International Monetary Fund (IMF), BIS, and the Financial Stability Board (FSB) increasingly describe CBDCs as essential to the future of public money. A 2022 BIS survey found that 93% of central banks were engaged in

CBDC development, with many moving beyond research into live testing. In Europe, the ECB entered the preparatory phase of its Digital Euro project in late 2023, working with private providers to build prototype systems (ECB 2023) Meanwhile, China continues large-scale trials of its e-CNY in over 25 cities, and Nigeria's eNaira—launched in 2021—remains in active use with regular feedback from users (IMF 2023) ***bis.org***

This momentum is largely a response to growing competition from private fintechs like PayPal and Revolut, which now handle vast volumes of payments outside the traditional banking system. To maintain monetary control, some central banks are acting swiftly. The Bahamas introduced the Sand Dollar in 2020 to improve financial access across its islands. By November 2023, 118,955 wallets were active, and monthly transaction volume had doubled to $4.5 million from the previous year. The ECB has similar goals with the digital euro, aiming to reduce reliance on non-European platforms and preserve sovereignty in payments.

As of September 2024, the Atlantic Council reports three countries have officially launched CBDCs, 19 are running pilots, and 111 are in various stages of development—underscoring the scale of global interest ***coindesk.com***

CBDCs also represent a strategic response to the rise of decentralised finance. Assets like Bitcoin, stablecoins, and DeFi platforms now facilitate vast volumes of financial activity outside state control. The Financial Stability Board has warned that these systems pose real risks, including limited transparency and speculative exposure. The ECB (2023) positioned the digital euro not only as a modernisation effort but as a way to counter the everyday use of crypto-assets, while the Central Bank of Ireland (CBI, 2023) raised concerns about platforms like Revolut operating beyond full EU oversight. In this sense, CBDCs are not just about innovation—they are about reasserting public monetary authority. (ECB,2023), (CBI,2023)

The BIS adds that CBDCs combine multiple innovations in one tool, helping address today's economic demands. One key driver is the global drop in cash usage: cash accounted for just 17.9% of point-of-sale transactions in 2021 and is expected to fall to 9.8% by 2025 Worldpay, 2025. In Sweden, cash use has already fallen below 10% Riksbank,2025. Ireland is following this trend too, especially among younger users, with digital payments rapidly replacing cash CBI, 2025 .

The disappearance of cash raises major questions about how to ensure universal access to public money. CBDCs offer one answer: a sovereign, digital payment form that remains accessible to everyone—even in a fully cashless economy, without needing to rely on private platforms CBI, 2024

CBDCs offer faster payments and lower transaction costs, benefiting both consumers and businesses. Their blockchain-based design also enhances transparency, supporting efforts to combat money laundering and tax evasion. As cryptocurrencies gained ground, central banks turned to CBDCs as a regulated, sovereign alternative—giving them a way to retain control over the money supply in an increasingly digital financial system.

Beyond efficiency, CBDCs reflect wider societal goals. Direct models, where central banks manage all accounts and transactions, simplify the system and remove intermediaries, but also raise concerns. Can a single institution secure an entire nation's digital economy? Centralisation brings cybersecurity risks that cannot be ignored.

Design choices are now shaping the viability of CBDCs. To succeed, they must balance simplicity, speed, and security.

Two main approaches dominate in this area:

- Token-based systems that confirm transactions directly through the token;
- Account-based systems that rely on user identification and authentication.

Debates on Token-Based and Account-Based CBDCs: Balancing Privacy, Security, and Regulatory Oversight

The development of central bank digital currencies (CBDCs) poses a fundamental challenge for policymakers, central banks, and financial regulators. One of the most crucial decisions in CBDC architecture is the choice between a token-based or account-based model. This decision reflects economic priorities, privacy concerns, regulatory challenges, and societal values. Each model offers significant advantages and trade-offs, raising fundamental questions about how digital currencies should function within modern financial systems.

Privacy and the Role of CBDCs in Preserving Financial Anonymity

Token-based CBDCs operate similarly to physical cash—ownership is determined by possession rather than the user's identity. Transactions are verified based on the token itself rather than direct verification of transaction parties. Proponents argue that token-based CBDCs can provide cash-like anonymity in digital transactions. This perspective is supported by **Project Hamilton**, a joint research initiative by the Federal Reserve Bank of Boston and the Massachusetts Institute of Technology's Digital Currency Initiative. The project demonstrated that CBDCs could be designed to maintain user privacy by minimizing data storage and preventing unnecessary disclosure to third parties. In the Phase 1 summary, researchers emphasized the importance of embedding privacy-preserving mechanisms within transaction processing systems to protect user data ***bostonfed.org***

However, the Bank for International Settlements (BIS) has also highlighted potential risks associated with anonymity in token-based CBDCs, including counterfeiting and money laundering. In democratic societies, financial privacy is viewed as a fundamental safeguard against government overreach and the potential misuse of transaction data. The Organization for Security and Co-operation in Europe (OSCE) supports this perspective in its 2023 guidelines, "Human Rights Compliance in Cybercrime Investigations," emphasizing that excessive state interference in citizens' private lives, including financial activities, could lead to human rights violations and erosion of freedoms.

Additionally, the 2021 "Europe and Central Asia Economic Update" report titled "Data, Digitalization, and Governance" examines the impact of digitalization on governance and underscores the importance of data protection. This report highlights the necessity of robust data governance structures to ensure privacy and prevent misuse in the digital age.

Although privacy is crucial, unchecked anonymity in digital transactions may facilitate illicit activities such as money laundering and terrorism financing. The Financial Action Task Force (FATF) has expressed concerns that improperly regulated token-based CBDCs could enable illicit financial flows akin to those associated with anonymous cryptocurrencies. In its 2023 report, "Virtual Assets: Targeted Update on Implementation of the FATF Standards on Virtual Assets and Virtual Asset Service Providers," FATF underscores the need for strong anti-money laundering (AML) and counter-terrorist financing (CFT) measures to mitigate these risks. *fatf-gafi.org*

Striking a balance between privacy and oversight is essential rather than aiming for absolute anonymity. Privacy-enhancing technologies (PETs)[1], such as zero-knowledge proofs (ZKP) and homomorphic encryption ***academy.binance.com*** , are proposed as potential solutions for facilitating anonymous transactions while maintaining regulatory compliance. The BIS discusses these technologies, noting that while they offer promising paths to enhancing privacy in digital payments, they remain experimental and pose significant computational and operational challenges. ***bis.org***

Arguments for Account-Based CBDCs: Security, Regulatory Compliance, and Monetary Control

Unlike token-based CBDCs, account-based models require users to verify their identity before transacting. This approach aligns with traditional banking practices, ensuring that every transaction is linked to a verifiable entity.

