

Department of Political Science

Bachelor's Degree in Politics: Philosophy and Economics

Thesis in Microeconomics

FINANCIAL CRISES AND BANKING STABILITY: THE RESPONSE OF THE EUROPEAN BANKING SYSTEM

Prof. Lorenzo Carbonari	Emanuele D'Agostino 105642
Supervisor	Candidate

Academic Year 2024/2025

- Non quia difficilia sunt non audemus, sed quia non audemus, difficilia sunt – **Lucio Anneo Seneca**

It's not because things are difficult that we don't dare to do them,

It's because we don't dare to do them that they are difficult

Table of	<u>f Contents</u>	
INTRO	DUCTION	1
CHAP		
FINAN	CIAL CRISES AND THE IMPACT ON THE BANKING SYSTEM	3
1.1.	DEFINITION OF FINANCIAL CRISES AND MAIN CAUSES	3
1.2.	IMPACT OF FINANCIAL CRISES ON GLOBAL BANKING SYSTEMS	8
1.3. CEN	EFFECTS OF FINANCIAL CRISES ON THE EUROPEAN SYSTEM OF TRAL BANKS	13
CHAP	ΓER II:	
	UROPEAN BANKING SYSTEM'S RESPONSE TO MAJOR FINANCIAL	
CRISE	S	15
2.1 EUR	THE 2008 GLOBAL FINANCIAL CRISIS AND ITS IMPACT ON THE OPEAN BANKING SYSTEM	15
2.2	THE EUROPEAN SOVEREIGN DEBT CRISIS (2010-2012):	
VUL	NERABILITIES AND ECB CORRECTIVE MEASURES	20
2.3 OF E	THE 2020 PANDEMIC CRISIS: KEY CHALLENGES AND THE RESILIENG UROPEAN BANKS	
CHAP	ΓER III:	
RESIL	IENCE STRATEGIES IN THE EUROPEAN BANKING SECTOR	30
3.1	RISK MANAGEMENT POLICIES	30
3.2	THE EVOLUTION OF BANKING REGULATIONS	33
3.2	2.1 European Banking Union	36
3.2	2.2 Basel III	38
CHAP	ΓER IV:	
CHALI	LENGES AND FUTURE PROSPECTS	42
4.1 T	HE NEW ECB PRIORITIES	42
4.2 D	IGITALISATION AND SUSTAINABILITY AS NEW DRIVERS OF STABILIT	Ύ 45
CONC	LUSION	49
BIBLIC	OGRAPHY	50

List of Figures

Figure 1: Number of Foreign Banks from OECD and Non-OECD Countries, 1995-2	013 12
Figure 2: ECB response: strong decline in ECB interest rates - Percentages per annual	m; daily
data	17
Figure 3: Role of banks in the funding of corporations & households	18
Figure 4: The end of recession; Rate of change of seasonally adjusted real euro area	GDP on
previous quarter (in per cent)	23

List of Acronyms

BCBS = Basel Committee on Banking Supervision

BSC = Banking Supervision Committee

CBPP = Covered Bond Purchase Programme

CCyB = Countercyclical Capital Buffer

CEBS = Committee of European Banking Supervisors

CRD IV = Capital Requirements Directive IV

CRR = Capital Requirements Regulations

EBA = European Banking Authority

EBU = European Banking Union

ECB = European Central Bank

EDIS = European Deposit Insurance Scheme

EFSF = European Financial Stability Facility

EFSM = European Financial Stabilisation Mechanism

EMU = European Economic and Monetary Union

ESCB = European System of Central Banks

ESM = European Stability Mechanism

ESRB = European Systemic Risk Board

EU = European Union

FSC = Financial Stability Committee

GDP = Gross Domestic Product

GFC = Great Financial Crisis

IMF = International Monetary Fund

LTRO = Long-term Refinancing Operations

MRO = Main Refinancing Operations

MS = Member States

OECD = Organisation for Economic Co-operation and Development

OMT = Outright Monetary Transactions

QE = Quantitative Easing

SMP = Securities Markets Programme

SREP = Supervisory Review and Evaluation Process

SSM = Single Supervisory Mechanism

TFEU = Treaty on the Functioning of the European Union

INTRODUCTION

This thesis explores the topics of financial crises and banking stability, with a particular focus on the response of the European banking sector. While numerous economic crises have left their mark on history, special attention is given here to those that have occurred in the 21st century. This period has arguably witnessed some of the most significant economic transformations in Europe's modern history, from the introduction of the euro to the global financial crisis, the most severe since the 1929 Wall Street crash. The global crisis of 2008, in turn, led to a sovereign debt crisis, pushing several highly influential European countries to the brink of collapse, with repercussions not only for other EU member states but also for economies beyond the European Union. More recently, the pandemic crisis, triggered by an external and exogenous factor, further tested the resilience of the European financial system. Although this latest crisis did not result in substantial financial losses, it highlighted the persistent structural and systemic challenges still faced by the European banking sector.

Despite these recurring shocks, which brought periods of recession, high inflation, and rising unemployment, the European Union and its member states have demonstrated a remarkable capacity for recovery. It is important to note that this recovery process was long and marked by years of negative trends. Nevertheless, particularly in economic terms, the European Central Bank played a crucial role in supporting member states through the adoption of innovative and forward-looking policy measures. Among the most important developments was the establishment of the European Banking Union. This initiative, through a comprehensive set of rules, supervisory mechanisms, and crisis management tools, aims to safeguard the stability of the euro area's banking system, enhance the resilience of credit institutions, and provide a framework for the orderly resolution of failing banks without burdening taxpayers. Its three key components, the Single Supervisory Mechanism, the Single Resolution Mechanism and the European Deposit Insurance Scheme, are responsible for the consistent, integrated supervision of the euro area's most significant banks, ensuring that they operate prudently, comply with European regulations, and are managed effectively in times of crisis. In addition, global regulatory reforms such as the implementation of the Basel III framework have played a vital role in strengthening the resilience of the banking sector, improving risk management practices, and ensuring broader financial stability. These reforms require banks to maintain higher levels of capital as a buffer against potential losses in the event of future crises.

Today, however, the financial sector is confronted with new and complex challenges. Digitalisation and sustainability have emerged as fundamental priorities in ensuring a resilient, competitive, and future-proof banking system. Although the European System of Central Banks still has ground to cover in these areas, a range of initiatives has been introduced to foster a greener and more innovative banking environment in Europe.

CHAPTER I:

FINANCIAL CRISES AND THE IMPACT ON THE BANKING SYSTEM

1.1. DEFINITION OF FINANCIAL CRISES AND MAIN CAUSES

Financial crises are recurrent phenomena throughout history. While some scholars argue that each crisis is unique and context-specific, others, instead, emphasise the underlying patterns and similarities common to the different periods of instability. What is certain, however, is that such crises are acute symptoms of the connection between the financial sector and the real economy. The rise of a financial crisis is rarely tied to a single root, but rather it results from a succession of economic circumstances, such as considerable fluctuations in credit volume and asset prices. Furthermore, drastic disruptions in financial intermediation, together with the provision of external financing to various economic actors, often worsen these circumstances. Additionally, the grounds for crises can vary from wide-ranging balance sheet vulnerabilities affecting businesses, households, financial institutions, or even sovereign entities, to broad government interventions, usually through liquidity measures or reallocation of capital. It can be, therefore, pointed out that financial crises are *pluri-dimensional* turbulences that cannot be accurately recognised by a single index. This complexity explains why definitions of financial crises often vary and continue to evolve. Nonetheless, these can be generally understood as follows:

"A financial crisis is defined as any situation where one or more significant financial assets – such as stocks, real estate or oil – suddenly, (and usually unexpectedly) loses a substantial amount of their nominal value."²

Although financial crises might appear in diverse configurations, they are generally categorised into four main classes: currency crises, sudden stop crises – commonly referred to as capital account or balance of payment crises – debt crises, and banking crises. Two American Economists, Reinhard and Rogoff, pointed out that these types of crises can be further

¹ Claessens, Stijn, and M Ayhan Kose. Financial Crises: Explanations, Types, and Implications; by Stijn Claessens and M. Ayhan Kose; IMF Working Paper 13/28; January 1, 2013. https://www.imf.org/external/pubs/ft/wp/2013/wp1328.pdf

² CFI Team. "Financial Crisis." *Corporate Finance Institute*, 2020, https://corporatefinanceinstitute.com/resources/economics/financial-crisis/#:~:text=A%20financial%20crisis%20is%20generally,overextension%20of%20credit%20to%20borrowers

distinguished according to their respective methods of analysis³. Currency and sudden stop crises, indeed, constitute a broader macroeconomic group that is typically analysed using quantitative tools, making them promptly recognisable. Differently, debt and banking crises are related to qualitative and judgmental evaluation. Even though these crises usually overlap, the theoretical frameworks facilitate their identification. Currency crises, for instance, are frequently characterised by a depreciation in the nominal value of the currency, often prompted by speculative attacks, an outstanding increase in interest rates, significant interventions in foreign exchange markets, and the restriction on capital mobility by monetary authorities. In contrast, sudden stop crises occur due to an impulsive drawdown or swing in foreign capital investments, usually going hand in hand with a significant increase in the country's credit spread⁴. Given the reliance on quantifiable variables, both currency and sudden stop crises are frequently analysed through quantitative approaches. By way of alternative, the second classification of crises is associated with debt turbulences and banking system problems. Debt crises are further differentiated between domestic and foreign debt dynamics. On the one hand, domestic debt crises occur when countries fail to meet their financial obligations due to outright default, elevated inflationary periods, depreciation of their currency, or by facing other financial constraints. On the other hand, foreign debt crises arise when countries are unable or unwilling to honour their foreign debt, involving a sovereign, private, or both debt crisis. Last but not least, banking crises are usually identified when, during bank runs, whether concrete or anticipated, liabilities are suspended from being convertible, or when government authorities are constrained to intervene by providing additional liquidity and financial injections with the intent of avoiding a systemic collapse. Since the variables involved in these types of crises centre on judgmental analysis, they are said to be of qualitative *modus operandi*.

The progression toward financial crises has followed recurring patterns, often driven by three general conditions that typically precipitate these turbulent periods. Nevertheless, it is important to acknowledge that there have been some exceptions due to the crisis's chameleonlike characteristic of evolving according to time and space in which they took place. What

_

³ Reinhart, Carmen M, and Kenneth S Rogoff. "The Aftermath of Financial Crises." *American Economic Review*, vol. 99, no. 2, Apr. 2009, pp. 466–472, https://www.aeaweb.org/articles/pdf/doi/10.1257/aer.99.2.466

⁴ Claessens, Stijn, and M Ayhan Kose. Financial Crises: Explanations, Types, and Implications; by Stijn Claessens and M. Ayhan Kose; IMF Working Paper 13/28; January 1, 2013. https://www.imf.org/external/pubs/ft/wp/2013/wp1328.pdf

remains consistent is the role played by credit frameworks before, during, and after each crisis.⁵ In the pre-crisis period, the abundant accessibility of credit fuels excessive confidence among consumers and investors. However, this is immediately reversed in the subsequent period, where the availability of credit reduces drastically, preannouncing the potential rise of a crisis. Following periods of massive amounts of financial investments, both domestic and foreign investors intervene by decreasing their exposure to the affected markets. This might be prompted by several grounds, most commonly the apprehension about the sustainability of the exchange rate regime. Additional concerns may be related to doubts about fiscal and currentaccount deficits, and to increased recognition of structural weaknesses in the financial sectors, such as undercapitalised banks, inadequate regulatory oversight, or excessive leverage.⁶ Furthermore, as uncertainty escalates, the behaviour of capitalists is influenced by people's concerns, which drives investors to rush to withdraw their funds before further decline, spreading a bank run mentality, especially once the country's foreign exchange reserves start to shrink. The result is the rise of the phenomenon known as capital flight, which leads to exchange rate pressure, causing a depreciation of currency.⁷ The devaluation not only diminishes incomes and reduces consumption but also discourages new foreign investments, thereby boosting economic distress. Moreover, as the country faces a depreciation of the currency, the cost of servicing foreign debt increases considerably, rendering local borrowers more vulnerable and less creditworthy.⁸ In response, banks and lenders responded by cutting back on loans, further constraining economic activity.

The post-crisis period is likewise characterised by shortening of credit, as financial institutions seek to minimise risk exposure by providing capital only to borrowers with the highest creditworthiness. However, as these tight periods have been overcome, financial crises are also preceded and followed by phases of economic expansion, referred to as boom periods. In this volatile interval, financial factors, such as capital market prices and lending, tend to

_

⁵ Summers, Lawrence H. "International Financial Crises: Causes, Prevention, and Cures." *American Economic Review*, vol. 90, no. 2, May 2000, pp. 1–16, https://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.90.2.1

⁶ Claessens, Stijn, and M Ayhan Kose. Financial Crises: Explanations, Types, and Implications; by Stijn Claessens and M. Ayhan Kose; IMF Working Paper 13/28; January 1, 2013. https://www.imf.org/external/pubs/ft/wp/2013/wp1328.pdf

⁷ Summers, Lawrence H. "International Financial Crises: Causes, Prevention, and Cures." *American Economic Review*, vol. 90, no. 2, May 2000, pp. 1–16, https://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.90.2.1

⁸ CFI Team. "Financial Crisis." *Corporate Finance Institute*, 2020, https://corporatefinanceinstitute.com/resources/economics/financial-

crisis/#:~:text=A%20financial%20crisis%20is%20generally,overextension%20of%20credit%20to%20borrowers

follow common pathways, despite slight differences in time and duration. While much is acknowledged about the conditions that usually precede crises, the root causes of these conditions are still open to discussion. In many circumstances, several factors are considered irrational since their origins are not easily recognisable, such as unexpected bank runs, contagion effects and decline of financial markets, and systemic failures like tightening of credit or forced asset sales. Additional reasons might be related to restrictions on arbitrage when markets are under pressure.⁹

Financial crises do not choose preferences in terms of their origin, occurrence or impact. They can emerge in both developed and developing countries, as well as from both the public and the private sectors and strike countries regardless of their wealth or global power. The key difference lies in the impact, which is predominantly shaped by the forms the crisis assumes and the characteristic economic conditions of the country in which it develops¹⁰. Crises may originate from either domestic or foreign imbalances, yet of fundamental importance is the responsibility of the respective authorities to implement economic strategies and policy interventions in the effort to minimise losses and to prevent critical economic and social damages. However, as financial crises unfold, usually expanding from a local area to a global context, domestic policy interventions might be insufficient, proving that coordinated efforts, particularly in the area of fiscal and monetary policies, become essential. Although manifestations of these periods of instability might evolve in history, their consequences often present recurring features across affected countries. One of the most prominent and immediate effects is a sharp decrease in Gross Domestic Product (GDP), parallel to a fall in economic output, a significant decrease in the labour market, and threatening inflationary trends.

