MASTERS IN

FINANCE

MASTER'S FINAL WORK

PROJECT

EQUITY RESEARCH:

BANCO DE SABADELL, S.A.

JOSÉ DUARTE DA SILVA AMARAL

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SUPERVISOR:
DR. FLORENCE MENDES CORREIA CARP PINTO BASTO

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Abstract

This research report provides an in-depth analysis of Banco de Sabadell, S.A. ('Banco Sabadell' or 'the bank'), a leading banking institution in Spain. The study evaluates the bank's financial performance, market position, and strategic initiatives to assess its investment potential. Based on this analysis, the report assigns a **BUY** recommendation for Banco Sabadell, with a projected year-end 2025 share price target of €2.09, derived using a Discounted Cash Flow to Equity (DCFE) model. This forecast reflects a potential upside of 17.26% over a 15-month period, compared to the closing share price of €1.78 as of October 1, 2024.

It is important to note that this recommendation comes with a medium-risk factor. The rationale behind this recommendation primarily rests on three factors:

i) The dependence of the bank of macroeconomically factors in Spain, in the United Kingdom, and Mexico.

ii) The bank’s strong position in the markets it operates in;

iii) The ongoing hostile takeover from BBVA.

The bank has a strong position and a stable market share in the markets it operates in and the stock is currently trading at a discount.

For this analysis, firstly, an exhaustive analysis of the bank’s markets, business, strategy, and risks was made. Then, multiple valuation methods were computed: the free cash-flow to equity, the residual income, the dividend discount model, and the multiples valuation model. Additionally, multiple sensitivity analyses were performed to understand the impact of key variables on the final valuation.

JEL classification: G10; G32; G34.

Keywords: Equity Research; Valuation; Mergers & Acquisitions; Banco de Sabadell, S.A.; Banking Industry.

Resumo

Este relatório oferece uma análise aprofundada do Banco de Sabadell, S.A. (“Banco Sabadell” ou “o banco”), uma instituição bancária líder em Espanha. O estudo avalia o desempenho financeiro, a posição de mercado e as iniciativas estratégicas do banco, para avaliar o seu potencial de investimento. Com base nesta análise, o relatório atribui uma recomendação de COMPRA ao Banco Sabadell, com um de preço para as ações projetado para o final do ano de 2025 de € 2,09, estimado usando um modelo de Fluxo de Caixa Descontado para Capital Próprio (DCFE). Esta previsão reflete uma potencial subida de 17,26% ao longo de um período de 15 meses, em comparação com o preço de fecho das ações de 1,78 euros a 1 de Outubro de 2024.

É importante notar que esta recomendação apresenta um factor de risco médio. O racional subjacente a esta recomendação assenta essencialmente em três factores:

i) A dependência do banco de factores macroeconómicos em Espanha, no Reino Unido e no México.

ii) A forte posição do banco nos mercados em que opera.

iii) A aquisição hostil em curso por parte do banco BBVA.

O banco tem uma posição forte e uma quota de mercado estável nos mercados em que opera e as acções estão atualmente a ser negociadas a desconto.

Para esta análise, foi efectuada, em primeiro lugar, uma análise exaustiva dos mercados, da atividade, da estratégia e dos riscos do banco. De seguida, foram calculados vários métodos de avaliação: Free Cash-flow to Equity, Residual Income, Dividend Discount Model e a Avaliação por Múltiplos. Adicionalmente, foram efectuadas várias análises de sensibilidade para compreender o impacto das principais variáveis do modelo de avaliação no preço estimado.

Classificação JEL: G10; G32; G34

Palavras-chave: Equity Research; Avaliação de Empresas; Fusões e Aquisições; Banco de Sabadell, S.A.; Banking Industry.

Acknowledgements

I would like to sincerely thank my family and friends for their unwavering support and encouragement throughout this journey. Your belief in me has been my greatest source of strength and motivation.

I would also like to express my gratitude to the professors who guided me throughout this process. Your insights and encouragement were invaluable in helping me shape this thesis.

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BANCO DE SABADELL, S.A.

Buy

Medium-risk

15 October 2024

BANCO DE SABADELL

(YE2025 Price Target of € 2.09 (+17.26%); recommendation is to BUY with Medium Risk)

1. Research Snapshot

A BUY recommendation has been issued for Banco Sabadell., with a 2025YE price target of €2.09, representing a potential upside of 17.26% from its value as of October 1st, 2024.