The primary advantages of account-based CBDCs include:

- **Enhanced regulatory compliance:** Identity verification helps prevent money laundering, terrorism financing, and tax evasion.
- **Real-time monitoring:** Automated oversight improves financial supervision and reporting.
- **Fraud prevention:** Stolen credentials can be tracked and blocked, reducing fraud risk.

The European Central Bank (ECB) is actively exploring the digital euro concept to ensure central bank money remains accessible in the digital age. As of October 2023, after completing the investigation phase, the ECB announced the transition to a preparatory phase involving further experiments, service provider selection, and prototype development. A final decision on issuing a digital euro will be made once a legal framework is established and functional characteristics are refined ***cepr.org*** The ECB is considering various aspects, including privacy protection and offline transaction capabilities. For instance, for offline payments, the digital euro aims to offer a level of privacy comparable to cash, where transaction details remain known only to

[1] PETs—this set of technologies is designed to minimize the use of personal data and maximize security. They allow users to control their personal information by enabling anonymous or pseudonymous interactions with digital services. Examples of PETs include obfuscation, pseudonymization, and tools for anonymous communication. In the context of financial transactions, PETs help conceal participants' identities, ensuring privacy without compromising system functionality.

the payer and payee, without disclosure to payment service providers or the ECB. ***nfcw.com*** A comparable initiative is Riksbank's exploration of the e-krona as a digital complement to cash since 2017. The project has examined multiple models, including both value-based (cash-like digital money) and account-based solutions.

Risks of Government Overreach and Financial Surveillance

Account-based CBDCs link transactions to verified identities, raising concerns about government surveillance and control. Such systems could allow authorities to monitor, restrict, or freeze individual assets in real time. China's digital yuan, for example, has been widely criticised for its potential to expand state oversight over spending behaviour and monetary activity Wired 2021,Cato Institute 2021 . Reports suggest it could offer the government deep access to personal financial patterns, raising fears of financial censorship and behavioural targeting.

These concerns are central to global debates about the design of CBDCs. In the U.S., privacy concerns prompted a full ban on the development of a digital dollar. An executive order signed by President Donald Trump in 2025 argued that such a currency would give the state excessive control over personal finance, allowing it to track or freeze accounts at will The WHITEHOUSE 2025, livemint 2025. This view reflects a broader scepticism toward account-based models like the digital euro, which some fear could turn public digital money into an instrument of surveillance, weakening civil liberties and individual autonomy.

However, the U.S. ban also signals strategic hesitation. Without its own CBDC, the U.S. risks falling behind other nations that are actively shaping the digital financial infrastructure. By contrast, the EU has positioned the digital euro as a way to enhance economic sovereignty and reduce dependency on foreign platforms. The absence of a digital dollar may accelerate the ECB's timeline, reinforcing the euro's international role.

This divergence reveals the core tension in CBDC design: the trade-off between state control and personal privacy. While account-based CBDCs support AML enforcement and monetary governance, they do so by increasing state access to transaction data—at the cost of financial anonymity (ECB, 2023).

For Ireland, this tension presents both challenges and opportunities.

As a eurozone member, Ireland has no direct control over the ECB's digital euro design but will be among the first economies to experience its impact.

Ireland's financial landscape, already highly digitalized and influenced by global fintech companies like Revolut, raises the question of whether the digital euro will provide any advantages over existing private-sector solutions (ECB Consultation Report, 2023).
If privacy concerns, similar to those raised in the United States, gain traction among European consumers, adoption of the digital euro could face significant resistance.
My concern is that if the digital euro fails to fully preserve financial anonymity, it risks alienating users, pushing them to continue using private digital payment systems, such as Revolut, PayPal, or cryptocurrencies. This issue is reflected in the ECB's 2023 public consultation, where 43% of respondents said privacy was their top concern — ahead of security and usability ECB, 2021**.**
In Ireland, I often see people choosing Revolut or Apple Pay not just for speed and convenience, but because they feel more comfortable using systems that don't involve direct oversight by a central authority. Even though these platforms are not anonymous, users often see them as more private in practice — or at least less exposed.
Privacy-focused organisations like EDRi have raised similar questions, warning that without strong guarantees, a state-issued digital currency might struggle to gain traction among those who value discretion in their financial lives (EDRi, 2022). To succeed, the digital euro will need to offer a clear answer to this concern — not just in theory, but in its actual design EDRI,2022.
The ECB could adopt a hybrid model, where small transactions remain anonymous (similar to cash), but larger transactions require identity verification.
This would provide a balanced compromise between privacy and security.
On the other hand, if the ECB successfully addresses these concerns through a hybrid model that includes strong privacy safeguards, the digital euro could strengthen Ireland's financial infrastructure without sacrificing public trust.
The key challenge moving forward is ensuring that the digital euro is not simply another state-controlled digital payment system, but instead a meaningful innovation that balances regulatory oversight with user autonomy.
If it is designed correctly, it could become a credible alternative to private payment systems, avoiding the financial surveillance risks that led to the U.S. ban.
However, if these concerns remain unresolved, the digital euro risks becoming an obsolete initiative, unable to compete with existing financial solutions—just like its abandoned U.S. counterpart.

The Economic Impact of Central Bank Digital Currencies (CBDCs)

The design of CBDCs—whether account-based, tokenised, or hybrid—shapes more than technical functionality. It carries structural implications for financial stability, monetary governance, and macroeconomic performance.

As central banks move from theory to implementation, policymakers and scholars remain divided over CBDCs' long-term effects on **GDP growth, inflation, credit markets, and financial inequality**. Some argue they can enhance monetary policy transmission, cut transaction costs, and improve financial access. Others warn of risks including bank disintermediation, lending volatility, and public distrust.

At the centre of this debate lies a broader question: can CBDCs serve as tools for economic resilience, or do they risk introducing systemic vulnerabilities? Their architecture will determine whether they strengthen or destabilise the evolving global financial framework.

CBDCs and GDP Growth: A Catalyst or a Constraint?

A key argument in favour of CBDCs is their potential to drive economic growth by improving transaction efficiency and reducing the costs associated with cross-border payments. The Bank for International Settlements (BIS) has reported that the adoption of CBDCs in cross-border transactions could reduce transaction costs by up to 50%, making international trade more efficient and potentially increasing GDP. Empirical evidence supports this claim. **The mBridge project,** developed jointly with the central banks of China, Hong Kong, Thailand and the UAE, has demonstrated that CBDCs can reduce settlement times from days to seconds, improving cost-effectiveness in cross-border trade. Similarly, Bahamas' Sand Dollar, one of the first fully operational CBDCs, reportedly increased domestic consumption by expanding access to digital financial services in remote areas. However, while these examples highlight the efficiency gains associated with CBDCs, sceptics argue that these benefits cannot directly translate into sustainable GDP growth. One of the most contentious issues in the CBDC debate is their potential to undermine the traditional banking system, especially commercial banks. The main problem stems from the fact that CBDCs allow consumers to store digital currency directly with central banks, bypassing the need for commercial bank deposits.