A critical question that opens current debates and reflection is why financial crises continue to recur despite the efforts of economists and scholars to publicly acknowledge their underlying causes. According to Danielson, the reappearance of crises revolves around the fundamental mistrust among economic actors, which arises from the uneven distribution of

-

⁹ Claessens, Stijn, and M Ayhan Kose. Financial Crises: Explanations, Types, and Implications; by Stijn Claessens and M. Ayhan Kose; IMF Working Paper 13/28; January 1, 2013. https://www.imf.org/external/pubs/ft/wp/2013/wp1328.pdf

¹⁰ Claessens, Stijn, and M Ayhan Kose. Financial Crises: Explanations, Types, and Implications; by Stijn Claessens and M. Ayhan Kose; IMF Working Paper 13/28; January 1, 2013. https://www.imf.org/external/pubs/ft/wp/2013/wp1328.pdf

information, the intricacy of financial markets and the clarity of the economic system.¹¹ The Icelandic economist further pointed out that although financial crises do not frequently occur, they have a regular recurrence over time. It can be argued, indeed, that while the time-and-space context might vary, all major crises, since the first one in 1763, share similarities in terms of causes, growth, and impacts.

⁻

¹¹ Danielsson, Jon. "Why so Many Crises Happen When We Know Why They Happen and How to Prevent Them." *CEPR*, 30 May 2024, https://cepr.org/voxeu/columns/why-so-many-crises-happen-when-we-know-why-they-happen-and-how-prevent-them

1.2. IMPACT OF FINANCIAL CRISES ON GLOBAL BANKING SYSTEMS

The global banking sector has undergone considerable structural transformations throughout successive financial crises, particularly following the global financial crisis of 2008. During these periods of economic instability, systemic vulnerabilities within the banking system have often come to light. These typically include immoderate levels of unsustainable borrowing and high-risk financial behaviour, without sufficient credit and liquid assets to absorb potential losses. The most profound effects of financial crises are generally observed in economic expansion, financial stability and the operational capabilities of banks. 12 In recent years, the profound changes of globalisation have brought with them technological innovations that have reshaped the financial landscape, spreading contentions among non-bank entities and confronting the banking sector with environmental issues. Governments and financial authorities have implemented substantial amendments as a response to crises, improving regulation. These structural changes have aimed to enhance regulatory frameworks, strengthening banks' capacity to withstand shocks through massive amounts of credit and liquid assets. Moreover, these had the goals of restricting hidden government support and lessening the broader economic fallout of bank failures by enhancing recovery and resolution processes. However, it is relevant to monitor the rise of new threats and the sector's capacity to adapt to a dynamic context. With the global economy transitioning into a new era, the banking sector has set new business policies and standards, including changes to balance sheet composition, cost structures, operational scope and geographical presence.¹³ While some developed banking systems have undergone radical transformations, others continue to face persistent challenges such as weak financial performance and jurisdictional constraints.

One of the most significant transformations in the banking sector in response to financial crises has been the evolution of its structural framework and market functionality. These periods of instability brought an end to the preceding phase of economic expansion for numerous developed economies' banking systems. Various efficiency indices have suggested a substantial decline in banking activity, particularly in the most severely affected countries. This contraction

¹² Mayes, David G., et al. "The Oxford Handbook of the Economics of Central Banking." *Google Books*, 2019, https://books.google.it/books?hl=it&lr=&id=3BCIDwAAQBAJ&oi=fnd&pg=PA171&dq=the+impact+of+financial+crises+on+global+banking+system&ots=cKz-AELKds&sig=UmLdJ36-HaMCmiRUMFQ9n4iZpOg&redir_esc=y#v=onepage&q&f=false. Accessed 8 Apr. 2025.

¹³ Buch, Claudia, et al. Committee on the Global Financial System Structural Changes in Banking after the Crisis Report Prepared by a Working Group Established by the Committee on the Global Financial System the Group Was Chaired By. https://www.bis.org/publ/cgfs60.pdf Jan. 2018.

was primarily reflected in the decrease of transaction volumes, rather than the fall in the number of economic actors operating within financial markets. Several countries, indeed, witnessed an increase in the number of banks, particularly in less developed economies that have suffered relatively lower impact. Moreover, the banking sector has exhibited a general trend toward greater concentration, notwithstanding some exceptions. Of equal importance, it has been the evolution of banking strategies. The strongest financial institutions have moved away from complex, trading-oriented activities toward more labour-intensive operations, especially in the field of traditional banking services. This transition is reflected in the shifts of banks' asset portfolios, diversification of revenue streams, and greater dependency on customer deposit funding¹⁴. International operations of the greatest European and American banks are now characterised by increased selectivity and strategic focus. Alternatively, the global banking scenario witnessed a broader expansion of the banks based in less developed economies, where the impact of crises was less pronounced. A third notable development has been the shifts in bank profitability and efficiency trends. Several financial systems on the international stage experienced a significant fall in bank performance, particularly in terms of return on equity, diverging from the exorbitant rate levels recorded prior to crises. ¹⁵ In some circumstances, this downturn can be attributed to reduced leverage resulting from regulatory changes. Furthermore, the banking systems of several developed economies, particularly within Europe, have faced stagnant revenue growth and rigid cost structures, often burdened by inherited financial costs tied to past investments and managerial inefficiencies.

Additional significant developments within the banking sector have emerged, particularly as defining characteristics of the post-crisis phase. Among these, the most fundamental aspects have been the enhancement of bank resilience and exposure to financial risks. Through the accumulation of liquid assets and the increasing amounts of credit, financial institutions have strengthened their position on a global scale to better withstand potential future financial shocks. This increased resilience has been facilitated by the widespread implementation of stress testing frameworks, aimed at sustaining financial flows during boom and recession

_

¹⁴Buch, Claudia, et al. Committee on the Global Financial System Structural Changes in Banking after the Crisis Report Prepared by a Working Group Established by the Committee on the Global Financial System the Group Was Chaired By. https://www.bis.org/publ/cgfs60.pdf Jan. 2018.

¹⁵ Mayes, David G., et al. "The Oxford Handbook of the Economics of Central Banking." *Google Books*, 2019, https://books.google.it/books?hl=it&lr=&id=3BCIDwAAQBAJ&oi=fnd&pg=PA171&dq=the+impact+of+financial+crises+on+global+banking+system&ots=cKz-AELKds&sig=UmLdJ36-HaMCmiRUMFQ9n4iZpOg&rediresc=y#v=onepage&q&f=false. Accessed 8 Apr. 2025.

periods¹⁶. Furthermore, banking systems in the most developed economies have progressively prioritised reliable capital resources while focusing their investments on secure liquid assets, often guided by periodic indicators, such as expansionary monetary policy. Non-quantitative factors, including improved risk government frameworks and internal oversight measures, have played a central role in further increasing the resilience of banking institutions. Nonetheless, with the uncertainty of the future approaching and the recurrent emergence of new financial threats, regulatory bodies have acknowledged that further efforts are required to enhance the adaptability of the global banking sector, while it remains difficult to analyse the evolutions brought by the crises.

When financial crises occur, the area of international banking is usually the most distressed. Despite generating economic turbulence and instability on a global scale, including the collapse of major foreign financial institutions involved in local banking activities, the consequences have been uneven. On the one hand, banking systems in the most developed economies, particularly in Europe, have had a domino effect on the foreign banking institutions, many of which remain closely interconnected with advanced banks. On the other hand, the financial institutions located in economies less severely impacted by crises have experienced a substantial expansion of their global presence, with the outcome in a radical shift in the international structure of banking holdings. ¹⁷ In the years between 2007 and 2013, several host countries perceived a substantial reduction in the number of foreign banking institutions present within their markets, while others witnessed a growth of foreign banks in their relative markets. Moreover, financial institutions from OECD countries saw a 6% decrease in their possession of foreign banks while maintaining control over 89% of overseas banking holdings¹⁸. This was mainly attributable to structural changes in banking systems within Western Europe, which appeared to be the most vulnerable to financial shocks. By way of alternative, banking institutions in developing economies increased twofold their presence, primarily within their respective local areas, contributing to transforming the international banking sector into a

-

¹⁶ Buch, Claudia, et al. Committee on the Global Financial System Structural Changes in Banking after the Crisis Report Prepared by a Working Group Established by the Committee on the Global Financial System the Group Was Chaired By. https://www.bis.org/publ/cgfs60.pdf Jan. 2018.

¹⁷ Schoenmaker, Dirk. "What Happened to Global Banking after the Crisis?" *Journal of Financial Regulation and Compliance*, vol. 25, no. 3, 10 July 2017, pp. 241–252,

https://www.emerald.com/insight/content/doi/10.1108/jfrc-01-2017-0010/full/html

¹⁸ Claessens, Stijn, and Neeltje van Horen. "The Impact of the Global Financial Crisis on Banking Globalization." *IMF Economic Review*, vol. 63, no. 4, Nov. 2015, pp. 868–918, https://link.springer.com/article/10.1057/imfer.2015.38

broader and more diverse international banking environment characterised by greater regional integration. The results of this readjustment have been manifested through more limited sales by financial institutions, reduced new investments, and the formation of closer and more strategic business partnerships. Nonetheless, international banking was not fractured; rather, it underwent significant and varied structural changes, with an increase in market participants. Several factors prompted banks to prioritise loans with proximate local areas over global operations.

Setting the focus on the years of the global financial crisis, between 2007 and 2013, numerous advanced economies witnessed profound changes in the control structure of the banking sector. Although the crisis indiscriminately affected countries across various development levels, the responses were notably diverse. Some economies were compelled to reduce their international influence, while others intervened on the global stage, expanding their presence in foreign financial markets and increasing their overseas market positions. The aforementioned developments can be supported through empirical data. The first noteworthy observation is the significant drop in the number of new international financial institutions entering the market. In particular, the year 2013 marked a critical decline, with only 19 new entrants recorded compared to 120 in 2007. Since countries did not experience equivalent rates of overseas financial institutions' exits, the net foreign bank entry turned negative between 2010 and 2013 for the first time since 1995. Secondly, in nearly 60 global economies, the role of foreign banks in financial services provision diminished considerably, with a reduction exceeding 15%. Thirdly, the control of foreign banks moved from the most advanced economies to subsidiary banks in developing countries. Specifically, the number of foreign banks in OECD countries fell from 873 to 747 financial institutions, while, conversely, 106 new banks emerged in less developed economies.

Numbers Numbers 2000 1000 2000 1000 2000 1000 2000 1000 2000 1000 2000 1000 2000 1000 2000 1000 2000 1000 2000 1000 2000 1000

- Non-OECD country banks

19

OECD country banks

Figure 1: Number of Foreign Banks from OECD and Non-OECD Countries, 1995-2013

Source: Claessens and van Horen, 2015

Lastly, but not least important, the banking sector transitioned from a global presence to a predominantly regional and local orientation. Empirical evidence indicates that by 2012, over 50% of international banking holdings were held by corporate institutions operating within the corresponding geographical region as their receiving country. While this trend was observable across all global regions, it was comparatively less pronounced in Europe, where regional concentration had long been an established characteristic. In conclusion, rather than affirming these evolutions as fractures of the banking sector, it is noteworthy to declare them as radical transformations, giving rise to a renewed economic scenario characterised by a broader and more diversified market actors.

_

¹⁹ Claessens, Stijn, and Neeltje van Horen. "The Impact of the Global Financial Crisis on Banking Globalization." *IMF Economic Review*, vol. 63, no. 4, Nov. 2015, pp. 868–918, https://link.springer.com/article/10.1057/imfer.2015.38

1.3. <u>EFFECTS OF FINANCIAL CRISES ON THE EUROPEAN SYSTEM OF</u> CENTRAL BANKS

The European banking sector has been severely affected and reshaped over the years by successive financial crises, particularly by the one that emerged at the beginning of the second decade of the 21st century. The European Economic and Monetary Union (EMU) experienced notable shifts in market activity, resulting in a less central position that several of its member states had maintained prior to the global financial crisis. The international turbulence had severe repercussions not only for the giants of the banking sector but also for the regional financial institutions within the primary economies of the European Union (EU). This was exacerbated by the collapse of global financial markets, which were closely interlinked with banking and investment firms, especially in sectors most exposed to international trade. During the crisis of 2008, numerous EU member states incurred substantial economic losses given their significant vulnerability to distressed and hard-to-sell assets within the failing US financial market. Additionally, the precarious economic stability of the most susceptible countries in the Eurozone placed considerable strain on the core economies through the volatility of sovereign debt securities and asset prices in the outermost countries. As global financial stability deteriorated, the crisis became concrete in all its aspects, compelling governments to intervene swiftly in financial markets. Numerous institutions facing imminent insolvency were recapitalised with government funds to prevent financial system collapse and mitigate the consequent risk of soaring unemployment.²⁰ This intervention led to a substantial rise in public expenditure and national debt levels that, in several cases, surpassed the size of the respective economies. Moreover, the EU encountered a capital inflow halt that originated within its principal Union members and rapidly spread to weaker economies, heightening the risk of sovereign default in countries such as Greece, Portugal, Ireland and Spain²¹. The most effective policy response available to these nations was the enforcement of critical prompt macroeconomic measures aimed at achieving immediate stabilising effects. Consequently, by the end of the first decade of the 2000s, these economies entered a second phase of economic downturn, further exacerbating failure risks among non-financial corporations and undermining the resilience of their financial sectors. The subsequent years witnessed an additional decline in

-

²⁰ Bodnár, Katalin, et al. "Credit Shocks and the European Labour Market." *SSRN Electronic Journal*, Working Paper Series No. 2124, 2018, https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2124.en.pdf

²¹ Messori, Marcello. *Financial Instability and Evolution in the European Monetary Union*. Oct. 2018. https://leap.luiss.it/wp-content/uploads/2022/09/WP10.18-Financial-instability-and-evolution.pdf

the region's banking sector, as other marginal countries, including the Italian peninsula, became embroiled in a mutually reinforcing cycle between national debt crises and financial sector vulnerabilities. It can thus be asserted that the banking system entering this new era must be characterised by cohesive and coordinated efforts among banking and investment firms to maintain efficiency and resilience. Failing this, financial institutions risk surrendering their central role in providing credit to the non-banking sector and in controlling the household investment holding throughout the recovery phase.