Although the recent surge in Banco Sabadell's stock price is primarily driven by speculation surrounding a potential hostile takeover by Banco BBVA, the company's strong fundamentals indicate that it remains an undervalued stock. Sabadell's robust market position in Spain, where it benefits from a well-established retail and corporate banking franchise, and its growing footprint in the United Kingdom, through its subsidiary TSB, underscore its operational resilience and diversified revenue streams. Furthermore, its rapidly expanding business in Mexico represents a significant growth opportunity, capitalizing on the country's favorable demographic trends, rising financial inclusion, and increasing demand for banking products.

The recommendation comes with medium risk, as Sabadell is highly expose to macroeconomic conditions in Spain and in the United Kingdom, and an unexpected shift in the monetary policy in those countries will severely affect the fundamentals of the company.

Figure 1 - Risk Assessment

Low	**Medium**	High

Source: *Author*

2. Key Statistics

Banco de Sabadell has a market capitalization of €9.978B and has outstanding 5.36B shares, of which 5.35B are freely traded.

Figure 3 - Key information as of October 14th, 2023

Ticker	SAB	**52-Wk High (€)**	2.05	**Shares Outstanding (b)**	5.36B	**5 year Beta**	1.03
Website	bancsabadell.com	**52.Wk Low (€)**	1.02	**Market Cap. (€b)**	9.978B	**Float (b)**	5.35B
Industry	Banking	**Current Price (€)**	1.86	**Dividend Yield (%)**	5.92	**inside Own. (€)**	0.03

Source: *Yahoo Finance*

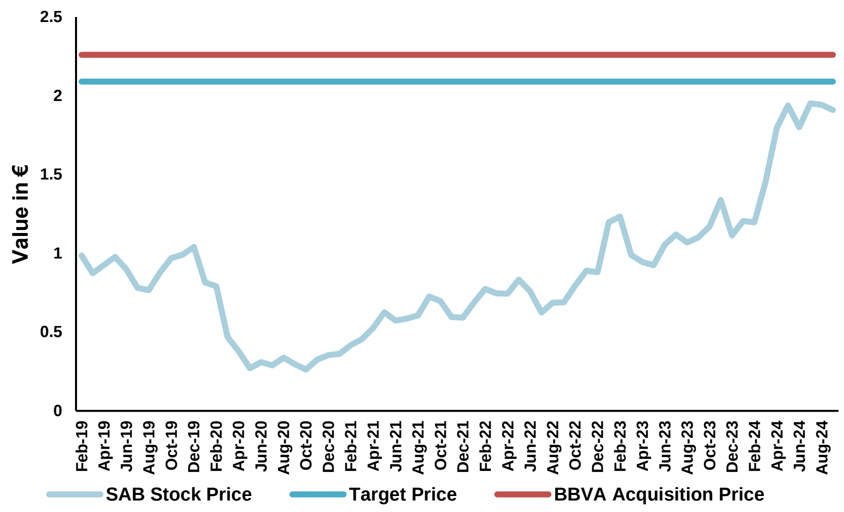
Figure 2 - 2023YE Key Metrics

EURm	**2023**
Loans to Customers	152,260
Customer Deposits	160,331
Net Equity	13,879
Net Interest Income	4,723
Net Income	1,332

Source: *Annual Report 2023*

3. Stock Performance

Figure 4 - SAB Historical share price



Source: *Investing.com*

4. Highlights

The Free Cash Flow to Equity (FCFE) model, Residual Income (RI) method and Multiples approach all produced intrinsic valuations above the current market price of the stock. In contrast, the Discounted Dividend Model (DDM) was the only method that yielded a valuation lower than the stock's current market price.

Figure 5 - Valuation methods and price estimates

Valuation Method	Estimated Value (€)
DDM	1.55
FCFE	**2.09**
RI	2.02
Multiples	2.07

Source: *Author*

It's important to note that the bank is currently the target of a hostile takeover, which adds uncertainty to its future outlook. The outcome of this takeover attempt is still unresolved, and this situation may be influencing the stock market price.

BBVA's pursuit of Banco Sabadell has been marked by a series of strategic moves and regulatory considerations. On April 30, 2024, BBVA announced a merger proposal to Banco Sabadell, which was subsequently rejected by Sabadell's Board of Directors on May 6, 2024. Following this, on May 9, 2024, BBVA escalated its efforts by submitting a hostile takeover bid directly to Banco Sabadell's shareholders, offering an exchange ratio of one BBVA share for every 4.83 Sabadell shares. This offer was later adjusted on October 1, 2024, to one BBVA share plus €0.29 in cash for every 5.0196 Sabadell shares, accounting for interim dividends paid by both banks.

The proposed €12 billion bid has been under regulatory scrutiny, with the European Central Bank granting non-opposition in September 2024. However, Spain's antitrust authority, the CNMC, extended its analysis to a second phase in November 2024, potentially prolonging the review process into the first quarter of 2025. Concurrently, the Spanish government has expressed concerns about the merger's impact on the financial system, employment, and customers, indicating possible intervention depending on the CNMC's findings.