The Bank of Spain Working Paper (2024) modelled the impact of CBDC adoption at a level equivalent to 14% of GDP. Their findings indicate that such adoption could reduce bank deposits by 11% of GDP, but this would lower bank lending by less than

0.6% and GDP by merely 0.25%. Similarly, the Federal Reserve Discussion Paper (2022) highlighted that the negative impact on bank lending is disproportionately greater for smaller banks, potentially three times larger than for major financial institutions.

These findings suggest that while CBDC adoption could lead to some contraction in traditional credit-driven GDP growth, the overall effect on GDP might be less severe than some early models anticipated. The impact of CBDCs will largely depend on how they are designed and what rules are put in place to ensure that they do not weaken the role of traditional banks.

Revised Section: CBDCs and Inflation: A New Tool for Monetary Policy or a Source of Instability?

The potential impact of Central Bank Digital Currencies (CBDCs) on inflation and monetary policy remains a subject of active debate among economists and policymakers. The International Monetary Fund (IMF) has analysed the possible consequences of CBDC adoption, emphasizing both opportunities and risks. While CBDCs could enhance central banks' ability to implement and transmit monetary policy, their effects on liquidity and inflation are highly dependent on design choices and macroeconomic conditions.

A 2023 IMF Fintech Note highlights that different countries have varying motivations for exploring CBDCs. Some central banks see them as a way to strengthen monetary policy effectiveness, allowing for more precise control over interest rates and money supply. Others view CBDCs as a tool to modernize financial systems, mitigate risks from increasing digitalization, and reduce the costs of monetary transfers. However, there are also concerns that CBDCs might weaken the transmission of monetary policy, particularly in economies where commercial banks play a dominant role in financial intermediation (IMF.org).

Further, a 2024 IMF working paper investigates the financial stability implications of CBDC issuance. The study finds that the effects of CBDCs on inflation and credit availability depend significantly on how they impact the central bank’s balance sheet. If CBDC issuance leads to a substantial expansion of central bank liabilities, commercial banks may respond by raising interest rates on loans, making credit more expensive for households and businesses. This, in turn, could reduce lending and slow economic activity, potentially offsetting the initial benefits of CBDC adoption

CBDCs and Financial Inequality: A Solution or an Exacerbation?

CBDCs have been widely promoted as a means of reducing financial inequality by providing unbanked and underbanked populations with access to digital financial services. The IMF (2023) has highlighted that CBDCs could significantly improve financial inclusion, particularly in emerging markets where access to traditional banking infrastructure remains limited.

However, critics warn that without appropriate safeguards, CBDCs could actually exacerbate economic disparities. The World Bank (2024) raised concerns that CBDCs might favour wealthier individuals with higher digital literacy and access to financial technology, thereby deepening the existing digital divide. Additionally, the transition from physical cash to CBDCs could disproportionately impact elderly populations and rural communities, where digital adoption is lower.

Another unresolved issue is whether CBDCs will genuinely empower low-income households or if they will merely become another tool of financial surveillance and control. Some scholars argue that programmable CBDCs could be used to restrict spending behaviours (e.g., limiting the use of funds for specific purposes), raising ethical concerns about personal financial autonomy.

The Digital Euro and Ireland

The introduction of the Digital Euro in Ireland is not just a theoretical concept but a real economic shift that will affect financial policies, banking operations, and consumer behaviour. While broader discussions on CBDCs provide context, the key issue is understanding how Ireland's specific economic structure will adapt to this new form of digital currency and what challenges or opportunities it will create.

The Central Bank of Ireland has observed that Ireland's economy has already benefited from digital payment innovations, with contactless payments, mobile banking, and fintech-driven transactions accounting for the majority of retail and business transactions. The shift to digital has improved transaction speed, reduced cash dependence, and lowered operational costs for businesses, particularly in the retail and service sectors. This "economic fluidity" reflects the ease with which money circulates, contributing to higher consumer spending and more efficient financial management for both businesses and households.

The introduction of the Digital Euro could further accelerate this trend, particularly by enhancing cross-border transactions. As an export-driven economy with strong financial and trade links to the EU and the UK, Ireland relies heavily on international

payments. The Digital Euro could reduce exchange rate risks, eliminate transaction fees on intra-EU payments, and provide businesses with a secure and stable alternative to private payment systems.

However, the success of the Digital Euro in Ireland depends on its ability to integrate with the country's existing financial and fintech infrastructure. Ireland is home to some of the world's leading fintech companies, including Stripe and Fexco, which have already developed highly efficient digital payment solutions. If the Digital Euro complements rather than competes with these systems, it could further boost Ireland's role as a European fintech leader. Conversely, if its implementation disrupts established financial networks or limits flexibility, adoption rates may be lower than anticipated.

Additionally, Ireland has one of the lowest rates of cash usage in the eurozone, meaning that the Digital Euro is unlikely to dramatically change consumer payment habits. Instead, its real impact may be seen in government payments, social welfare distribution, and business-to-business transactions, where a central bank-backed digital currency could increase efficiency and security.

However, its impact on financial inequality remains uncertain. While it could expand access to digital financial services, especially for lower-income individuals who rely on government transfers, its benefits will depend on whether all socioeconomic groups can adopt it equally. If commercial banks face reduced deposits, they may adjust lending policies, potentially increasing borrowing costs for those most reliant on traditional credit channels, further influencing wealth distribution in Ireland.

4. Research Question and Hypotheses

This research explores how the introduction of a Digital Euro, specifically through an account-based model, may transform the competitive relationship between the Central Bank of Ireland and commercial banks. The focus lies in identifying structural and behavioural changes prompted by deposit movements, liquidity management, and institutional responses.

Research Question:

How Will the Digital Euro's Account-Based Model Reshape the Competitive Dynamics Between the Central Bank and Commercial Banks in Ireland?

Hypothesis 1:

The introduction of an account-based Digital Euro may lead to a decline in deposits held by commercial banks, requiring them to find new funding sources or change their lending strategies.

Hypothesis 2:

If the Digital Euro causes deposit outflows, the Central Bank of Ireland may need to take on a larger role in maintaining financial stability, changing the balance between public and private banking.

These hypotheses provide the analytical foundation for examining how the institutional and operational roles of central and commercial banks may evolve as digital public money becomes part of the Irish financial system.

5. Methodology

Understanding the philosophical assumptions of a research project is key to developing a consistent and meaningful methodology. This section outlines the ontological, epistemological and axiological assumptions of the research and explains how these relate to the choice of research paradigm, design, data collection methods and analytical approach.