Although the European System of Central Banks (ESCB) has undergone multiple financial crises and the EU continues to recover from the most recent one, the European Central Bank (ECB) has consistently played a pivotal role in maintaining the stability of the monetary union. A conventional measure employed by the ECB during periods of financial instability has been the provision of substantial liquidity to the banking sector. However, during the most recent crises, a different strategy emerged, distinguished by a drastic drop in lending relative to both real economic activity and monetary aggregates. Notably, between 2008 and 2012, the ESCB maintained both its bank capitalisation ratio and the aggregate value of its financial assets and liabilities relative to national economic output at levels registered before the crisis, largely due to the delayed restructuring of the financial sector.²² In every regional policy initiative, whether addressing immediate crisis administration or enacting long-term configurational reforms within the region, the ECB has remained a principal and indispensable institution.²³ As financial crises have demonstrated a cyclical and recurrent nature, the ECB has progressively acquired greater authority and liability, reinforcing its role as the principal institution safeguarding the Union's financial and economic stability. In conclusion, the ECB's fundamental mandate entails mitigating the consequences of past crises as well as its capacity to prevent the rise and escalation of future threats to the system, whether at the regional or global scale.

-

²² Reichlin, Lucrezia, *The ECB and the Banks: The Tale of Two Crises* Sept. 2013. CEPR Discussion Paper No. DP9647, https://ssrn.com/abstract=2326511

²³ Grozdanovski, Damjan, The Roles of the ECB and the Financial Crisis: *The Legal Framework Under which the ECB Currently Operates in the EU and the Evolution of that Framework in the Light of the European Financial Crisis*, 2017 Vol 1 LSEUR, pp 98-129

CHAPTER II: THE EUROPEAN BANKING SYSTEM'S RESPONSE TO MAJOR FINANCIAL CRISES

2.1 <u>THE 2008 GLOBAL FINANCIAL CRISIS AND ITS IMPACT ON THE</u> EUROPEAN BANKING SYSTEM

The global financial crisis of 2008, commonly referred to as the Great Financial Crisis (GFC), was triggered by the bankruptcy of the American investment bank Lehman Brothers.²⁴ The collapse of one of the most prominent financial institutions in the United States, alongside the insolvency of several major insurance institutions, produced severe and far-reaching consequences for the international financial system, unprecedented in recent history. Given the strong interdependence and extensive economic ties between the United States and the European Union, the effects of the crisis were rapidly transmitted to Europe, significantly destabilising its financial and economic scenario. It is important, however, to acknowledge the critical developments that preceded the crisis. The year before (2007), numerous global investment institutions and insurers encountered severe credit problems, largely as a result of the excessive issuance of high-risk mortgage loans. This resulted in the so-called subprime crisis that cast doubt on the fundamental values of the EU, such as the use of a single currency and market integration.²⁵ In the aftermath of the initial financial shock, several common impacts were recognised. While core member states entered the economic depression phase, peripheral countries experienced acute liquidity disruptions and a rapid escalation in government debt burdens. This dynamic would ultimately lead to a secondary crisis within the euro area in the years that followed – an issue that will be discussed in the subsequent sections of this thesis.

Although the United States and Europe have always maintained close economic ties, their respective responses to the financial crisis diverged significantly. The principal distinction lies in the configuration and scope of the policies adopted, affected in turn by the structural frameworks of their principal financial institutions, particularly in terms of autonomy. Within the European Union, the reaction of both individual member states and, notably, the ECB, was immediate and crucial. This was recognised through the adoption of raising insured deposit thresholds, liability guarantees for financial institutions, and substantial capital support for

Fleming, Michael J, and Asani Sarkar. "The Failure Resolution of Lehman Brothers." *EliScholar – a Digital Platform for Scholarly Publishing at Yale*, 12 Jan. 2014, https://elischolar.library.yale.edu/ypfs-documents/320
 Anderson, Jeffrey J. "A Series of Unfortunate Events: Crisis Response and the European Union after 2008." *The Palgrave Handbook of EU Crises*, 22 Dec. 2020, pp. 765–789, https://doi.org/10.1007/978-3-030-51791-5
 45.

banks²⁶. While national governments adopted distinct approaches tailored to the specific features of their domestic financial systems and institutions, the EU as a whole implemented a remarkable level of coordinated policy intervention. On the one hand, the Union sought to stabilise financial trade and contain the unfold of system instability. On the other hand, it introduced a series of institutional adjustments aimed at addressing vulnerabilities within the framework of the EMU. According to various scholars, these institutional weaknesses had contributed to the austerity and rapid escalation of the crisis within the euro area.

The international financial shock compelled the ECB to intervene in the area of monetary policy. Central to its response was the supply of credit and the adjustment of the bank credit transmission mechanism, achieved through the reform and adaptation of existing monetary policy instruments. Financial institutions, confronted with severe liquidity shortages due to the halt of financial markets and other short-term financing channels, were in urgent need of credit. However, the ECB undertook significant changes to its refinancing operations, amending both Main Refinancing Operations (MRO) and Long-term Refinancing Operations (LTRO). Notably, the average maturity of these operations was extended from six months to one year²⁷. Moreover, these operations became more accessible through a relaxation of collateral requirements, the establishment of inflexible lending rates, and the adoption of unrestricted liquidity supply mechanism. These measures registered positive outcomes and were considered effective in addressing the acute credit constraints brought about by the crisis. Further structural innovations by the ECB as a response to the GFC included the adoption of the Securities Markets Programme (SMP) and the Covered Bond Purchase Programme (CBPP). Although exceptional and initially restricted in both purpose and duration, these initiatives aimed to strengthen market confidence within the euro area. By purchasing national sovereign bonds from member states most severely affected by the crisis, these programs sought to heal the system through which monetary policy influences the economy. A fundamental pillar of the ECB's crisis strategy was the preservation of the cohesion and stability of the Euro system. This objective was further reflected in the introduction of the Outright Monetary Transactions (OMT) programme, which envisaged unlimited acquisition of sovereign bonds from euro area

_

²⁶ European Central Bank. "The European Response to the Financial Crisis." *European Central Bank*, 16 Oct. 2009, https://www.ecb.europa.eu/press/key/date/2009/html/sp091016 1.en.html

²⁷Claeys, Grégory. "The (Not So) Unconventional Monetary Policy of the European Central Bank since 2008." *Bruegel* | *the Brussels-Based Economic Think Tank*, 8 July 2014, https://www.bruegel.org/report/not-so-unconventional-monetary-policy-european-central-bank-2008

countries, conditional upon participation in the European Stability Mechanism (ESM) programme.²⁸ However, despite its potential importance, the OMT programme was never formally activated.

In the last years of the first decade of the 2000s, the ECB introduced a series of policies collectively referred to as "enhanced credit support" measures, alongside a substantial reduction in policy interest rates from 4.25% to 1%. Simultaneously, the rates applied to refinancing operations were lowered by 325 basis points. These policy rates represented the lowest levels recorded since the first appearance of the euro in 1999, as a result of the sharp decline in inflationary forces in October 2008, while consistently upholding the ECB's function of promoting euro stability within the Union.²⁹

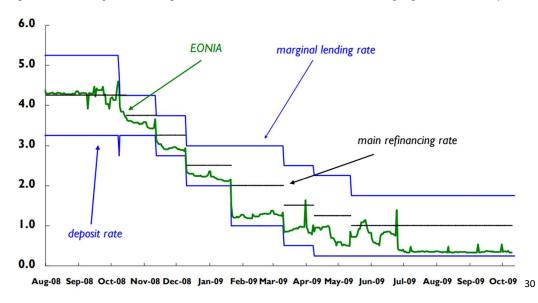


Figure 2: ECB response: strong decline in ECB interest rates - Percentages per annum; daily data

Source: European Central Bank, 2009

The liquidity manoeuvres implemented during this period pursued several goals, but were predominantly directed towards retail banks, since they represented the main channel of financial support for private sector borrowers within the Eurozone. Approximately 70% of the

²⁸ Anderson, Jeffrey J. "A Series of Unfortunate Events: Crisis Response and the European Union after 2008." *The Palgrave Handbook of EU Crises*, 22 Dec. 2020, pp. 765–789, https://doi.org/10.1007/978-3-030-51791-5 45.

²⁹ European Central Bank. "The European Response to the Financial Crisis." *European Central Bank*, 16 Oct. 2009, https://www.ecb.europa.eu/press/key/date/2009/html/sp091016 1.en.html

³⁰ Tumpel-Gugerell, Gertrude. "The European Response to the Financial Crisis." *European Central Bank*, 16 Oct. 2009.

https://www.ecb.europa.eu/press/key/date/2009/html/sp091016 1.en.pdf?695023033184ce04bcc6bcf0cb179a98

financing for individual and commercial clients, indeed, is provided through credit issuance by banks, making the proper function of the interbank market a critical element of the ESCB.³¹ This sector represents a fundamental financial pathway for the effective implementation of monetary regulation measures throughout the economy. While the ECB's flexible monetary policy framework facilitated the adoption of liquidity measures with only minor adjustments to its operational pattern, the introduction of secured bond purchases constituted a notable innovation in the central bank's crisis response.

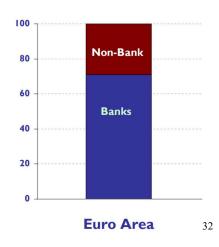


Figure 3: Role of banks in the funding of corporations & households

Source: European Central Bank, 2009

Within the Euro system, banks have generally relied on the covered bonds market, which played a central role in providing funds. However, in the wake of the transnational financial shock, this market experienced severe disruptions. In response, the ECB launched a programme allocating 60 billion euros for the purchase of secured bonds, intending to restore market functionality. Despite the substantial scale of this intervention, it did not prevail over business progress³³. Rather, in accordance with its institutional mandate, the ECB aimed to support activity within the secured debt market without assuming a leading or distortionary role, purchasing these assets in carefully regulated amounts across member states. Regarding the impact of these policies on the broader monetary environment, a favourable trend was

_

³¹ Tumpel-Gugerell, Gertrude. *The Financial Crisis – Looking Back and the Way Forward*. Conference "Rien ne va plus? Ways to rebuild the European Social Market Economy." https://www.bis.org/review/r090129e.pdf
³² Tumpel-Gugerell, Gertrude. "The European Response to the Financial Crisis." *European Central Bank*, 16 Oct. 2009.

 $[\]underline{https://www.ecb.europa.eu/press/key/date/2009/html/sp091016_1.en.pdf?695023033184ce04bcc6bcf0cb179a98}$

³³ European Central Bank. "Economic and Monetary Developments: ECB Monetary Policy during the financial crisis and asset price developments." European Central Bank, Sept. 2013. https://www.ecb.europa.eu/pub/pdf/other/mb201309 focus07.en.pdf

observed in the money market, with interest rates falling significantly, eventually reaching the ECB's deposit rate of 0.25%. This improvement was mainly attributable to the extensive capital investments, which sustained the money market's operations during a period of pronounced financial distress. Nevertheless, data registered in the second semester of 2009 indicated that the liquidity provided was insufficient to fully restore pre-crisis financial conditions. Lending activity from major financial institutions to real economy firms remained subdued, with an annual growth rate of solely 0.7%. This persistent weakness was primarily driven by ongoing economic uncertainty, which undermined firms demand for credit and diminished consumer confidence, thereby constraining the overall effectiveness of the ECB's monetary policy measures.

⁻

³⁴ European Central Bank. "The European Response to the Financial Crisis." *European Central Bank*, 16 Oct. 2009, https://www.ecb.europa.eu/press/key/date/2009/html/sp091016 1.en.html

2.2 <u>THE EUROPEAN SOVEREIGN DEBT CRISIS (2010-2012)</u>: <u>VULNERABILITIES</u> AND ECB CORRECTIVE MEASURES

The difficulties experienced in Europe between late 2008 and early 2009 laid the groundwork for the emergence of a new, profound economic crisis. This crisis was primarily driven by widespread financial instability and the severe economic challenges faced by several Mediterranean countries, including Greece, Portugal, Italy, Spain and Ireland. The immediate trigger, however, was the collapse of Iceland's banking system, which ignited financial turmoil across the Union³⁵. The so-called Eurozone sovereign debt crisis exposed Europe's vulnerabilities on the global stage, with its repercussions persisting for over five years. Although the crisis was regional in scope, the European Union's response was supported by the International Monetary Fund (IMF). In this context, both institutions collaborated closely to devise a cohesive three-year financial assistance programme. Nevertheless, the Custom Union served as the principal contributor, as the IMF's lending capacity fell significantly short of the demanded funding levels. The resulting programmes allocated approximately €100 billion, distributed over the respective years. These initiatives aimed to provide financial support to countries that, by the early 2010s, had been effectively excluded from international bond markets; initially, Greece, Ireland and Portugal, followed later by Italy and Spain. Access to these financial resources, however, was conditional upon the adoption of budgetary tightening policies and framework renovations, intended to encourage economic development, strengthen capital buffers and reduce excessive debt within the banking sector³⁶.

The GFC profoundly disrupted the covered bond market, further exacerbating the public debt levels of several EU member states. In response, the EU, particularly the financial authorities, including the European banking sector, implemented a series of monetary policy measures aimed at supporting the affected countries while primarily safeguarding the solidity and integrity of the euro area. As the principal mandate of the ECB was to maintain price stability within the Union, in May 2010, the relevant authorities, with the approval of the seventeen eurozone member states, introduced and established the European Financial Stability Facility (EFSF) programme. Building upon this initiative, the European Financial Stabilisation

_

³⁵ Throstur, Olaf Sigurjonsson. "The Icelandic Bank Collapse: Challenges to Governance and Risk Management." *Corporate Governance: The International Journal of Business in Society*, vol. 10, no. 1, 23 Feb. 2010, pp. 33–45, https://doi.org/10.1108/14720701011021094.

³⁶ Lane, Philip R. "The European Sovereign Debt Crisis." *Journal of Economic Perspectives*, vol. 26, no. 3, Aug. 2012, pp. 49–68, https://doi.org/10.1257/jep.26.3.49.

Mechanism (EFSM) was created in 2012, placed under the administration of the European Commission. Although both programmes were conceived in response to the same crisis and share a common goal of financial stabilisation, they differed in target beneficiaries. The EFSF was specifically designed to provide financial assistance to euro area countries severely affected by the crisis, with a funding volume of approximately €400 billion. Conversely, the EFSM aimed to offer financial support to any EU member states facing potential financial shocks.³⁷ Both mechanisms secured funding through the issuance of bonds to guarantee financial liquidity within the euro area, though their operation remained contingent upon guarantees provided by participating countries.