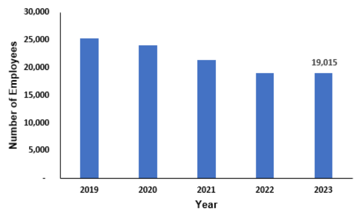
In response to these developments, Banco Sabadell's board has taken defensive measures, including the decision in late December 2024 to relocate its headquarters back to Catalonia from Alicante, where it had moved in 2017 amid political tensions. This move, formalized in January 2025, is seen as an effort to strengthen ties with its traditional shareholder base and regional stakeholders during the ongoing takeover attempt.

5. Business Description

History

Banco de Sabadell, S.A. is a Spanish company founded in 1881 in Sabadell, with a capital of 10 million pesetas, aiming to finance local industries. In 2004 the bank's stock was included in the IBEX 35 Index. During the 2008 financial crisis, Spain's banking system experience a bank concentration, being Sabadell one of the main acquirers. Banco de Sabadell also begun its internationalization process by acquiring the British TSB, in 2015, and creating a bank in Mexico, in 2016. According to the Net Promoted Score, a market benchmark that measures customer experience, Banco Sabadell archived the 1st place in the SMEs and Companies in 2021, signaling that the bank is succeeding in customer experience in one of its main customer bases. In 2021, the bank presented a 3-year strategic plan, focused on increasing efficiency and profitability. The bank's results in 2021 are in line with the plan. The reduction of costs and the large growth driven by the good performance of all segments in Spain and of the mortgages in the United Kingdom highly contributed to the improvement of the recurring margin and overall results.

Figure 6 - Number of employees evolution



Source: *Author*

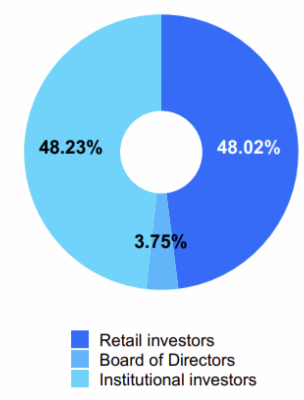
Ownership Structure

The ownership structure of Banco Sabadell as of the end of 2023 shows that three major investors hold over 3% of the bank's shares each. These three investor groups collectively account for 10.10% of the total share capital. Here are the detailed holdings of these investors:

- BlackRock, Inc. – Holds an indirect share of 4.10% through several subsidiaries.
- Dimensional Fund Advisors LP – Holds 3.11% through its advised funds and accounts.
- David Martínez Guzmán – Holds 3.56%.

These groups collectively control 10.10% of the bank's capital, and the rest is held by various institutional and retail investors, with institutional investors accounting for 48.23% and retail investors for 48.02% (figure 7).

Figure 7 - Ownership structure



Source: *Annual Corporate Governance Report 2023*

Segments

The bank is divided into four segments: banking activities in Spain, banking activities in the United Kingdom, and banking activities in America. The banking activities in Spain comprises commercial and corporate banking products, markets and private banking investment, and generate 69.3% of the total revenue (net interest income + net fees and commissions) of the group; the banking activities in the United Kingdom consists in the TSB Banking Group, offering current and savings accounts, mortgages, personal loans and credit cards and generates 23.5% of the total revenue; the banking activities in America provides retail and commercial banking services and generate 7.2% of the total revenue (figure 8).

Drivers of Profitability

Banco de Sabadell has two main drivers of profitability: the interest income and the fees and commissions. Interest income depends on two factors, the interest rate (a combination between the market rate – Euribor - and a spread) and the value of the performing loans conceded. The fees and commissions depend on the number and value of the services provided.

The main drivers of expenses are the interest expense, the operating expenses, and the impairment for credit losses. The interest expenses depend on the rate paid by the bank and the value of interest paying deposits at the bank. The operating expenses depend highly on the staff costs, and the impairment for credit losses depends on the expected ability of clients to pay their loans to the bank. The bank has its loans and advances to customers account mainly composed of mortgage loans (58% of gross performing loans) and its deposits account is mainly composed of current and savings account (>83%).

Strategy

Banco Sabadell has outlined several strategic priorities aimed at shaping its future. The bank plans to consolidate its presence in the Spanish market by improving customer engagement, both digitally and through traditional channels. Part of this strategy includes revamping its retail banking services to meet the increasing demand for digital solutions.

Internationally, the bank aims to boost profitability, particularly in the UK and Mexico, by focusing on efficient capital use and cutting operational costs. A significant part of its broader vision is the ongoing digital transformation across various segments of the business. In retail banking, the focus is on simplifying services and products, while business banking will benefit from data analytics and enhanced risk management practices.