The methodological framework draws on the relevant academic literature, both empirical and theoretical, reviewed in the previous section of the Literature Review This approach provides a logical link between theory and practice.

The methodology also relates to the main research question:

'How will an account-based digital euro model change the dynamics of competition between the Central Bank and commercial banks in Ireland?'.

This question indicates the direction of the entire study and determines the choice of appropriate tools for data collection and analysis.

Philosophical Assumptions and Research Paradigm

From an ontological perspective, this study suggests that the impact of the digital euro on the Irish banking sector is not a fixed or objective reality, but a multiplicity of interpretations shaped by key organisations.

The Central Bank of Ireland, commercial banks and financial analysts operate in the context of different organisational strategies, regulatory constraints and strategic

interests that influence exactly how they perceive the risks and opportunities associated with the introduction of the digital euro.

Rather than assuming a single and universal outcome, the study relies on a relativist ontological stance, recognising the existence of multiple simultaneous versions of reality, each relevant to a particular stakeholder group.

For example, for some, the digital euro may be perceived as a threat to existing models of commercial finance, while for others it may be perceived as a tool to renew and improve the efficiency of the financial infrastructure.

It is this diversity of views and positions that underpins the research and justifies the choice of a qualitative methodology based on expert judgements and interpretations.

From an epistemological perspective, this study is based on a subjectivist approach. Knowledge of how the digital, account-based euro affects the Irish banking sector is not something objective and measurable. Rather, it is formed through interaction with the participants in the process - the Central Bank of Ireland, commercial banks and other stakeholders. These participants are not simply observing what is happening - they are actively involved in shaping the meaning of the new monetary instrument through public debate, policy development and strategic action.

In this context, the study does not consider the understanding of the digital euro as a predetermined set of opinions. Instead, the focus is on how interpretations are shaped by institutional roles, organisational interests and economic priorities. This explains the choice of expert interviews as the main method of data collection, as this format allows for a deeper understanding of respondents' perspectives through dialogue, reflection and contextual analysis.

From an axiological perspective, the study does not pretend to be neutral. The participants were chosen carefully - they are representatives of the Central Bank of Ireland, top managers of commercial banks and independent financial advisors whose professional activities are closely related to the implementation of the digital euro. Their views are shaped by factors such as deposit outflows, regulatory changes and a rethinking of the role of commercial banking in the new financial landscape.

The study recognises that both the participants' responses and the researcher's analytical approach are driven by certain attitudes and values. Transparency and critical reflection are therefore built into the research process.

All these philosophical attitudes belong to **the interpretivism paradigm**, which, as opposed to research based on hypothesis testing using quantitative data, focuses on

understanding how different financial actors in Ireland interpret the account-based CBDC model proposed by the European Central Bank. This will help to understand how financial sector actors react to the new model and what changes they expect in competition between banks.

Research Design

This study uses a qualitative research method to explore how the introduction of the digital euro may affect competition and institutional behaviour in the Irish banking sector. As the digital euro is still under development and there is no empirical evidence yet on its actual impact, qualitative methods are the most effective way to explore how experts interpret its potential impact. The study relies on two hypotheses but does not test them statistically. Instead, it uses an inductive approach: it analyses the views of experts to assess the extent to which their views support or refute the hypotheses. Key themes will be drawn from the interview data and interpreted using thematic analysis.

Data Collection Strategy

This study relies on semi-structured interviews as the primary method of data collection. This format offers a balance between maintaining a clear thematic direction and allowing participants to highlight what they find important based on their expertise. While key issues will guide the discussion, the format also enables flexibility and depth. Participants will be selected for their direct experience or professional involvement with the potential effects of a CBDC in Ireland. The sample will include representatives from the Central Bank of Ireland, senior executives from major commercial banks such as AIB and Bank of Ireland, and experienced professionals in the regulatory or advisory space who are familiar with the ECB's digital euro initiative. The selection focuses on securing meaningful insights rather than achieving statistical representativeness.

Interviews will be conducted either in person or online (Zoom or Microsoft Teams), depending on availability. Each session will last between 45 and 60 minutes. With prior consent, interviews will be recorded and later transcribed. Anonymity will be preserved, and all data will be securely stored in accordance with GDPR and the ethical standards of the National College of Ireland.

Interview questions are thematically linked to the study's two hypotheses:

- That the introduction of an account-based Digital Euro may result in declining deposits for commercial banks, forcing them to adapt their funding or lending strategies.
- That such disruptions could prompt the Central Bank of Ireland to become more actively involved in maintaining financial stability, thereby transforming its role within the banking system.

The structure of the interviews follows a progressive logic designed to elicit nuanced reflections. The first phase addresses immediate and operational concerns—such as deposit flight, customer behaviour, and shifts in lending capacity. This allows an initial exploration of whether the Digital Euro could affect liquidity and challenge traditional funding mechanisms, which speaks to the first hypothesis.

The second part focuses on institutional responses. Questions here explore how commercial banks might react—through funding innovation, strategic repositioning, or engagement with the ECB—and whether the Central Bank anticipates taking on expanded functions.

The final segment invites participants to reflect on long-term implications, particularly how the structure of the financial system might evolve: who designs and controls payment infrastructure, how access is governed, and what role the Central Bank might play in future system coordination.

This sequence—from practical risks to governance dynamics—supports clarity and comparability, ensuring responses stay closely aligned with the research aims and enabling structured thematic analysis in the subsequent phase.

Analytical Framework and Data Processing

Given the small number of expert interviews, the study uses manual thematic analysis. Each interview is fully transcribed to ensure all relevant content is captured. Transcripts are then reviewed closely to identify ideas that directly relate to the research question and hypotheses. Attention is paid both to what is said and how it is expressed, especially when themes or terms recur.

Emerging patterns are organised into core themes. These reflect the main concerns of the study, including deposit outflows, banks' funding strategies, and the expected role of the Central Bank or ECB in preserving financial stability. The analysis looks for consistent points raised across multiple interviews while also considering more individual insights within context.

As patterns take shape, the data is examined for alignment with the hypotheses. When several participants raise similar points—such as potential shifts in deposit volumes or institutional responses—these are treated as shared perspectives. One-off comments are only included if supported by clear context or corroboration from other participants. Sub-themes, such as retail versus corporate impacts, are included where relevant and grouped under broader categories. This helps capture sector-specific nuances without fragmenting the analysis. Themes are tracked systematically to allow comparison across responses and to support transparency in interpretation.

The focus throughout is on the strength, clarity, and frequency of insights—not on statistical generalisation. The goal is to present a structured and consistent account of how financial professionals in Ireland interpret the implications of an account-based CBDC. Each stage of the process is documented to maintain analytical coherence and ensure the findings are grounded in the evidence provided by the participants.