A decisive and coordinated response by Eurosystem countries materialised in October 2011, through the adoption of policies intended to restore financial market stability. These measures addressed multiple challenges, with the Greek financial situation demanding the most urgent intervention. It was collectively agreed among member states that Greece's debt-to-GDP ratio should be reduced to 120% by 2020. This objective was supported by the voluntary participation of private financial investors, who agreed to a 50% reduction in the nominal value of Greek sovereign bonds, achieved through a bond exchange programme where new bonds were issued at half of the previous value. Additionally, leaders of the Eurozone's countries committed to providing €30 billion to support the Private-Sector Investment initiative, as this intervention came to be known. Member states also planned to enhance the lending capacity of the EFSF through various mechanisms, enabling it to provide greater liquidity, sustain financial institutions to raise capital, and acquire government bonds to stabilise financial markets. Likewise, a key element of these reforms involved strengthening financial institutions by requiring banks to raise their Core Tier 1 capital ratio to 9% by June 2012³⁸. Furthermore, member states pledged to cooperate in providing more accessible, longer-term funding for banks when necessary. The sovereign debt crisis also precipitated significant reforms in economic governance and fiscal oversight within the euro area. Member states intensified coordination on economic policy and public finance management, introducing stricter

_

³⁷ Anderson, Jeffrey J. "A Series of Unfortunate Events: Crisis Response and the European Union after 2008." *The Palgrave Handbook of EU Crises*, 22 Dec. 2020, pp. 765–789, https://doi.org/10.1007/978-3-030-51791-5 45.

³⁸ European Central Bank. *Financial Stability Review*. European Central Bank, Dec. 2012. https://www.ecb.europa.eu/pub/pdf/fsr/financialstabilityreview201212en.pdf

mechanisms to ensure fiscal discipline and financial stability, thereby extending and reinforcing the regulatory frameworks already in place³⁹.

A theoretical, though vital, response to the discussed crisis was delivered by the former President of the ECB, Mario Draghi, during the Global Investment Conference in London on 26th July 2012. In his pivotal speech, Draghi reaffirmed the commitment to the euro, declaring that the EU's financial institutions would undertake "whatever it takes" (the famous expression used by the then Head of the ECB) within their mandate to preserve the common currency⁴⁰. Although these remarks did not constitute formal policy measures, the statement had a profound and immediate impact on financial markets and policymakers across the euro area. Following Draghi's address, financial markets stabilised, speculative pressures eased, and government bond yields for the most affected countries began to decline. The most significant policy development, however, occurred shortly thereafter with the introduction of the OMT programme in September 2012. This initiative authorised the ECB to purchase government bonds of distressed eurozone countries in the secondary market under specific conditions. This initiative was undertaken primarily to mitigate the so-called redenomination risk, which threatened to fragment the monetary union by forcing member states to revert to their national currencies⁴¹. Notably, this risk heightened borrowing costs for certain countries, as market uncertainty increased, but OMT addressed this challenge by restoring market confidence. However, the ECB adopted a cautious approach, pledging financial assistance only to those countries willing to implement comprehensive and credible economic reform programmes. This conditionality served as a safeguard for the EU, ensuring that member states remained fiscally responsible and did not rely on the ECB as an unconditional lender of last resort. The OMT programme represented a decisive and unprecedented intervention, signalling the ECB's

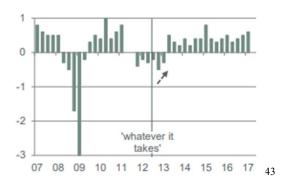
-

³⁹ European Central Bank. "The ECB and the Sovereign Debt Crisis. Speech by José Manuel González-Páramo, Member of the Executive Board of the ECB, at the XXIV Moneda Y Crédito Symposium, Madrid, 4 November 2011." *European Central Bank*, 2011, https://www.ecb.europa.eu/press/key/date/2011/html/sp111104 1.en.html ⁴⁰ European Central Bank. "Building Stability and Sustained Prosperity in Europe. Speech by Mario Draghi, President of the ECB, at the Event Entitled "the Future of Europe in the Global Economy" Hosted by the City of London Corporation, London, 23 May 2013." *European Central Bank*, May 2013, https://www.ecb.europa.eu/press/key/date/2013/html/sp130523 2.en.html

⁴¹ De Santis, Roberto A. "A Measure of Redenomination Risk." *European Central Bank*, vol. 1785, 2015, https://doi.org/10.2139/ssrn.2620732.

readiness to engage more directly in safeguarding financial stability and ensuring the integrity of the euro area.⁴²

Figure 4: The end of recession; Rate of change of seasonally adjusted real euro area GDP on previous quarter (in per cent)



Source: Eurostat, KfW Research

By the end of 2012, the ECB began to observe trends of a gradual recovery. Positive developments in both sovereign and corporate debt markets prompted financial institutions, particularly in the most affected countries, to increase the volume of deposits held by euro area non-bank entities by approximately €200 billion since August 2012. At the same time, TARGET2 balances, the liabilities gathered by these countries within the ECB's payment system, of member states' financial institutions dropped by around €250 billion, representing a 25% reduction from their peak levels. Moreover, the demanded loans by these countries from the ECB decreased significantly. As the crisis drew to a close, the ECB introduced additional measures to safeguard the euro area economy against the risk of slipping into another recession, particularly during a period of economic stagnation. In 2015, the ECB launched a Quantitative Easing (QE) policy, under which the ESCB committed to the acquisition of government and institutional bonds monthly, worth a value of approximately €60 billion, until September 2016. The primary objective of this policy was to support the Eurosystem, which was struggling at the time. Although the Eurozone was gradually exiting from the turbulent period, the economy

⁴² Lionello, Luca. "The New Role of the ECB in the European Sovereign Debt Crisis." *Thefederalist.eu*, 2015, https://www.thefederalist.eu/site/index.php/en/essays/2042-the-new-role-of-the-ecb-in-the-european-sovereign-debt-crisis

⁴³ Wanke, Sebastian. "Five Years of "Whatever It Takes": Three Words That Saved the Euro." KfW Research, 26 July 2017. https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-Volkswirtschaft-Kompakt/One-Pager-2017-EN/VK-No.-139-July-2017-Whatever-it-takes EN.pdf

⁴⁴ European Central Bank. "Building Stability and Sustained Prosperity in Europe. Speech by Mario Draghi, President of the ECB, at the Event Entitled "the Future of Europe in the Global Economy" Hosted by the City of London Corporation, London, 23 May 2013." *European Central Bank*, May 2013, https://www.ecb.europa.eu/press/key/date/2013/html/sp130523 2.en.html

was still mired in prolonged weak growth, presenting the danger of renewed financial instability. To manage the financial risks associated with this large-scale asset purchase programme, the ECB assumed only one-fifth of the total financial risk, driving the remaining exposure towards the financial institutions of the member states⁴⁵.

⁴⁵ Roman, Angela, and Irina Bilan. "The Euro Area Sovereign Debt Crisis and the Role of ECB's Monetary Policy." *Procedia Economics and Finance*, vol. 3, 2012, pp. 763–768, https://doi.org/10.1016/s2212-5671(12)00227-4.

²⁴

2.3 <u>THE 2020 PANDEMIC CRISIS: KEY CHALLENGES AND THE RESILIENCE OF</u> EUROPEAN BANKS

The twenty-first century has gone down in history for a series of significant events, both positive and negative, that have rapidly and profoundly reshaped human life. Among the most impactful have been the terrorist attacks of 2001, the global financial crisis of 2008, and, more recently, an unprecedented global pandemic that began in 2020. For the first time in centuries, the world confronted a pandemic of such scale, caused by the SARS-CoV-2 virus, more commonly known as COVID-19, which infected and claimed the lives of millions worldwide. Although primarily a public health crisis rather than an economic one, its consequences swiftly spilled over into global financial markets, triggering severe economic disruptions. The world's largest financial institutions, particularly those based within the EU, faced a renewed period of recession, though generally less severe than the one precipitated by the events of 2008.

The crisis encountered by the ESCB in recent years was the consequence of a series of external and unforeseen events that subsequently generated serious and tangible challenges for the banking sector. Unlike the GFC, which originated within financial markets themselves, the factors behind this new period of economic instability were largely exogenous and indirect from a financial perspective. The COVID-19 pandemic forced the closure and suspension of business operations on a global scale, giving rise to widespread solvency risks and potential corporate bankruptcies. In an era characterised by global economic interdependence, no sector functions solely, rather each is intricately interconnected with others. Consequently, the suspension of business activity and the halt in production inevitably impacted the banking sector. The surge in unemployment rates, coupled with widespread salary reductions, triggered a domino effect that created credit challenges for financial institutions. As businesses experienced sharp declines in revenue due to pandemic-related restrictions, many were unable to meet their obligations to repay loans and other financial liabilities. Banks, in turn, faced a contraction in financial flows and investment activities, which resulted in liquidity shortages and heightened financial vulnerabilities. This already difficult situation was further aggravated by growing concerns among investors, particularly in peripheral EU member states, about the safety of their bank deposits amid the looming threat of corporate bankruptcies and financial market volatility. A notable issue exacerbating this climate of uncertainty was the continued absence of a unified and robust deposit insurance scheme within the EU. The lack of a comprehensive, shared deposit protection framework rendered the ESCB less equipped to manage systemic risks effectively, leaving national banking systems exposed to sudden capital outflows and investor

panic. This structural weakness in the EU's financial safety net underscores the persistent challenges in advancing banking union reforms and achieving greater financial integration within the euro area. 46 Furthermore, the implementation of expansionary monetary policies and the prevalence of favourable credit conditions led a substantial increase in corporate debt markets. In particular, many businesses accumulated significant levels of debt, as consumer incomes, especially in developing economies, stagnated or declined. This erosion of purchasing power resulted in a sharp reduction in consumer demand for goods and services, which in turn diminished the demand for loans intended to finance production and commercial activity⁴⁷.

Despite the severe disruptions caused by the pandemic, the European banking sector demonstrated considerable resilience and an effective capacity to respond. According to data from the end of 2021, the principal financial institutions within the euro area continued to efficiently extend credit and provide financial services to the real economy. Nevertheless, as this crisis remains relatively recent and its long-term economic and financial repercussions are still unfolding, it is premature to issue a definitive assessment of the effectiveness of the policies implemented thus far. What can be affirmed, however, is that the financial sector has, to date, avoided severe systemic disruptions, and the ESCB has maintained its operational resilience throughout this challenging period⁴⁸.

Although this did not result in substantial financial losses, it nevertheless served to expose two critical vulnerabilities within the European banking system. The abrupt suspension of industrial production and the closure of in-person commercial activities profoundly disrupted daily life and business operations. This disruption revealed both the insufficiency of effective risk management practices and the urgent necessity for the digitalisation of banking services, an issue that will be examined in greater detail in subsequent chapters. A fundamental responsibility of financial institutions is the careful assessment and management of default risk,

⁴⁶ Boot, Arnould W. A., and et al. "The Corona Virus and Financial Stability." Leibniz Institute for Financial Research SAFE, Policy Letter No. 78, Mar. 2020. https://www.econstor.eu/bitstream/10419/214882/1/1692877798.pdf

⁴⁷ Barbier-Gauchard, Amélie, et al. "Towards a More Resilient European Union after the COVID-19 Crisis."

Eurasian Economic Review, vol. 11, 26 Feb. 2021, https://doi.org/10.1007/s40822-021-00167-4.

⁴⁸ European Central Bank. "The Resilience of the European Banking Sector. Keynote Speech by Anneli Tuominen, Member of the Supervisory Board of the ECB and Designated ECB Representative, at the Florence School of Banking and Finance's Annual Conference "the Future of Finance - Finance for the Future."" European Central Bank - Banking Supervision, 14 June 2022,

https://www.bankingsupervision.europa.eu/press/speeches/date/2022/html/ssm.sp220614~f5ea7887ec.en.ht ml

the risk associated with a borrower's inability to meet financial obligations. Between 2020 and 2022, this responsibility became progressively critical, as specific sectors such as business property market and service industries experienced heightened financial distress and encountered greater challenges in loan repayment. In this context, the ECB played a pivotal role, particularly in overseeing how loans within the highest-risk categories were managed by national central banks across the euro area. The ECB introduced targeted supervisory measures to ensure that financial institutions accurately identified borrowers at risk of default and adopted appropriate risk management strategies to address these exposures.

While the ECB's response was both prompt and largely effective, notable deficiencies persist in certain areas. Several national central banks continue to face significant challenges in managing credit risk, largely due to shortcomings in the early identification of distressed debtors, errors in the valuation of collateral assets, and the inadequate provisioning of funds to cover potential losses arising from non-performing loans. These weaknesses have, in some cases, exacerbated poor risk management practices within the European banking sector. In the short term, despite financial markets entering a recessionary phase in 2020, the European banking system demonstrated resilience by maintaining control over credit risk, as evidenced by a further decline in the volume of non-performing loans. Nevertheless, there remains a tangible risk of asset quality deterioration, particularly as pandemic-related support measures are gradually withdrawn and new financial pressures emerge. Moreover, the sectors most severely affected by the pandemic remain in a fragile and uncertain condition, posing the risk of a contagion effect that could trigger subsequent financial shocks.⁴⁹

A prompt response to the instability triggered by the pandemic was delivered through the introduction of the Principles for Operational Resilience, designed to enhance operational resilience and support the management of operational risks in the face of uncontrollable external threats, such as natural disasters, technological failures, or, as in this case, a global health crisis. This document, released in early 2021 by the Basel Committee on Banking Supervision (BCBS), was built upon the framework established in the aftermath of the GFC, while adapting its core principles to address the unique challenges posed by COVID-19, particularly in relation

_

⁴⁹ European Central Bank. "The Resilience of the European Banking Sector. Keynote Speech by Anneli Tuominen, Member of the Supervisory Board of the ECB and Designated ECB Representative, at the Florence School of Banking and Finance's Annual Conference "the Future of Finance – Finance for the Future."" *European Central Bank - Banking Supervision*, 14 June 2022,

https://www.bankingsupervision.europa.eu/press/speeches/date/2022/html/ssm.sp220614~f5ea7887ec.en.html

to the continuity and accessibility of financial services⁵⁰. According to the BCBS, operational resilience is explained as "the bank's ability to deliver critical operations through disruptions"⁵¹. In this context, banks are considered resilient when they are capable of maintaining the continuity of essential services, particularly during periods of instability. Institutions that demonstrate operational resilience have a lower probability of experiencing significant interferences or operational failures, thereby mitigating potential damage when adverse disorders occur. A fundamental component in achieving resilience is the strategic integration of technology and automation, which can enhance the efficiency, speed and reliability of banking processes. However, these advancements simultaneously introduce new vulnerabilities, such as system malfunctions and heightened exposure to digital threats. As a result, robust and secure technological infrastructures have proven essential in enabling financial institutions to continue operating and providing services throughout the restrictive and unprecedented conditions imposed by the pandemic-related lockdown. The examination of how financial institutions manage extensive and unpredictable disruptions represents a particularly complex field of study, given the rarity of such events and the varied effects they produce across institutions. The global health crisis, however, compelled the banking sector to significantly adapt its operational models and customer engagement strategies, as traditional service frameworks no longer aligned with the emerging needs of consumers. Notably, in numerous European countries, the pandemic brought about considerable shifts in consumer behaviour and expectations regarding financial services. At the height of the crisis, during the spring of 2020, in-person banking transactions at physical branches reportedly declined by as much as 90%, while digital and online banking services experienced substantial growth, as consumers increasingly opted for safer, remote alternatives⁵². In general, the response of the banking sector can be regarded as positive, as financial institutions rapidly integrated these principles within a relatively short timeframe and with considerable effectiveness. This was made possible by the sector's inherent capacity to endure, respond to, and improve in circumstances characterised by

-

⁵⁰ Bank for International Settlements. "Basel Committee on Banking Supervision - Principles for Operational Resilience." Bank for Institutional Settlements, 31 Mar. 2021. https://www.bis.org/bcbs/publ/d516.pdf

⁵¹ Rismanchi, Katie, and Martin Boer. "IIF Staff Paper: Operational Resilience – a Brief History and the Road Ahead." Institute of International Finance, Dec. 2024.

https://www.iif.com/portals/0/Files/content/Regulatory/32370132_iif_staff_paper_operational_resilience_december 2024 final.pdf

⁵² Demma, Cristina, et al. "Banks' Operational Resilience during Pandemics." *SUERF - the European Money and Finance Forum*, vol. No.914, June 2024, https://www.suerf.org/wp-content/uploads/2024/06/SUERF-Policy-Brief-914 Demma-et-al.pdf

heightened risk and uncertainty. Despite facing numerous unforeseen challenges, financial institutions demonstrated resilience through the implementation of a range of diversified solutions aimed at safeguarding the continuity of market operations and preserving financial stability.