Connection to Supporting Literature

This study's methodology is grounded in key reports and academic sources that examine the effects of CBDCs on commercial banking and financial governance. The **ECB's Second Progress Report** (2024) and the **FSB's Fintech Note** (2023) both highlight the risk of deposit outflows from commercial banks following the introduction of retail CBDCs. These insights directly shaped the first hypothesis: that an account-based digital euro could reduce commercial bank funding, prompting adjustments in their lending models. Interview questions on deposits, funding, and credit were informed by this concern.

The **BIS Project Helvetia Phase II** (2022) played a central role in developing the second hypothesis. It shows how central banks, by managing infrastructure and settlement processes, can shift the balance of power without changing legislation. This supports the idea that, if commercial banks lose ground due to deposit flight, the Central Bank might step in more directly—redefining its position in the financial system.

Comparative cases also shaped the research design. The **E-krona Pilot Report** (Riksbank, 2025) illustrates a more decentralised model, where commercial banks retain operational roles. In contrast, the **Digital Yuan Progress Report** (PBoC, 2023) reflects a fully centralised approach. These contrasting models helped frame the research question as part of a wider debate on monetary infrastructure control.

The **Atlantic Council's CBDC Tracker** (2024) was used to contextualise the Irish case globally. By comparing governance and transparency structures across countries, the tracker supported viewing Ireland's alignment with the ECB model as a deliberate strategic choice—not just a technical one.

Together, these sources informed the hypotheses and interview structure, reinforcing the value of a qualitative, interpretive approach. Scholars like **Oliver (2010)** and **Scotland (2012)** support this orientation, arguing that in rapidly changing, uncertain environments like CBDC implementation, meaning is best explored through flexible, dialogue-based methods such as expert interviews.

Ethical Considerations

This study adheres to the ethical standards of the National College of Ireland. An NCI Ethics Form has been completed and approved as part of the Capstone preparation process. All participants are invited to take part voluntarily and are informed of their right to withdraw from the study at any point without consequence. Informed consent is obtained before each interview, and participants are fully briefed on the research objectives, data usage, and confidentiality measures.

Due to the qualitative nature of the research and the professional status of participants, particular attention is given to anonymity and data protection. All interview responses will be anonymised, and no personally identifiable information will be disclosed. Recordings and transcripts will be securely stored on encrypted devices, accessible only to the researcher. Participants are informed that their contributions will be used solely for academic analysis within the scope of this project.

As the researcher, I recognise that personal interpretations may influence the analysis of qualitative data. To minimise bias and maintain transparency, I keep detailed notes during the analytical process and reflect critically on emerging interpretations. These steps ensure that the findings are grounded in the participants' views rather than shaped by preconceived assumptions.

6. Analysis and Findings

4.1 Deposit Outflows and Competitive Realignment

One of the most widely anticipated consequences of the introduction of a central bank digital currency (CBDC) is its potential impact on the deposit base of commercial banks. In the context of an account-based digital euro, this issue takes on additional

significance as deposit accounts will be managed directly by the central bank or through licensed providers. The first hypothesis of this study is that the introduction of an account-based Digital Euro may lead to a decline in deposits held by commercial banks, requiring them to seek new funding sources or modify their lending strategies. This analysis uses expert interviews with representatives of the Central Bank of Ireland and a fintech professional from Revolut to assess this assertion. The interview data is cross-checked with published research from the ECB, BIS and IMF.

Participants from the Central Bank of Ireland acknowledged that the impact of the Digital Euro on deposits remains highly uncertain, citing user behaviour, adoption rates, and design limitations as critical variables. One interviewee from the Digital Euro Unit within the Financial Operations Directorate (FOD) explained that "if the population of Ireland decided they all wanted Digital Euro accounts, the implications for deposits would be very different" than if uptake remained low. This conditional framing reflects the broader ECB position that the impact of the Digital Euro will be shaped not just by its technical availability but by behavioural patterns and incentives (ECB, 2023).

In contrast, the interview with the fintech sector presented a sharper interpretation of potential competitive displacement. The representative from Revolut described the loyalty of depositors as "a thing of the past," especially among younger, mobile-first users. From this perspective, the convenience, perceived neutrality, and platform integration of the Digital Euro could gradually erode the deposit base of legacy banks. This aligns with concerns raised in the BIS report *Central Bank Digital Currencies: Financial Stability Implications* (2021), which warned that poorly designed CBDCs could lead to disintermediation of banks, especially during periods of financial stress when depositors might shift funds to perceived safer central bank holdings. Supporting this view, Agustín Carstens, General Manager of the BIS, stated in a 2024 interview that "the Basel regime has been very good for the banks,"[2] referring to the role of Basel III regulatory standards in strengthening liquidity and capital buffers. He emphasised that coordinated oversight remains essential to manage risks associated with financial innovation, including digital currencies.

However, the Central Bank of Ireland downplayed such risks in the Irish context. Citing internal simulations, the interviewees indicated that the proposed holding limits and the non-interest-bearing nature of the Digital Euro would reduce the likelihood of

[2] https://www.ft.com/content/36ae6198-9ee1-4144-96c1-039bd7e32893?utm_source

systemic outflows. They also noted that customer behaviour tends to be “sticky,” suggesting that depositors may be slow to shift from traditional accounts without strong incentives. Indeed, the IMF supports this position in its Fintech Note *Implications of Central Bank Digital Currencies for Monetary Policy Transmission* (2023), stating that design features such as holding limits, transaction caps, and disincentives for rapid conversion from deposits can help limit outflows. These measures are expected to prevent significant disruption to monetary policy transmission, allowing CBDCs to coexist with traditional deposit-based systems within existing liquidity frameworks.

What emerges from this comparative analysis is a divergence in the perceived scale and nature of the risk. For the Central Bank, deposit outflows are viewed as a contained, model-dependent scenario, manageable through institutional tools and policy design. For the fintech sector, however, they are part of a broader transformation in consumer behaviour and institutional trust. These contrasting views reflect a deeper divide in how the two sides interpret digital transformation: one sees it as a systemic variable to be managed, the other as a market shift to be leveraged.

This divergence has significant implications for the dynamics of institutional competition. If commercial banks lose their role as the primary holders of transactional deposits, they may be compelled to redefine their value proposition within the financial ecosystem. At the same time, central banks, by assuming a more prominent role in retail money management, risk becoming not just a stabiliser but a direct participant in competitive domains. These shifts, though still unfolding, support the preliminary conclusion that the account-based Digital Euro does have the potential to realign the competitive structure of Ireland’s banking sector. Hypothesis 1, therefore, finds partial confirmation: while the magnitude of deposit outflows remains uncertain, the underlying conditions for competitive disruption are clearly present.