CHAPTER III: RESILIENCE STRATEGIES IN THE EUROPEAN BANKING SECTOR

3.1 RISK MANAGEMENT POLICIES

When financial institutions undertake various operations, they do so with the expectation that these activities will generate benefits. However, equally significant are the potential losses and risks that these institutions may encounter in the process. For this reason, banks adopt comprehensive risk management policies, which are of critical importance in safeguarding financial institutions from threats to their solvency and, in more severe cases, bankruptcy. In the financial sector, risk management involves the strategic planning and implementation of structured actions designed to mitigate potential losses⁵³. The application of such policies, aimed at preventing declines in asset values and maintaining financial stability, is inherently complex and requires considerable time. As institutions essentially engaged in risk-bearing activities, banks must accurately identify, measure, and manage the risks they face. This task is particularly challenging in situations of asymmetric information, where different clients may possess varying degrees of information, necessitating heightened diligence on the part of the bank⁵⁴.

Risk, in this context, refers to the possibility that actual outcomes may diverge from expectations and projections. Once a risk is identified, it must be classified according to two key criteria: its likelihood of occurrence and its effect. Numerous procedural steps are involved before such risk management measures can be adopted, underscoring the necessity for precision and thoroughness in every aspect of the process to minimize exposure to even minor losses. The procedure begins with the recognition and analysis of potential risks, followed by an evaluation or measurement of these issues. To address these risks effectively, appropriate corrective measures must be devised and implemented by the responsible authorities. Financial institutions systematically gather and organize this information to support the risk measurement process, which involves assessing the level of exposure both at the level of individual business units and for the sector as a whole. These stages are closely interconnected and mutually dependent, as any error at one stage could result in substantial financial losses for the institution or for the broader corporate sector. Once these risk management strategies are enacted, the

⁵³ McGrath, Amanda. "What Is Risk Management?" *Ibm.com*, IBM, 26 Aug. 2021, https://www.ibm.com/think/topics/risk-management

⁵⁴ Colombini, Fabiano. "Risk, Regulation, Supervision and Crises in the European Banking Union." *LAW and ECONOMICS YEARLY REVIEW*, vol. 4, no. 2, 29 Mar. 2016, pp. 236–273, http://hdl.handle.net/11568/788955.

subsequent phase involves continuous monitoring and reporting, which are crucial for enabling the bank to maintain profitability and generate value⁵⁵.

Given the complexity and costs associated with risk management, it is essential to recognize that banks engage in this process to strike a careful balance between the risks they assume and the returns they seek to achieve. The overarching objective is to ensure that implemented measures remain effective over time, particularly in anticipating and responding to periods of financial turbulence. Ultimately, efficient risk management entails deciding whether to retain certain risks within the bank's balance sheet, taking into account the capital required to support these risks and the potential returns relative to the associated costs.

A fundamental question arises as to why banks choose to assume risks instead of adopting entirely risk-averse positions. The rationale behind this dilemma lies in the recognition that effective risk management provides financial institutions and the banking sector with a dynamic, structured approach to addressing disruptions, crises, and challenges that could jeopardize both their operations and long-term strategic objectives. Like any other sector, banks face a wide array of risks capable of hindering the attainment of their goals, making it essential to actively plan, coordinate, and manage these risks in an organized and anticipatory manner. The implementation of risk management policies is further complicated by the diverse nature of financial risks. Indeed, risks do not present themselves uniformly, rather, they vary in type, origin, and potential impact. For instance, credit risk arises when borrowers fail to meet their repayment obligations, while market risk may result from fluctuations in stock prices or interest rates. Each risk type affects different areas of a bank's operations, and the costs associated with managing these risks, as well as the appropriate policies to mitigate them, differ accordingly⁵⁶. Consequently, the financial sector's ability to remain informed, adaptable, and responsive is fundamental, as this enhances a bank's capacity to develop a broad and diversified portfolio of risk management strategies. The greater the number of tools and policies available, the more efficiently a bank can distribute and absorb the costs of managing its risk exposure. The origin of these can be either internal, such as poor management decisions, or external, as exemplified

⁵⁵ Türsoy, Turgut. "Risk Management Process in Banking Industry". *MPRA - Munich Personal RePEc Archive*, 30 Apr. 2018. https://mpra.ub.uni-muenchen.de/86427/1/MPRA paper 86427.pdf

⁵⁶ Kanchu, Thirupathi, and M. Manoj Kumar. "RISK MANAGEMENT in BANKING SECTOR - an EMPIRICAL STUDY." Indian Research Journal, Feb. 2013.

https://d1wqtxts1xzle7.cloudfront.net/38374679/11-libre.pdf?1438663397=&response-content_disposition=inline%3B+filename%3DRISK_MANAGEMENT_IN_BANKING_SECTOR_AN_EMP.pdf&Expir_es=1747501327&Signature=CT7IBjdCUeREdjoXYE4agYYckUmS7xDf~lg2NH258ozb801PzTYlvwG28T

by the GFC. Exposure to unmanaged risks amplified operational vulnerabilities. Hence, it is both prudent and strategically advantageous to identify potential risks at an early stage, asses their possible consequences, and develop proactive contingency plans⁵⁷. This forward-looking approach reduces the likelihood of severe disruptions and facilitates more effective long-term risk mitigation. As banks have expanded in size and intricacy, and as the financial scenario continues to evolve, risk management has assumed an increasingly critical role in ensuring institutional resilience and sustainability. At its core, risk for a bank encompasses any factor that could impair its financial stability, whether through reduced profitability, declining share value, or operational disruption. Thus, active and sophisticated risk management is necessary not only for safeguarding solvency but also for maintaining competitiveness and profitability within the market. In fact, the ability to manage risks efficiently has become a source of competitive advantage, distinguishing well-managed institutions from their peers.

⁵⁷ Türsoy, Turgut. "Risk Management Process in Banking Industry". *MPRA - Munich Personal RePEc Archive*, 30 Apr. 2018. https://mpra.ub.uni-muenchen.de/86427/1/MPRA paper 86427.pdf

3.2 THE EVOLUTION OF BANKING REGULATIONS

Since the establishment of the European Union through the Maastricht Treaty in 1992, the framework for banking regulation within the Union has undergone continuous evolution, consistently adapting to the changing economic and financial landscape. The numerous crises that have affected the European banking system have compelled regulators to modify and reassess their supervisory approaches, often in response to emergent challenges. These regulatory adjustments have been driven not only by economic and structural considerations but also by broader societal factors, prompting a progressively proactive stance in addressing periods of financial instability. Consequently, it can be observed that many of the supervisory measures adopted by the ESCB have historically been reactive interventions to crises, rather than components of a fully established, pre-emptive regulatory framework aimed at preventing systemic disruptions⁵⁸.

The first structural reform process began in the early stages following the formation of the ECB and the ESCB, both established under the provisions of the Treaty on the Functioning of the European Union (TFEU)⁵⁹. In 1999, the ECB officially assumed its role as the primary authority responsible for implementing monetary policy within the Eurosystem. This marked a fundamental landmark in the development of banking regulation in Europe, as the ECB has retained and progressively strengthened its pivotal role in the European banking sector to the present day⁶⁰. In the same year, the EU financial Institution established the Banking Supervision Committee (BSC) as a supporting body tasked with assisting the ESCB in fulfilling its responsibilities concerning the regulatory oversight of credit institutions and the safeguarding of financial stability within the euro area. The BSC served as a forum for cooperation and information exchange among the central banks of the member states and their respective prudential supervisory authorities. Its responsibilities included the coordination of supervisory practices at the EU-regional level, particularly following the introduction of the euro, as well as the analysis of the structural developments in the banking sector, solvency issues, and potential systemic risks from a macroprudential perspective. In doing so, it anticipated the

_

⁵⁸ Sainz De Vicuna, Antonio. "The ESCB and Its Role in Banking Supervision." *HeinOnline*, 8 Mar. 2021, https://heinonline.org/HOL/LandingPage?handle=hein.journals/intlyr34&diy=16&id=&page=

⁵⁹ Lamandini, Marco, et al. "The European Central Bank (ECB) as a Catalyst for Change in EU Law, Part 1: The ECB's Mandate." *HeinOnline*, 2021,

https://heinonline.org/HOL/LandingPage?handle=hein.journals/coljeul23&div=5&id=&page=

⁶⁰ European Central Bank. "ECB, ESCB and the Eurosystem." *European Central Bank*, 2020, https://www.ecb.europa.eu/ecb/orga/escb/html/index.en.html

growing need for more integrated and harmonized supervisory structures as European banking markets became increasingly interconnected⁶¹. The BSC operated within the ESCB framework until more centralized supervisory arrangements were introduced, notably with the establishment of the Committee of European Banking Supervisors (CEBS) in 2004, which assumed advisory and coordination functions in the EU banking supervision⁶². The ECB's supervisory authority was further consolidated with the creation of the Single Supervisory Mechanism (SSM) in 2014, a significant institutional development that replaced earlier committees like the BSC by granting the ECB direct supervisory powers over significant credit institutions in the euro area⁶³. Nonetheless, this transformation will be further examined in the following sections of this thesis. It is important to note that these institutional advancements were, in large part, the realization of principles set out in the Delors Committee Report of 1988, which recommended that the ESCB should assume a macroprudential role and actively engage in the coordination of supervisory policies among national bodies⁶⁴. This foundational vision laid the groundwork for the progressively integrated supervisory structures that now characterize the European banking system.

With the outbreak of the GFC in 2008, countries, particularly those in Europe, were compelled to substantially reconsider and ameliorate the frameworks governing regulation and supervision. Prior to the crisis, oversight efforts predominantly focused on ensuring the solvency and operational soundness of individual financial institutions. However, the events of 2008 revealed that although institutions were individually stable, systemic vulnerabilities could arise from interconnected risks accumulating across the broader financial sector. This realization underscored the necessity for regulatory authorities to adopt a macroprudential perspective, which considers the financial system as an integrated network, both domestically and internationally, and acknowledges how disruptions in one segment can transmit risks to others.

-

⁶¹ Gutiérrez de Rozas, Luis. "The European Central Bank and Financial Stability: A Quarter of a Century of Evolution and Transformation (1998-2023)." *Financial Stability Review*, no. Issue 44 (Spring 2023), 30 May 2023, pp. 139–168, https://doi.org/10.53479/33799.

⁶² Congiu, Franca Rosa. "Committee of European Banking Supervisors (CEBS) Holds First Meeting | European Banking Authority." *Europa Banking Authority*, 21 May 2013, https://www.eba.europa.eu/publications-and-media/press-releases/committee-european-banking-supervisors-cebs-holds-first

⁶³ Ioannou, Demosthenes, et al. "The Accountability of the ECB as a Macroprudential Supervisor." *Mainz Papers on International and European Politics*, vol. 30, no. 12, Aug. 2023, pp. 524–540, https://doi.org/10.1177/1023263x231224734.

⁶⁴ Smits, R. "The Role of the ESCB in Banking Supervision." UvA-DARE https://hdl.handle.net/11245/1.422254.

In response to these challenges, the de Larosière Report, published in 2009, recommended enhancing the role and responsibilities of the ECB in preserving financial stability within the Eurosystem⁶⁵. The report proposed the establishment of a dedicated body, initially termed the European Systemic Risk Council, which would later become known as the European Systemic Risk Board (ESRB). The core premise was that the ECB, as the central authority of the ESCB, was uniquely positioned to assume a leadership role in macroprudential oversight, particularly through close collaboration with national supervisory authorities⁶⁶. The ESRB was formally established in November 2010, following the recommendations of the report. Its primary mandate is to monitor and assess risk to the stability of the European financial system and to issue early warnings and policy recommendations aimed at preventing the materialisation of systemic crises. Chaired by the President of the ECB and supported by its institutional authorities, the ESRB has enabled the ECB to broaden its involvement in financial stability matters. Since its origin, the ECB has engaged in initiatives addressing not only financial and macroeconomic concerns but also the enhancement of coordination between the various authorities responsible for banking stability, regulation, and supervision across the EU. Furthermore, this institutional evolution formally allocated responsibility for macroprudential policy, which focuses on safeguarding the resilience of the financial system as a whole, rather than solely concentrating on individual institutions. The establishment of the ESRB also eased more structured and effective institutional relations between the ECB and national supervisory authorities overseeing capital markets, retirement funds and insurance companies. To ensure operational coordination in this context, the ECB established the Financial Stability Committee (FSC).⁶⁷

The aftermath of the GFC also ushered in a series of significant regulatory innovations within Europe, including the creation of the European Banking Union, composed of the Single Supervisory Mechanism, Single Resolution Mechanism, and European Deposit Insurance Scheme. Equally consequential were global regulatory reforms implemented at the regional level, most notably the introduction of Basel III. Collectively, these instruments have enhanced

⁶⁵ De Larosière, Jacques, et al. "The high-level group on financial supervision in the EU." *Europa.EU*, 25 Feb. 2009. https://ec.europa.eu/economy/finance/publications/pages/publication14527 en.pdf

⁶⁶ European Central Bank. "European Systemic Risk Board Established." *European Central Bank*, 16 Dec. 2010, https://www.ecb.europa.eu/press/pr/date/2010/html/pr101216 3.en.html

⁶⁷ Gutiérrez de Rozas, Luis. "The European Central Bank and Financial Stability: A Quarter of a Century of Evolution and Transformation (1998-2023)." *Financial Stability Review*, no. Issue 44 (Spring 2023), 30 May 2023, pp. 139–168, https://doi.org/10.53479/33799.

the capacity of the ESCB and international financial institutions to better withstand future financial shocks, while simultaneously strengthening strategic business models, operational frameworks, and cross-border coordination⁶⁸.

3.2.1 European Banking Union

As previously discussed in this paper and well-documented in financial history, the events of the 2008 global financial crisis profoundly affected the financial sector and fundamentally transformed the framework for its administration and supervision. In particular, EU member states, having experienced the severe repercussions of the crisis, resolved to intervene decisively in the financial sector by adopting comprehensive measures and establishing a new, unified system for the regulation and supervision of the banking industry. This initiative led to the creation of the European Banking Union (EBU), conceived with the objective of centralising banking supervision and coordinating the administration of national central banks within the euro area, alongside the development of a common deposit insurance framework to reinforce financial stability during periods of market stress. The concept of a banking union initially emerged within the discussions of the ESRB, progressively winning support from the member states. National authorities proposed the establishment of an integrated and resilient banking framework, encompassing the region's largest financial institutions, to be supervised by a single, centralised regulatory authority. Subsequently, in June 2012, the countries of the euro area officially agreed to establish the EBU, designating the ECB as the leading authority responsible for its implementation⁶⁹.

The EBU was founded based on three principles: enhanced banking supervision, an effective bank resolution mechanism, and the establishment of a common deposit guarantee scheme, each grounded in EU legislation. Each of these concepts is embodied by distinct institutional frameworks. Among these, the Single Supervisory Mechanism is considered the cornerstone of the Banking Union, as it embodies the first and foundational pillar, that is, the prudential supervision of the banking sector. The establishment of the SSM marked the initial step in creating a coordinated system of oversight. The overarching aim was to enable the orderly management of financial institutions in distress while minimising the fiscal burden on

⁶⁸ Anderson, Jeffrey J. "A Series of Unfortunate Events: Crisis Response and the European Union after 2008." *The Palgrave Handbook of EU Crises*, no. 5433, 22 Dec. 2020, pp. 765–789, https://doi.org/10.1007/978-3-030-51791-5 45.

⁶⁹ Breuss, Fritz. "European Banking Union." *Econstor.eu*, vol. 454, 2013, http://hdl.handle.net/10419/128982.

taxpayers, through a centralised resolution authority operating under a harmonised regulatory framework⁷⁰. Additionally, the safeguarding of depositors' funds would progressively transition from national oversight to collective European responsibility. However, despite significant progress, certain components of the EBU remain incomplete, as not all elements have achieved political consensus. In particular, some supervisory and financial responsibilities continue to rest with national authorities, and, although the EBU was designed to facilitate joint risk exposure and mutual accountability, individual MS currently retain primary liability in the event of banking sector vulnerabilities. The Banking Union encompasses all euro area countries, while offering voluntary participation to EU member states outside the eurozone. Nevertheless, to date, none of the countries outside the euro area has formally requested to join the framework.

To this day, the EBU can be regarded as the boldest project implemented at the regional level within the EU to enhance the resilience of the banking sector and to sever the harmful interdependence between banks and sovereign states, which persists in several member states. Simultaneously, it represents the most significant structural reform aimed at advancing the integration of an internal market for financial services in the EU. Additionally, the EBU was conceived to address the problematic nexus between private and public debt, ensuring that crises originating in the private banking sector would no longer inevitably destabilise public finances. By strengthening the control and oversight of private debt, the EBU aims to prevent financial contagion from jeopardising sovereign debt markets⁷¹. This objective is pursued through the implementation of a strong recovery and resolution framework, designed to shield countries from the fiscal burden of state-funded bank rescues. Achieving such a goal requires a reinforced, transparent, and regulated supervisory architecture capable of maintaining financial sector discipline and preserving market confidence.

At its core, the EBU also endeavours to restore credibility within the financial markets, which had been severely eroded during the global financial crisis. The substantial economic drop incurred by the banking sector, coupled with the collapse in reliance on government bond issuers, created a destabilising feedback loop between financial institutions and public finances, exacerbating systemic risks within the euro area. As of today, the EBU comprises 21 countries,

⁷⁰ Ehrenpil, Markus, and Mattias Hector. "Banking Union -What Is It?" Sveriges Riksbank, 10 Nov. 2017. https://www.riksbank.se/globalassets/media/rapporter/ekonomiska-kommentarer/engelska/2017/banking-union-what-is-it.pdf

⁷¹ Wymeersch, Eddy O. "The European Banking Union, a First Analysis." *SSRN Electronic Journal*, no. 1104, 2012, https://doi.org/10.2139/ssrn.2171785.

with Bulgaria and Croatia being the most recent participants, having joined in 2020 and 2023, respectively. While significant attention has been devoted to the successful implementation and operational effectiveness of the first two pillars, the Single Supervisory Mechanism and the Single Resolution Mechanism, it must be noted that the third pillar, the European Deposit Insurance Scheme (EDIS), remains incomplete. Proposed by the European Commission in 2015, the establishment of a common deposit insurance framework has faced prolonged political and institutional delays, with negotiations between the European Parliament and the Council remaining unresolved for over seven years⁷².

3.2.2 Basel III

Facing the substantial losses inflicted by the GFC, the international regulatory community introduced a significant reform through the Basel Committee on Banking Supervision with the adoption of Basel III in 2010. This exhaustive framework of regulatory measures was designed to enhance the resilience of banks, mitigate the risk of future financial crises, and improve the transparency of financial institutions' operations. Basel III builds upon the foundational principles established by its predecessors, Basel I of 1998 and Basel II of 2004, which aimed to strengthen the global financial system's stability and supervisory standards. The primary objective of Basel III was to ensure that banks are better equipped to withstand periods of financial stress, while also preventing the proliferation effect whereby difficulties at one institution could propagate throughout the broader financial system and adversely affect the real economy. Additionally, the reform sought to promote greater clarity regarding the financial health of banking institutions. Among its key provisions, Basel III introduced more rigorous clarity of what qualifies as high-quality regulatory capital and significantly increased capital requirements. Specifically, the minimum capital requirements were raised from 2% to 7% of risk-weighted assets, thereby compelling banks to maintain a larger buffer to absorb potential losses. The framework also established improved methodologies for assessing the riskiness of banks' asset portfolios and advanced a leverage ratio to constrain excessive borrowing and limit the potential for banks to artificially lower their reported risk levels through internal models⁷³.

-

⁷² DG FISMA. "What Is the Banking Union." *European Commission*, 2023, https://finance.ec.europa.eu/banking/banking-union/what-banking-union_en

⁷³ Veron, Nicolas. "Basel III: Europe's Interest Is to Comply." *CEPR*, VOXEU, 5 Mar. 2013, https://cepr.org/voxeu/columns/basel-iii-europes-interest-comply

Moreover, Basel III imposed further regulatory obligations for systemically important financial institutions, recognising that the failure of such entities could have disproportionately severe consequences for the global economy. To enhance liquidity risk management, the framework required banks to maintain sufficient levels of liquid assets or readily marketable securities to survive periods of financial distress. Despite its prudential objectives, Basel III attracted criticism from several sectors of the banking community, which argued that higher capital and liquidity requirements could constrain credit growth, hinder market liquidity, and potentially dampen economic expansion.

At the European level, the EU incorporated the Basel III standards into legally binding legislation through the Capital Requirements Directive IV (CRD IV) and the Capital Requirements Regulations (CRR), adopted in 2013-2014⁷⁴. Through these legal manoeuvres, stricter capital definitions, liquidity coverage ratios, and leverage ratio requirements were introduced, thereby aligning the regulatory framework for EU credit institutions with the internationally agreed Basel III principles. The implementation of these measures was carried out progressively over several years to facilitate a smooth transition for financial institutions across the region.⁷⁵ A forthcoming update to the existing regulatory framework, known as CRR III, is currently under preparation. The European banking sector has formally requested a minimum implementation period of 18 months between the official publication of the new rules and their entry into force. Should the final regulatory text be adopted by the end of 2023, the industry has proposed that its application should not commence before July 2025. In parallel, the European Banking Authority (EBA) faces a significant regulatory position, being responsible for drafting over 70 technical standards and guidelines intended to assist credit institutions in effectively complying with the provisions of CRR III⁷⁶. These accompanying regulatory instruments will be crucial in ensuring that financial institutions are able to produce accurate and consistent financial reporting in accordance with the revised framework. The implementation of the remaining elements of Basel III has encountered delays, primarily due to the substantial legal and institutional requirements involved. EU authorities require sufficient

⁻

⁷⁴ European Commission. "CRD IV/CRR – Frequently Asked Questions." *European Commission*, 16 July 2013, https://ec.europa.eu/commission/presscorner/detail/en/memo 13 690

⁷⁵ Fratianni, Michele, and John C. Pattinson. "Basel III in Reality." *Journal of Economic Integration - JEI*, vol. 30, no. 1, 1 Mar. 2015, https://dx.doi.org/10.11130/jei.2015.30.1.

⁷⁶ Barbieri, Vittoria. "EBIC Calls for the Postponement of the Basel III Implementation Date in the EU." *EBF*, European Banking Federation, 31 Oct. 2023, https://www.ebf.eu/ebf-media-centre/ebic-calls-for-the-basel-iii-implementation-date-in-the-eu/.

time to finalise the necessary secondary legislation, develop technical standards, and establish appropriate supervisory mechanisms. Simultaneously, financial institutions must adapt their internal systems, operational processes, and reporting infrastructures to align with the new regulatory obligations. A practical constraint also arises, as the application of updated capital adequacy rules is dependent on the availability of corresponding reporting systems and processes. The synchronised development and implementation of these two components are essential to avoid operational disruptions and to safeguard the integrity of the financial reporting and supervisory process.

The most recent and significant development in the implementation of these regulatory reforms occurred in summer 2024, when the EU officially completed the transposition of the Basel III framework into EU law. This achievement represents a major turning point for the consolidation of the resilience of the European banking sector and enhancing its preparedness for future financial crises. ⁷⁷ The application of Basel III is particularly important as it constitutes a globally agreed set of standards designed to ensure that banks maintain satisfactory capital buffers, conduct regular simulations of adverse financial shocks, and effectively manage credit. The overarching objective is to enable financial institutions to absorb losses during periods of financial stress without resorting to government bailouts, thereby reducing the likelihood of systemic financial crises. Despite the completion of the legislative process in 2024, the new Basel III rules formally entered into application at the beginning of 2025, covering approximately 4500 banks across the EU, both at the individual institution level and for their consolidated parent groups. The experience of the COVID-19 crisis offered important lessons for the ESCB, particularly highlighting the relative resilience of European banks in comparison to their international counterparts. This resilience was further demonstrated in 2023, when the ESCB remained largely unaffected by the difficulties faced by several medium-sized US banks that failed due to their non-compliance with the full Basel III framework. This outcome underscored the effectiveness of the EU's stricter prudential standards in safeguarding the stability of its banking system.⁷⁸

⁷⁷ BRAG. "Basel III & Basel 3.1: Adapting to New EU and UK Rules." *BR-AG* | *RegTech* & *SupTech Reimagined*, BR-AG, 20 Nov. 2024, https://br-ag.eu/2024/11/20/basel-iii-and-basel-3-1-adapting-to-new-eu-and-uk-rules/

⁷⁸ European Commission. "Basel III." *European Commission*, 25 July 2024, https://finance.ec.europa.eu/news/basel-iii-2024-07-25 en

The overall increase in minimum capital requirements introduced by Basel III is expected to be feasible, as it will be spread progressively over time. The effect of these requirements will vary among institutions, relying upon their operational models and the extent to which they rely on internal risk assessment methodologies. To facilitate the transition, the EU has introduced temporary adjustments and grace periods, offering banks additional time to comply. These transitional measures are subject to clearly defined expiry dates and require approval from supervisory authorities. At the international level, maintaining regulatory consistency is of critical importance, as the Basel framework seeks to establish a uniform regulatory environment. Significant postponements in adoption by responsible authorities could erode the confidence of the system and create opportunities for regulatory arbitrage, wherein financial institutions might shift riskier activities to countries with more lenient supervisory regimes. In response, the European Commission has been entrusted with monitoring the implementation of Basel III standards in third countries. Should disparities arise that threaten the competitiveness or stability of the EU's financial system, the Commission holds the authority to introduce corrective regulatory measures to safeguard the integrity and competitiveness of the European banking sector within the global financial landscape.

CHAPTER IV:

CHALLENGES AND FUTURE PROSPECTS

4.1 THE NEW ECB PRIORITIES

In recent years, the unstable non-financial scenario has presented significant challenges to the European banking sector, which, nonetheless, has manifested considerable resilience and sustained progress towards a strengthened restoration. Empirical evidence confirms that financial institutions within the EU maintain robust capital levels and liquid asset holdings. Furthermore, despite the sharp rise in interest rates, European banks have managed to maintain solid asset quality in an ambitious financial landscape, while their profitability expresses itself in the greatest form since the beginning of the ECB supervision. Following the unfolding of these risks, the Supervisory Board of the ECB has established a new medium-term supervisory strategy for the 2025-2027 period, articulated through a set of annually revised supervisory priorities. These priorities are grounded in a detailed analysis of the principal threats and weaknesses faced by the concerned bodies, informed by an extensive evaluation of both current market conditions and the findings of the Supervisory Review and Evaluation Process (SREP). The collection and analysis of supervisory data are instrumental in facilitating year-on-year comparisons and enabling adjustments in supervisory focus based on emerging trends. Notably, the adaptable nature of these priorities ensures that supervisory efforts remain responsive to a wide range of risk scenarios and operational contingencies⁷⁹.