4.2 Strategic Adjustments in Bank Funding and Lending

At the outset, this research assumed that an account-based Digital Euro would raise major concerns among Irish commercial banks regarding the stability of their deposit funding. It was expected that experts would highlight risks to deposit-based lending and the need for alternative liquidity sources. However, interview data revealed a more nuanced perspective: regulatory confidence coexists with cautious anticipation of structural change.

A representative from the Central Bank of Ireland’s Financial Operations Directorate noted that banks currently enjoy strong liquidity and have access to ECB borrowing

tools. Even if deposit migration occurs, “banks would certainly have access to borrowing,” supported by the ECB’s published framework of collateral and rates. This view reflects the ECB’s position that commercial banks remain central to the financial system and that deposit displacement can be managed through mechanisms like holding limits and non-remuneration (ECB, 2024, *Progress on the preparation phase of a digital euro*).

In contrast, the Revolut representative pointed to changing customer expectations, stating that “banks will have to adapt if deposits are going to move.” While not predicting immediate disruption, he argued that legacy institutions will need to modernise how they manage and provide funding in a digital financial environment. This aligns with broader debates around whether the Digital Euro might gradually alter competitive dynamics in the sector.

The contrast between these two views—measured regulatory assurance versus fintech-driven caution—was sharper than initially anticipated. The Central Bank focused on safeguards to preserve system stability, while Revolut framed the Digital Euro as a catalyst for deeper behavioural shifts and potential competitive restructuring. This divergence reflects findings from international literature. The IMF’s *Fintech Note* (2024) warns that CBDCs could gradually increase funding costs for banks if deposits shift toward central bank holdings. Even in well-regulated systems, the IMF notes, banks may face lending pressures and shrinking margins, recommending liquidity tools be recalibrated to mitigate risks (IMF, 2024, *Implications of Central Bank Digital Currency for Monetary Operations*).

The BIS’s *Project Helvetia Phase II* (2022) similarly concludes that central and commercial bank money can coexist—but only if refinancing frameworks are strong and institutional coordination is effective. This supports the CBI's claim that lending remains embedded in a broader regulatory system, not solely tied to deposit levels. Likewise, the ECB (2024) underscores that the digital euro is being designed with “holding limits” and “non-remuneration” to minimise deposit outflows while protecting banks’ intermediary role.

An important theme that emerged was the perception gap regarding timing and impact. The CBI viewed adjustments as minimal if limits are in place—“Irish banks are not expected to need major changes”—whereas Revolut suggested the need for faster strategic adaptation. This difference underscores a broader divide in how regulators and fintechs interpret the pace of change and institutional readiness.

In summary, the evidence supports the second element of Hypothesis 1: commercial banks may have to revise funding and lending strategies if digital euro adoption leads to deposit shifts. While the Central Bank projects a controlled transition, fintech voices point to a need for earlier innovation to maintain competitiveness. Overall, responses from the ECB, IMF, and BIS, along with interview data, suggest that preparedness, flexibility, and access to liquidity will shape how institutions respond to the new financial architecture.

4.3 Central Bank Interventions and Institutional Shifts

The introduction of an account-based Digital Euro raises the question of whether the Central Bank of Ireland could assume a broader stabilising role if deposit outflows weaken the funding base of commercial banks. If deposit volumes in traditional banks decrease substantially, the CBI may be required to take on a more prominent role in safeguarding financial stability, with broader implications for the structure of public–private financial governance in Ireland.

Both participants from the Central Bank of Ireland underscored that the Digital Euro is being developed within the framework of a two-tier system. The role of the central bank is to issue the digital currency, while commercial banks and payment service providers remain the primary point of contact for end users. One of the participants emphasised this clearly: *“banks will still have the role with the customer — the Central Bank will never have anything to do with that.”*

To uphold this structure, the interviewees highlighted three specific safeguards embedded in the Digital Euro design:

1. Non-remuneration — the currency will not bear interest;
2. Holding limits — individuals will face a cap on the amount of Digital Euro they can hold;
3. Merchant conversion — business accounts must automatically convert Digital Euro balances into commercial bank deposits within a set timeframe.

This institutional design is aligned with the ECB’s 2024 policy position, which states: “Holding limits are intended to preserve the role of banks in ensuring the efficient provision of credit to the real economy.” (*ECB, 2024, Progress on the preparation phase of a digital euro – Second Progress Report*)

The CBI participants also referred to their ongoing coordination with the ECB’s policy and technical working groups. They described the central bank’s role as one of oversight and monetary transmission—not direct consumer engagement or credit

provision. This aligns with the conclusions of Project Helvetia by the BIS (2022), which suggests that coexistence between central bank and commercial money is viable when proper liquidity facilities and operational clarity are maintained.

In contrast to the regulatory stance, the interviewee from Revolut shared a more cautious outlook on institutional dynamics. While acknowledging that commercial banks are not being removed from the model, they noted that users—particularly younger ones—may be drawn to the Digital Euro due to its simplicity, perceived neutrality, and backing by the central bank.

Although the interviewee did not frame this as a risk of legal disintermediation, they warned that without visible service improvements, “people will just move.” This reflects the concern that, even when central bank tools are delivered through intermediaries, they could gradually take over key roles in trust, access, and everyday financial use—reducing the relevance of commercial banks in the eyes of the public.

This observation finds support in the IMF’s 2023 Fintech Note, which identifies the risk of unintentional power shifts toward the public sector. The IMF recommends that central banks maintain operational boundaries to avoid gradually weakening the role of private credit institutions, even in systems that retain commercial distribution.

The pilot project of Sweden’s e-krona, led by Sveriges Riksbank, offers a useful point of comparison. In collaboration with market participants, Riksbank tested different levels of governance in its two-tier model, aiming to balance competition, innovation, and standardisation. A looser governance structure can boost innovation and market diversity, but it also risks fragmentation and reduced public trust in the e-krona. A stricter model ensures uniformity and public confidence but may limit participants’ ability to offer differentiated services. The Swedish case shows how important it is to maintain user choice and market competition—even when developing public digital infrastructure.

In contrast, China's digital yuan has followed a more centralized trajectory. While it is distributed through commercial banks, operational control remains firmly with the central bank. The BIS notes that most central banks are considering a retail CBDC architecture that involves the private sector, with 87%[3] of central banks engaged in

[3] https://www.bis.org/publ/bppdf/bispap136.pdf?utm_medium=email&utm_source

CBDC work considering using private intermediaries. This highlights the importance of maintaining the role of the private sector in the CBDC ecosystem.

The ECB's model aims to strike a balance between these two approaches. Statements from both the CBI and ECB consistently describe the Digital Euro as a complement to cash and deposits, not a competitor. The CBI interviewees reinforced this view, referring to the project as "evolutionary, not revolutionary."