Although European banks currently exhibit sound financial health and prudent risk management practices, it remains imperative for them to exercise continued vigilance in light of persistent external risk, including international disputes and the inherent uncertainty of future market conditions. Thus far, financial institutions have effectively navigated the latest global disruptions, bolstered by the relative strength of the broader European economy. However, close monitoring of the potential implications of such events on operational performance and risk exposure is essential. In this regard, credit risk management has become an area of heightened focus, particularly concerning the early detection of deteriorating asset quality and the timely provisioning for potential losses⁸⁰. Moreover, banks are required to enhance their operational

⁷⁹ KPMG. "SSM Supervisory Priorities 2025 - 2027." *KPMG*, Dec. 2024, https://kpmg.com/xx/en/our-insights/ecb-office/ssm-supervisory-priorities-2025-2027.html

⁸⁰ European Central Bank. "Priorities & Risks." *European Central Bank - Banking Supervision*, ECB, 19 Feb. 2025, https://www.bankingsupervision.europa.eu/framework/priorities/html/index.en.html

resilience by strengthening contingency frameworks to address unforeseen disruptions, including cybersecurity breaches, technical system failures, and geopolitical crises, thereby safeguarding the continuity of critical financial services. Given the systemic nature of these risks, supervisors must adopt a comprehensive, coordinated supervisory approach, while financial institutions are expected to promptly remediate any material deficiencies previously identified during supervisory assessments. Looking ahead to the 2025-2027, regulatory authorities have delineated three core priorities, which include reinforcing the financial sector's capacity to withstand financial and geopolitical shocks; ensuring the timely and effective remediation of long-standing supervisory findings; and, supporting banks in managing the risks and operational challenges associated with digitalisation and technological innovation. These priorities address distinct structural vulnerabilities within the European banking system, with clearly defined objectives and operational plans established to guide supervisory actions and maintain the integrity and stability of the EU's financial system.⁸¹

The effects of recent international financial development became evident in early April 2025, when global financial markets experienced a sharp and rapid downturn, accompanied by a significant decline in financial conditions. Borrowing costs for both households and corporations increased notably, making access to credit more challenging and expensive. In the last month, while riskier asset classes such as equities had largely recovered their initial losses, market sentiment remained fragile, with asset prices displaying heightened sensitivity to geopolitical developments and trade policy announcements. In particular, equity markets continue to face the risk of abrupt corrections, given that valuations remain elevated and risk concentrations persist within specific sectors. Within this variable and uncertain circumstances, non-banking institutions could encounter vulnerabilities if liquidity positions prove insufficient or leverage levels remain excessive. Sudden market dislocations could exacerbate these issues, amplifying systemic risks and posing challenges to financial stability. Consequently, safeguarding the resilience of the European banking system has become an imperative priority.

⁸¹ European Central Bank "Supervisory Priorities 2025-27." *European Central Bank - Banking Supervision*, 17 Dec. 2024, https://doi.org/10.2866/1264891.

⁸² European Central Bank. "Financial Stability Review, May 2025." *European Central Bank*, ECB, 21 May 2025 https://www.ecb.europa.eu/press/financial-stability-publications/fsr/html/ecb.fsr202505~0cde5244f6.en.html#toc16

European jurisdictions have made commendable progress in recent years by building up capital buffers intended to be drawn upon during periods of financial stress, thereby enhancing the resilience of the banking sector. Nevertheless, in several MS, the accumulation of these buffers remains incomplete, and it would be prudent to increase them where economic conditions allow, provided such adjustments do not unduly constrain credit provision during favourable periods. Certain jurisdictions that previously committed to achieving a balanced or neutral countercyclical buffer position have yet to reach these targets⁸³. Moreover, macroprudential policies, such as borrower-based measures that limit credit extension relative to income or collateral values, should be maintained to promote prudent lending practices, irrespective of prevailing economic conditions. Although European banks currently maintain sound liquidity positions, continuous monitoring remains essential, as unforeseen risks may still materialise. In this context, the ECB has reiterated the importance of modernising and harmonising the framework for financial risk management across the EU. This includes enhancing the clarity, efficiency, and consistency of macroprudential decision-making processes, improving the exchange of supervisory information between national and supranational authorities, and ensuring uniform implementation of capital buffer requirements across jurisdictions. Furthermore, the timely activation of instruments such as the Countercyclical Capital Buffer (CCyB) earlier in the financial cycle could help mitigate procyclical tendencies and smooth financial fluctuations⁸⁴. With regards to future scenarios, the ECB remains committed to streamlining complex prudential regulations while upholding the robustness of the banking system and maintaining alignment with international regulatory standards, particularly through the ongoing implementation of the Basel III framework.

⁸³ European Central Bank. "Press Release - Rapidly Shifting Geopolitical Environment Could Test Euro Area Financial Stability." *Resuscitation*, vol. 1, no. 1, 21 May 2025, https://doi.org/10.1016/s0300-9572(02)00412-4

⁸⁴ European Central Bank. "Financial Stability Review, May 2025." *European Central Bank*, ECB, 21 May 2025 https://www.ecb.europa.eu/press/financial-stability-publications/fsr/html/ecb.fsr202505~0cde5244f6.en.html#toc16

4.2 <u>DIGITALISATION AND SUSTAINABILITY AS NEW DRIVERS OF STABILITY</u>

In an increasingly globalised and interconnected world, the banking sector is required to continually adapt to evolving client demands and an economic landscape that remains in constant flux. By providing financial investments and developing innovative, reliable financial operations for households and businesses, the banking system plays a crucial role in addressing the most pressing economic and social requests. At a regional level, the EU must sustain a competitive and resilient financial framework, one capable of evolving in response to emerging challenges and opportunities. In pursuit of this objective, the European Commission remains committed to promoting technological innovation, fostering operational sustainability, reducing carbon emissions, and securing greater strategic autonomy for the Union's financial infrastructure.

In 2025, the pervasive digitalisation of all professional sectors has extended decisively to the banking industry. The strategic importance of a technologically advanced and digitally integrated financial sector was already underscored during the COVID-19 pandemic, when numerous financial institutions were found insufficiently prepared to navigate a predominantly digital environment. Recognised as a principal catalyst for the digital economy, the financial sector's future lies in the comprehensive adoption of financial technologies to deliver efficient, secure, and accessible financial services. The digital transformation of the European financial system began with the rapid development of digital services within the retail banking segment, where exponential innovation disrupted traditional banking models and consumer practices. Nonetheless, this transformative process remains incomplete, as conventional financial service providers have yet to achieve full integration of modern digital infrastructures and capabilities. Therefore, the sector continues to face both strategic and operational constraints that impede the effective and timely implementation of exhaustive digital transformation initiatives. Addressing these limitations is essential to ensure the European banking sector's competitiveness, resilience, and capacity to meet the future needs of an increasingly digital and sustainable economic environment.85

As technological innovation increasingly shapes the future of banking, it is imperative for financial institutions to continuously enhance their digital services while carefully managing the inherent threats associated with emerging technologies. Although significant progress has

_

⁸⁵ Diener, Florian, and Miroslav Špaček. "Digital Transformation in Banking: A Managerial Perspective on Barriers to Change." *MDPI*, vol. 13, no. 4, 13 Feb. 2021. *MDPI*, https://doi.org/10.3390/su13042032.

been made in this domain, with banks striving to remain competitive in an evolving marketplace, they must also be prepared to address the complex challenges posed by rapid digitalisation. Strengthening economic models to be both resilient and sustainable while leveraging new technological opportunities remains a strategic priority for the sector. Nevertheless, the accelerated pace of digitalisation presents a dual-edged dynamic, offering new avenues for growth and efficiency while simultaneously introducing new operational and systemic risks. Among these, the growing threat of cyberattacks represents a critical concern, as it holds the potential to disrupt operational continuity and compromise financial stability. In this context, it is essential for financial institutions to implement comprehensive strategic frameworks and clearly defined operational plans aimed at anticipating and adapting to key trends transforming the banking landscape. These include the rise of integrated digital ecosystems, strategic collaborations with technology firms, and the widespread application of AI technologies have emphasised the necessity for institutions to adhere to industry best practices in digital risk management.⁸⁶ Moreover, supervisory bodies continue to monitor the implications of digitalisation for banks' business models and overall risk exposure, ensuring that operational resilience is maintained in an increasingly digital financial environment. Presently, digitalisation is fundamentally transforming the manner in which banking services are delivered, leading to the emergence of fully digital banks that operate exclusively online, without reliance on physical branch networks.

By the conclusion of 2024, approximately 60 fully digital banks were active within the euro area, including seven subsidiaries established by traditional banking groups. The market share of these digital banks expanded from 3.1% of total banking assets in 2019 to 3.9% by 2024, driven by both incumbent firms and new market entrants. This trend not only reflects the increasing diversification of the European banking landscape but also highlights the potential financial stability risks associated with the rapid growth and operational concentration of digital banking services.⁸⁷

Another crucial area in which the European banking sector is evolving to maintain competitiveness is the integration of sustainable and environmental operations. Alongside

⁸⁶ European Central Bank "Supervisory Priorities 2025-27." *European Central Bank - Banking Supervision*, 17 Dec. 2024, https://doi.org/10.2866/1264891.

⁸⁷ Garcia, Thomas, et al. "Digital Banking: How New Bank Business Models Are Disrupting Traditional Banks." *European Central Bank*, vol. 1, no. 7, May 2025, https://www.ecb.europa.eu/press/financial-stability-publications/fsr/focus/2025/html/ecb.fsrbox202505_04~17b39a3c1a.en.html

digitalisation, sustainability has emerged as a central pillar of financial sector stability. Adopting sustainable manoeuvres is essential not only for enhancing institutional resilience but also for ensuring the long-term viability of financial institutions in a changing global economy. Without a comprehensive transformation of its economic and energy systems, the EU risks recurrent economic disruptions. To mitigate these risks, the ECB is increasingly expected to leverage its policy instruments in support of a smooth, equitable transition to a greener, climate-resilient economy. In this context, the ECB completed a review of its monetary policy strategy in July 2021, resulting in the adoption of a Climate Roadmap. This strategic framework formally recognised the direct relevance of climate change to the ECB's mandate and laid the foundation for a range of climate-focused measures to favour environmentally sustainable firms and the development of climate stress tests for financial institutions. A subsequent review of the ECB's monetary policy strategy is scheduled for 2025, presenting a critical occasion to strengthen the 2021 Climate Roadmap with enhanced initiatives that align with the objectives of the Paris Agreement. Such reforms aim to mitigate risks to both price and financial stability, while actively supporting the transition towards a sustainable economic model.

Nonetheless, the ECB has yet to comprehensively address the dual dimension of its environmental impact, specifically, how climate and biodiversity-related risk affect the financial system, and how its monetary policy instruments might inadvertently sustain environmentally harmful activities. To effectively respond, the ECB should adopt a double materiality approach, which evaluates not only the financial risks posed by climate and environmental degradation but also the ways in which monetary policy operations may exacerbate or alleviate these issues. For instance, maintaining elevated interest rates can impede investments in renewable energy infrastructure while preserving financing advantages for fossil fuel enterprises, thereby hindering the EU's decarbonisation efforts⁸⁹. Consequently, the ECB's strategic decisions regarding climate and environmental policy will be pivotal in determining Europe's capacity to achieve a just and orderly transition to a green economy. With this imperative in mind, climate and biodiversity considerations should occupy a central role in the ECB's 2025 monetary policy strategy review. Particular focus should be directed towards three

⁸⁸ European Central Bank "Climate and Nature Plan." ECB, 30 Jan. 2024.

https://www.ecb.europa.eu/ecb/climate/our-climate-and-nature-plan/shared/pdf/ecb.climate_nature_plan_2024-2025.en.pdf

⁸⁹ Jeandon, Jordan. "Stability through Sustainability - Three Recommendations for the ECB's 2025 Monetary Policy Strategy Review." Reclaim Finance, Jan. 2025. https://reclaimfinance.org/site/wp-content/uploads/2025/01/Stability-Through-Sustainability-Manifesto.pdf

fundamental aspects, including the design of green refinancing operations, adjustments to the collateral framework to reflect climate risk and the environmental sustainability of monetary policy portfolios.

CONCLUSION

The major reforms implemented over the past decade have brought European banks to become considerably more robust, characterised by higher capital buffers, improved liquidity positions, and a clearer, more consistent regulatory framework for both markets and supervisory authorities, these structural enhancements have notably increased the resilience of the European banking sector, as evidenced by its capacity to navigate the COVID-19 crisis without triggering systemic disruptions. At present, the European banking system continues to demonstrate resilience, underpinned by these strengthened capital and liquidity foundations, supported by an increasingly sophisticated supervisory and regulatory framework. However, opportunities remain to enhance the system's efficiency by addressing areas of excessive regulatory complexity. Simplifying overly intricate rules, where appropriate, could further improve operational effectiveness without compromising the integrity or stability of the system. In this regard, the ECB is actively pursuing reforms aimed at refining supervisory processes, streamlining reporting requirements, and reviewing the effectiveness of the current regulatory architecture. Crucially, any adjustments to the existing framework must safeguard financial stability and remain consistent with the European and international standards. Revisions should be grounded in rigorous impact assessments, carefully weighing potential benefits against unintended consequences, particularly with respect to market confidence, financial resilience, and competitive neutrality. In this way, the EU banking sector can continue to evolve in a measured, sustainable manner, remaining aligned with global best practices while addressing the unique demands of the European financial landscape.

BIBLIOGRAPHY

Anderson, Jeffrey J. "A Series of Unfortunate Events: Crisis Response and the European Union after 2008." *The Palgrave Handbook of EU Crises*, 22 Dec. 2020, pp. 765–789, https://doi.org/10.1007/978-3-030-51791-5 45.

Bank for International Settlements. "Basel Committee on Banking Supervision - Principles for Operational Resilience." Bank for Institutional Settlements, 31 Mar. 2021. https://www.bis.org/bcbs/publ/d516.pdf

Barbier-Gauchard, Amélie, et al. "Towards a More Resilient European Union after the COVID-19 Crisis." *Eurasian Economic Review*, vol. 11, 26 Feb. 2021, https://doi.org/10.1007/s40822-021-00167-4.

Barbieri, Vittoria. "EBIC Calls for the Postponement of the Basel III Implementation Date in the EU." *EBF*, European Banking Federation, 31 Oct. 2023, https://www.ebf.eu/ebf-media-centre/ebic-calls-for-the-postponement-of-the-basel-iii-implementation-date-in-the-eu/.

Bodnár, Katalin, et al. "Credit Shocks and the European Labour Market." *SSRN Electronic Journal*, Working Paper Series No. 2124, 2018, https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2124.en.pdf

Boot, Arnould W. A., and et al. "The Corona Virus and Financial Stability." Leibniz Institute for Financial Research SAFE, Policy Letter No. 78, Mar. 2020. https://www.econstor.eu/bitstream/10419/214882/1/1692877798.pdf

BRAG. "Basel III & Basel 3.1: Adapting to New EU and UK Rules." *BR-AG* | *RegTech* & *SupTech Reimagined*, BR-AG, 20 Nov. 2024, https://br-ag.eu/2024/11/20/basel-iii-and-basel-3-1-adapting-to-new-eu-and-uk-rules/

Breuss, Fritz. "European Banking Union." *Econstor.eu*, vol. 454, 2013, http://hdl.handle.net/10419/128982.

Buch, Claudia, et al. "Committee on the Global Financial System Structural Changes in Banking after the Crisis Report Prepared by a Working Group Established by the Committee on the Global Financial System the Group Was Chaired By". https://www.bis.org/publ/cgfs60.pdf Jan. 2018.