The material presented confirms that the Digital Euro, as currently designed, reinforces the two-tier financial model and does not transfer customer-facing functions to the Central Bank. At the same time, both the interviews and the literature suggest that changes in how people view digital money, who controls the infrastructure, and what kind of experience users have could slowly shift the balance of power between institutions. How this plays out will depend on how fast people adopt the system, how intermediaries are involved, and how innovation develops over time.

The introduction of a Digital Euro raises concerns about how commercial banks might adjust their lending capacity if deposits decline. One of the interviewees from the Central Bank of Ireland explained that Irish banks currently have enough liquidity buffers, and most are authorised to access ECB refinancing tools. They suggested that even if some deposits shift to Digital Euro accounts, this would not immediately restrict the banks' ability to lend. However, they acknowledged that if borrowing costs rise, banks might respond by raising loan rates or tightening access, especially for more risk-sensitive segments like small businesses or first-time borrowers.

This issue connects directly to the first hypothesis of this research. If commercial banks lose part of their deposit base, their main funding source becomes less stable. The ECB, in its 2024 *Second Progress Report on the Digital Euro*, confirms that holding limits and the absence of interest are intended to prevent large-scale deposit shifts. Still, the risk of some movement remains.

The representative from Revolut viewed the situation from a different angle. They said that if people start treating the Digital Euro as a safer or simpler way to store everyday funds, traditional banks might have to increase incentives—either through better interest rates or more flexible credit products—to avoid losing clients. The comments indicate that changes in customer behaviour can influence how banks compete, including in the structuring of credit offerings.

This perspective is reflected in the IMF's 2023 Fintech Note *"Central Bank Digital Currencies: Design Choices, Macroeconomic Implications, and the Road Ahead",*

which discusses how CBDCs can force commercial banks to adjust funding strategies. If replaced by costlier funding, lending could become more expensive unless mitigated by regulatory tools. However, the note also warns that central banks should avoid crowding out private credit systems, especially in countries where relationship lending plays a key role.

The BIS *"Project Helvetia: Settling Tokenised Assets in Central Bank Money – Phase II Report"* adds that while banks can adapt, uneven liquidity shifts may affect how credit is distributed. Based on the analysis of interviews and literature, this does not appear to be an immediate threat. However, it could become a more significant issue if the use of the Digital Euro grows beyond current expectations or starts to appeal more to consumers than traditional retail deposits.

Overall, both the interviews and the literature point to the same issue: credit conditions are sensitive to how funding models evolve. If banks need to compete more aggressively for deposits or lose part of their customer base, lending terms may adjust—especially in retail and SME markets. Whether or not this creates wider systemic effects depends on how both public and private institutions respond.

4.5 Institutional Power and the Role of the Central Bank

The second hypothesis focuses on whether deposit outflows caused by the Digital Euro may force the Central Bank of Ireland to take on a more direct role in the banking system, reshaping the balance of institutional responsibilities. Interview data show that, although the two-tier structure is formally preserved, the operational role of the Central Bank is expanding through its involvement in payment architecture and liquidity design.

One interviewee from the Central Bank of Ireland confirmed that core features such as holding limits, non-remunerated balances, and automatic reconversion of merchant funds were introduced "to avoid cutting banks out of the payment system." These mechanisms are not only regulatory tools but components of a coordinated infrastructure that is subject to continuous adjustment in collaboration with the ECB. The same participant emphasised that Ireland participates in Eurosystem-level discussions on technical design and legal frameworks. While the Bank does not interact with retail users, it has a direct role in defining how digital money flows within the system and under what conditions commercial banks operate.

The interview with Revolut reflected concern about how this architecture may affect the autonomy of private institutions. While recognising that banks remain involved in

distribution, the representative noted that “control over access, standards and liquidity ceilings” is moving toward central banks. They described this as a structural realignment rather than exclusion, whereby commercial actors become part of a centrally governed framework in which strategic decisions about infrastructure are made without market input.

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These developments are consistent with findings in the *ECB’s Second Progress Report on the Digital Euro (2024)*[4], which states that the Eurosystem will coordinate system parameters, monitor usage, and manage rule enforcement. Although the report affirms the role of intermediaries, their activity is clearly bounded by centralised

[4] https://www.ecb.europa.eu/press/pr/date/2024/html/ecb.pr241202~d0b19e5e1b.en.html?utm_source

protocols. The *IMF Fintech Note (2024)*[5] reinforces this view, warning that central banks implementing CBDCs may expand their operational reach when private institutions are unable to meet the liquidity or technological demands of public money. The report stresses that institutional change occurs not by declaration, but through infrastructure.

The *EDRi Position Paper (2024)*[6] raises related concerns. It argues that if CBDC infrastructure is controlled exclusively by central banks, it can embed governance into technical systems that are resistant to institutional accountability. While focused on civil rights, the document highlights a relevant institutional consequence: when monetary regulation is encoded in infrastructure, it no longer functions through traditional legal and financial channels.

The *Riksbank's e-krona pilot (2025)* offers a contrasting model. In Sweden, system architecture was designed to separate issuance from infrastructure, allowing private banks and fintechs to retain operational control within a central framework. This model preserves institutional flexibility by enabling market-driven service layers. Ireland, following the ECB's account-based model, does not provide for such decentralisation.

The *Atlantic Council's CBDC Tracker (2024)* confirms that institutional models vary significantly across jurisdictions. Where governance is centralised, competitive autonomy is reduced. Ireland's adoption of the Eurosystem model aligns it with the group of countries in which infrastructure governance resides predominantly with the central bank.

The interview data confirms that the Central Bank of Ireland has already moved beyond the role of passive regulator. While it does not lend, set prices, or manage users, it participates in defining the parameters within which all other actors operate. Revolut's concern that private institutions risk becoming structurally subordinate is grounded in the current governance structure. The literature supports this analysis by demonstrating how institutional shifts are embedded in architectural decisions.

Hypothesis 2 is confirmed. The Digital Euro embeds the Central Bank of Ireland into the structural coordination of the national financial system. While commercial banks remain part of the model, the conditions under which they function are defined by

[5] https://www.imf.org/en/Publications/fintech-notes/Issues/2024/10/04/Implications-of-Central-Bank-Digital-Currency-for-Monetary-Operations-555883?utm_source

[6] https://edri.org/wp-content/uploads/2024/02/EDRi-position-paper-Digital-Euro-and-Rights-to-Cash.pdf?utm_source

public institutions operating at the infrastructure level. This change does not represent full control or the replacement of private banking, but it constitutes a redistribution of institutional power through design. The role of the Central Bank is being reshaped not through law or crisis, but through the operational logic of a centrally managed monetary architecture.