CFI Team. "Financial Crisis." *Corporate Finance Institute*, 2020, https://corporatefinanceinstitute.com/resources/economics/financial-crisis/#:~:text=A%20financial%20crisis%20is%20generally,overextension%20of%20credit%20to%20borrowers

Claessens, Stijn, and M Ayhan Kose. *Financial Crises: Explanations, Types, and Implications; by Stijn Claessens and M. Ayhan Kose; IMF Working Paper 13/28; January 1, 2013*. https://www.imf.org/external/pubs/ft/wp/2013/wp1328.pdf

Claessens, Stijn, and Neeltje van Horen. "The Impact of the Global Financial Crisis on Banking Globalization." *IMF Economic Review*, vol. 63, no. 4, Nov. 2015, pp. 868–918, https://link.springer.com/article/10.1057/imfer.2015.38

Claeys, Grégory. "The (Not So) Unconventional Monetary Policy of the European Central Bank since 2008." *Bruegel* | *the Brussels-Based Economic Think Tank*, 8 July 2014, https://www.bruegel.org/report/not-so-unconventional-monetary-policy-european-central-bank-2008

Colombini, Fabiano. "Risk, Regulation, Supervision and Crises in the European Banking Union." *LAW and ECONOMICS YEARLY REVIEW*, vol. 4, no. 2, 29 Mar. 2016, pp. 236–273, http://hdl.handle.net/11568/788955.

Congiu, Franca Rosa. "Committee of European Banking Supervisors (CEBS) Holds First Meeting | European Banking Authority." *Europa Banking Authority*, 21 May 2013, https://www.eba.europa.eu/publications-and-media/press-releases/committee-european-banking-supervisors-cebs-holds-first

Danielsson, Jon. "Why so Many Crises Happen When We Know Why They Happen and How to Prevent Them." *CEPR*, 30 May 2024, https://cepr.org/voxeu/columns/why-so-many-crises-happen-when-we-know-why-they-happen-and-how-prevent-them

De Larosière, Jacques, et al. "The high-level group on financial supervision in the EU." *Europa.EU*, 25 Feb. 2009.

https://ec.europa.eu/economy finance/publications/pages/publication14527 en.pdf

Demma, Cristina, et al. "Banks' Operational Resilience during Pandemics." *SUERF - the European Money and Finance Forum*, vol. No.914, June 2024, https://www.suerf.org/wp-content/uploads/2024/06/SUERF-Policy-Brief-914 Demma-et-al.pdf

De Santis, Roberto A. "A Measure of Redenomination Risk." *European Central Bank*, vol. 1785, 2015, https://doi.org/10.2139/ssrn.2620732.

DG FISMA. "What Is the Banking Union." *European Commission*, 2023, https://finance.ec.europa.eu/banking/banking-union/what-banking-union_en

Ehrenpil, Markus, and Mattias Hector. "Banking Union -What Is It?" Sveriges Riksbank, 10 Nov. 2017. https://www.riksbank.se/globalassets/media/rapporter/ekonomiska-kommentarer/engelska/2017/banking-union--what-is-it.pdf

European Central Bank. "Building Stability and Sustained Prosperity in Europe. Speech by Mario Draghi, President of the ECB, at the Event Entitled "the Future of Europe in the Global Economy" Hosted by the City of London Corporation, London, 23 May 2013." *European Central Bank*, May 2013.

https://www.ecb.europa.eu/press/key/date/2013/html/sp130523 2.en.html

European Central Bank. "ECB, ESCB and the Eurosystem." *European Central Bank*, 2020, https://www.ecb.europa.eu/ecb/orga/escb/html/index.en.html

European Central Bank. "Economic and Monetary Developments: ECB Monetary Policy during the financial crisis and asset price developments." European Central Bank, Sept. 2013. https://www.ecb.europa.eu/pub/pdf/other/mb201309 focus07.en.pdf

European Central Bank. "European Systemic Risk Board Established." *European Central Bank*, 16 Dec. 2010, https://www.ecb.europa.eu/press/pr/date/2010/html/pr101216 3.en.html

European Central Bank. *Financial Stability Review*. European Central Bank, Dec. 2012. https://www.ecb.europa.eu/pub/pdf/fsr/financialstabilityreview201212en.pdf

European Central Bank. "Financial Stability Review, May 2025." *European Central Bank*, ECB, 21 May 2025 https://www.ecb.europa.eu/press/financial-stability-publications/fsr/html/ecb.fsr202505~0cde5244f6.en.html#toc16

European Central Bank. "Press Release - Rapidly Shifting Geopolitical Environment Could Test Euro Area Financial Stability." *Resuscitation*, vol. 1, no. 1, 21 May 2025, https://doi.org/10.1016/s0300-9572(02)00412-4

European Central Bank. "Priorities & Risks." *European Central Bank - Banking Supervision*, ECB, 19 Feb. 2025,

https://www.bankingsupervision.europa.eu/framework/priorities/html/index.en.html

European Central Bank "Supervisory Priorities 2025-27." *European Central Bank - Banking Supervision*, 17 Dec. 2024, https://doi.org/10.2866/1264891.

European Central Bank. "The ECB and the Sovereign Debt Crisis. Speech by José Manuel González-Páramo, Member of the Executive Board of the ECB, at the XXIV Moneda Y Crédito Symposium, Madrid, 4 November 2011." *European Central Bank*, 2011, https://www.ecb.europa.eu/press/key/date/2011/html/sp111104 1.en.html

European Central Bank. "The European Response to the Financial Crisis." *European Central Bank*, 16 Oct. 2009, https://www.ecb.europa.eu/press/key/date/2009/html/sp091016 1.en.html

European Central Bank. "The Resilience of the European Banking Sector. Keynote Speech by Anneli Tuominen, Member of the Supervisory Board of the ECB and Designated ECB Representative, at the Florence School of Banking and Finance's Annual Conference "the Future of Finance – Finance for the Future." *European Central Bank - Banking Supervision*, 14 June 2022,

 $\underline{https://www.bankingsupervision.europa.eu/press/speeches/date/2022/html/ssm.sp220614\sim\!f5ea7887ec.en.html$

European Commission. "Basel III." *European Commission*, 25 July 2024, https://finance.ec.europa.eu/news/basel-iii-2024-07-25_en

European Commission. "CRD IV/CRR – Frequently Asked Questions." *European Commission*, 16 July 2013,

https://ec.europa.eu/commission/presscorner/detail/en/memo_13_690

Fleming, Michael J, and Asani Sarkar. "The Failure Resolution of Lehman Brothers." *EliScholar – a Digital Platform for Scholarly Publishing at Yale*, 12 Jan. 2014, https://elischolar.library.yale.edu/ypfs-documents/320

Fratianni, Michele, and John C. Pattinson. "Basel III in Reality." *Journal of Economic Integration - JEI*, vol. 30, no. 1, 1 Mar. 2015, https://dx.doi.org/10.11130/jei.2015.30.1.

Grozdanovski, Damjan, The Roles of the ECB and the Financial Crisis: *The Legal Framework Under which the ECB Currently Operates in the EU and the Evolution of that Framework in the Light of the European Financial Crisis*, 2017 Vol 1 LSEUR, pp 98-129 https://elischolar.library.yale.edu/cgi/viewcontent.cgi?article=2275&context=ypfs-documents

Gutiérrez de Rozas, Luis. "The European Central Bank and Financial Stability: A Quarter of a Century of Evolution and Transformation (1998-2023)." *Financial Stability Review*, no. Issue 44 (Spring 2023), 30 May 2023, pp. 139–168, https://doi.org/10.53479/33799.

Ioannou, Demosthenes, et al. "The Accountability of the ECB as a Macroprudential Supervisor." *Mainz Papers on International and European Politics*, vol. 30, no. 12, Aug. 2023, pp. 524–540, https://doi.org/10.1177/1023263x231224734.

Kanchu, Thirupathi , and M. Manoj Kumar. "RISK MANAGEMENT in BANKING SECTOR - an EMPIRICAL STUDY ." Indian Research Journal, Feb. 2013. https://dlwqtxts1xzle7.cloudfront.net/38374679/11-libre.pdf?1438663397=&response-content-

<u>disposition=inline%3B+filename%3DRISK_MANAGEMENT_IN_BANKING_SECTOR_AN_EMP.pdf&Expires=1747501327&Signature=CT7IBjdCUeREdjoXYE4agYYckUmS7xDf</u>~lg2NH258ozb801PzTYlvwG28T

KPMG. "SSM Supervisory Priorities 2025 - 2027." *KPMG*, Dec. 2024, https://kpmg.com/xx/en/our-insights/ecb-office/ssm-supervisory-priorities-2025-2027.html

Lamandini, Marco, et al. "The European Central Bank (ECB) as a Catalyst for Change in EU Law, Part 1: The ECB's Mandate." *HeinOnline*, 2021,

https://heinonline.org/HOL/LandingPage?handle=hein.journals/coljeul23&div=5&id=&page=

Lane, Philip R. "The European Sovereign Debt Crisis." *Journal of Economic Perspectives*, vol. 26, no. 3, Aug. 2012, pp. 49–68, https://doi.org/10.1257/jep.26.3.49.

Lionello, Luca. "The New Role of the ECB in the European Sovereign Debt Crisis." *Thefederalist.eu*, 2015, https://www.thefederalist.eu/site/index.php/en/essays/2042-the-new-role-of-the-ecb-in-the-european-sovereign-debt-crisis

Mayes, David G., et al. "The Oxford Handbook of the Economics of Central Banking." *Google Books*, 2019,

 $\underline{https://books.google.it/books?hl=it\&lr=\&id=3BCIDwAAQBAJ\&oi=fnd\&pg=PA171\&dq=the\\ \underline{+impact+of+financial+crises+on+global+banking+system\&ots=cKz-}$

 $\underline{AELKds\&sig=UmLdJ36-HaMCmiRUMFQ9n4iZpOg\&redir_esc=y\#v=onepage\&q\&f=false}.$ Accessed 8 Apr. 2025

McGrath, Amanda. "What Is Risk Management?" *Ibm.com*, IBM, 26 Aug. 2021, https://www.ibm.com/think/topics/risk-management

Messori, Marcello. *Financial Instability and Evolution in the European Monetary Union*. Oct. 2018. https://leap.luiss.it/wp-content/uploads/2022/09/WP10.18-Financial-instability-and-evolution.pdf

Rismanchi, Katie, and Martin Boer. "IIF Staff Paper: Operational Resilience – a Brief History and the Road Ahead." Institute of International Finance, Dec. 2024.

https://www.iif.com/portals/0/Files/content/Regulatory/32370132_iif_staff_paper_operational resilience december 2024 final.pdf

Roman, Angela, and Irina Bilan. "The Euro Area Sovereign Debt Crisis and the Role of ECB's Monetary Policy." *Procedia Economics and Finance*, vol. 3, 2012, pp. 763–768, https://doi.org/10.1016/s2212-5671(12)00227-4.

Reichlin, Lucrezia, *The ECB and the Banks: The Tale of Two Crises* Sept. 2013. CEPR Discussion Paper No. DP9647, https://ssrn.com/abstract=2326511

Reinhart, Carmen M, and Kenneth S Rogoff. "The Aftermath of Financial Crises." *American Economic Review*, vol. 99, no. 2, Apr. 2009, pp. 466–472, https://www.aeaweb.org/articles/pdf/doi/10.1257/aer.99.2.466

Sainz De Vicuna, Antonio. "The ESCB and Its Role in Banking Supervision." *HeinOnline*, 8 Mar. 2021,

https://heinonline.org/HOL/LandingPage?handle=hein.journals/intlyr34&div=16&id=&page=

Schoenmaker, Dirk. "What Happened to Global Banking after the Crisis?" *Journal of Financial Regulation and Compliance*, vol. 25, no. 3, 10 July 2017, pp. 241–252, https://www.emerald.com/insight/content/doi/10.1108/jfrc-01-2017-0010/full/html

Smits, R. "The Role of the ESCB in Banking Supervision." *UvA-DARE* https://hdl.handle.net/11245/1.422254.

Summers, Lawrence H. "International Financial Crises: Causes, Prevention, and Cures." *American Economic Review*, vol. 90, no. 2, May 2000, pp. 1–16, https://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.90.2.1

Throstur, Olaf Sigurjonsson. "The Icelandic Bank Collapse: Challenges to Governance and Risk Management." *Corporate Governance: The International Journal of Business in Society*, vol. 10, no. 1, 23 Feb. 2010, pp. 33–45, https://doi.org/10.1108/14720701011021094.

Tumpel-Gugerell, Gertrude. "The European Response to the Financial Crisis." *European Central Bank*, 16 Oct. 2009.

https://www.ecb.europa.eu/press/key/date/2009/html/sp091016_1.en.pdf?695023033184ce04bcc6bcf0cb179a98

Tumpel-Gugerell, Gertrude. *The Financial Crisis – Looking Back and the Way Forward*. Conference "Rien ne va plus? Ways to rebuild the European Social Market Economy." https://www.bis.org/review/r090129e.pdf

Türsoy, Turgut. "Risk Management Process in Banking Industry". *MPRA - Munich Personal RePEc Archive*, 30 Apr. 2018. https://mpra.ub.uni-muenchen.de/86427/1/MPRA_paper_86427.pdf

Veron, Nicolas. "Basel III: Europe's Interest Is to Comply." *CEPR*, VOXEU, 5 Mar. 2013, https://cepr.org/voxeu/columns/basel-iii-europes-interest-comply

Wanke, Sebastian. "Five Years of "Whatever It Takes": Three Words That Saved the Euro." KfW Research, 26 July 2017. https://www.kfw.de/PDF/Download-
https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-Volkswirtschaft-Kompakt/One-Pager-2017-EN/VK-No.-139-July-2017-Whatever-it-takes-EN.pdf

Wymeersch, Eddy O. "The European Banking Union, a First Analysis." *SSRN Electronic Journal*, no. 1104, 2012, https://doi.org/10.2139/ssrn.2171785.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to Professor Lorenzo Carbonari, supervisor of my thesis, for his availability, courtesy, and professionalism he has shown throughout this work. Although we did not have the opportunity to meet regularly during the drafting of the thesis, his support has been precious and instrumental in allowing me to complete my study career. I would also like to take this opportunity to express my deep esteem for the Professor, who has been a key figure in my academic path. I fondly remember his lectures in Microeconomics, particularly the first one, which not only provided me with a solid theoretical foundation but also fostered my interest in the world of economics and helped guide my future professional choices. Having had the opportunity to learn from a professor of such competence and humanity is a source of pride for me. For this reason, Professor, I sincerely thank you not only for guiding me in the completion of this thesis, but also for being an important figure throughout my studies. It is rare to encounter educators capable of transmitting not only knowledge but also passion and curiosity, and you have truly been one of them for me. With my best wishes for your continued personal and professional success, I hope to have the pleasure of meeting you againg in the future.