7. Discussion and Conclusion

7.1 Interpretation of Findings

This research was guided by two hypotheses. The first stated that the introduction of a digital euro will lead to deposit flight from commercial banks to central bank accounts. The second proposed that if commercial banks struggle to maintain lending and competitiveness as a result, the Central Bank of Ireland may be forced to intervene more directly, reshaping its role in the banking system.

The interviews conducted support both assumptions. Participants acknowledged that deposit migration could occur, especially if users are offered unrestricted access to central bank accounts. One interviewee from Revolut noted that customers generally favour stability and simplicity, which they associate with central bank-backed solutions. This could put traditional banks at a disadvantage in attracting retail deposits.

Officials from the Central Bank emphasized that tools such as holding limits are in place to manage this risk, but they also admitted that these mechanisms are still being adjusted. This suggests that the issue is not yet resolved and remains under continuous review. The fact that mitigation strategies are being re-evaluated highlights a practical challenge rather than a theoretical concern.

The second hypothesis is also substantiated. Central Bank interviewees described their role in developing operational aspects of the digital euro — including user caps and merchant reconversion processes. These are not just regulatory functions but signal a hands-on involvement. This reflects a broader trend: responsibility for shaping payment infrastructure is shifting toward central banks. Concerns about such concentration of power have been raised by both the **Financial Stability Board (FSB, 2023)** and the **European Digital Rights Initiative (EDRi, 2024)**, which warn that digital public infrastructure could unintentionally limit institutional diversity.

Interestingly, one of the more unexpected findings was the degree of agreement between public and private sector participants. Although their perspectives differ, both

sides recognized that influence is now exerted not only through regulation, but also through system design. This indicates that the debate around the digital euro increasingly touches on how power is distributed and exercised in practical terms.

7.2 Significance of the Study

Beyond these findings, the research underscores how digital currencies are beginning to reshape institutional dynamics. In Ireland's case, the digital euro appears to be triggering a shift in how financial institutions interact — a shift driven less by formal legislation and more by the underlying technical infrastructure.

Ireland is a useful case study for observing how smaller economies adjust to top-down frameworks. The **European Central Bank (ECB, 2023)** has opted for a unified, account-based infrastructure, which contrasts with Sweden's more decentralized e-krona model (**Riksbank, 2025**). As a result, Irish stakeholders are operating within a system largely shaped at the supranational level, with relatively limited local flexibility. By conducting semi-structured interviews, this study brings forward voices that are directly engaged in this transition. Personally, I was motivated by the observation that much of the redesign of financial systems today is occurring quietly, embedded in protocol standards and backend infrastructure. This process, though technical on the surface, raises critical questions about transparency, competition, and control.

7.3 Limitations

It is important to acknowledge several limitations of this research. The study draws on three expert interviews: two from the Central Bank of Ireland and one from Revolut. While these interviews were valuable, they represent a narrow slice of institutional perspectives. Voices from traditional retail banks, regulatory watchdogs, or consumer advocates were not included.

Moreover, since the digital euro is still in the development phase, much of this study relies on expected outcomes rather than observable results. There is no user behaviour data available yet, which limits the scope to implementation design rather than real-world impact.

Finally, although Sweden was used for comparison, a more complete cross-country analysis would require additional research and access to more diverse stakeholders across Europe.

7.4 Recommendations for Future Research

Looking ahead, future work should compare how different CBDC models distribute decision-making power. For example, the ECB's centralized framework should be

contrasted with systems like Sweden's, which are more modular and adaptable at the national level. Such comparative studies could clarify which architectural choices encourage institutional diversity and which may limit it.

More inclusive empirical research should also be undertaken, especially involving traditional banks, fintech companies, and end-users. Understanding how these groups perceive and adapt to CBDC implementation would add important context that is currently missing. In particular, examining how design choices affect institutional agency — that is, who controls what — should be prioritized.

Finally, greater attention must be paid to how public control exercised through infrastructure can be kept accountable. As noted by **EDRi (2024)**, when rules are embedded in code rather than debated in parliament, oversight becomes more difficult. This raises broader questions about democratic governance in increasingly digital monetary systems.

7.5 Conclusion

The findings of this research demonstrate that the digital euro is likely to alter both the flow of retail deposits and the role of national central banks. The Central Bank of Ireland appears to be moving beyond its traditional supervisory role by becoming more directly involved in system design and implementation.

While commercial banks still play an essential part in the financial ecosystem, the conditions of their participation are being redefined by central authorities. Importantly, these changes are not necessarily introduced through new laws, but through technical configurations and protocols.

This finding reinforces the idea that infrastructure is not neutral. Decisions made during system design can have far-reaching consequences for institutional autonomy, market dynamics, and democratic accountability. In this sense, the digital euro is more than a technological development — it is a structural transformation of how money and financial power are governed.

As a final note, some of the drafting and phrasing in this paper was supported by AI-based writing assistance. However, all critical interpretations, synthesis, and final editorial decisions were made by the author.

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9. Appendices

Interview questions

1. How does the Central Bank of Ireland expect the Digital Euro to affect deposit levels in commercial banks? (*I want to understand if deposit outflows are expected and how the CBI is preparing for them.)*

Follow-up questions:

- Has the CBI done any studies on possible deposit movements?
- Which banking sectors (retail, corporate, SME) will be affected the most?
- Could different regions in Ireland see different levels of deposit movement?

2. If commercial banks lose deposits, what other funding options could they use? (*This shows how banks might adjust their business strategies.)*

Follow-up questions:

- Will banks need to borrow more from the Central Bank?
- Could banks start relying more on market-based funding (bonds, wholesale lending)?
- What risks do these funding options create for the banking system?

3. What actions, if any, is the CBI considering to prevent deposit outflows from affecting banks? *(If the CBI plans any interventions, it would mean they expect real risks for banks.)*

Follow-up questions:

- Could the CBI limit how much Digital Euro people and businesses can hold?
- Are there plans for deposit insurance or incentives to keep money in banks?
- Would capital requirements for banks change if deposits drop?

4. How could a drop in bank deposits affect credit availability and loan costs in Ireland? (*If banks lose deposits, they may lend less or increase loan costs.)*

Follow-up questions:

- Would loan interest rates go up if deposits decrease?
- Would small businesses or households be affected more than large companies?
- Would the CBI step in to keep credit available if lending slows down?

5. If the Digital Euro shifts financial power toward the Central Bank, how could this change Ireland's financial system in the long term? (*This helps me understand if the CBI will become a bigger player in financial markets.)*

Follow-up questions:

- Could the Digital Euro reduce the need for traditional banks?
- Would the CBI taking a bigger role in financial stability create new regulatory challenges?
- How might competition between banks and fintech companies change in a Digital Euro economy?