The bank is also committed to improving cost efficiency, reducing its overall cost structure, and streamlining operations through digital innovation. Additionally, sustainability is a key pillar of its strategy, with a focus on aligning its activities with the UN Sustainable Development Goals and increasing its role in sustainable financing initiatives.

Finally, Banco Sabadell remains dedicated to a customer-centric model, particularly in offering high-value products like mortgages, insurance, and investment services, with a focus on personalized support for complex transactions.

Figure 8 - Revenue sources by market

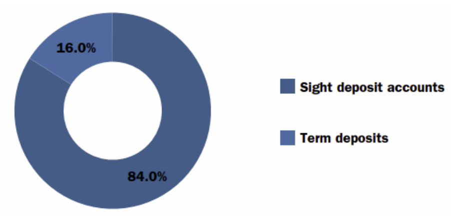
Market	Revenue (%)
Spain	69.3%
United Kingdom	23.5%
America	7.2%

Source: *Author*

Figure 9 - Lines of business

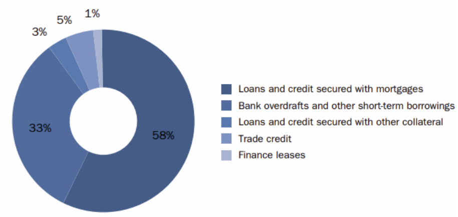
Source: *2023 results presentation*

Figure 10 - 2023YE Customer deposits



Source: *2023 Annual Report*

Figure 11 - 2023YE total loans to customers by type



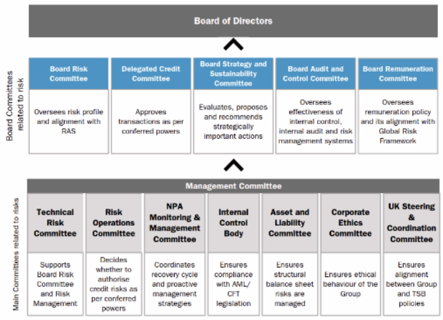
Source: *2023 Annual Report*

6. Management and ESG

Management

The management team is led by the CEO, who reports to the Board of Directors. He is responsible for managing the group's operations. The executive has 11 units directly reporting to him. The management committee are composed by 11 people: Cesar Gonzalez-Bueno Mayer Wittgenstein as Chief Executive Officer; Leopoldo Alvear Trenor as Chief Financial Officer; Gonzalo Barettino Coloma as Secretary General; David Vegara Figueras as Head of Risk and Regulation; Jorge Rodríguez Maroto as Head of Retail Banking; Carlos Ventura Santamans as Head of Business Banking and Branches; Cristóbal Paredes Camuñas as Head of Corporate Banking; Carlos Paz Rubio as Head of Risk; Marc Armengol Dulcet as Head of Operations and Technology; Elena Carrera Crespo as Head of Sustainability and Efficiency; and Sonia Quibus Rodríguez as Head of People (figure 12 and 13).

Figure 12 – 2023YE Management structure



Source: *Annual Report 2023*

Social and Environmental

Banco Sabadell has defined four pillars to align its business objectives with the Sustainable Development Goals of the United Nations: Institution, Customers, Investors, and Society.

The first is about progressing towards greenhouse gas neutrality, enhancement of diversity and equality and talent progression. The second is about supporting its customers in the transition to a carbon-neutral economy, advising and financing that transition. The third comprises the creation and offering of responsible investment products, enabling individuals and institutional clients to contribute to the Sustainable Development Goals. The fourth is about adding value to society by supporting projects and initiatives that contribute to financial inclusion and education, culture, talent and research, mainly through the bank's foundation. The bank has defined some clear objectives to be accomplished by 2025 concerning each pillar, that can be followed in each year's Commitment to Sustainability Report. The company's plan is already underway, and the company has already 100% neutrality concerning greenhouse gas emissions and 93% of the employees have been trained in sustainability. The amount of sustainable and social financing is increasing and already comprises more than 11B and 3.4B, respectively.

The Reuters' ESG score for the bank is 74 (B+).

Figure 13 - 2023 YE management body

Position	Name
Chief Executive Officer	Cesar Gonzalez-Bueno Mayer Wittgenstein
Chief Financial Officer	Leopoldo Alvear Trenor
Secretary General	Gonzalo Barettino Coloma
Head of Risk and Regulation	David Vegara Figueras
Head of Retail Banking	Jorge Rodríguez Maroto
Head of Business Banking and Branches	Carlos Ventura Santamans
Head of Corporate Banking	Cristóbal Paredes Camuñas
Head of Risk	Carlos Paz Rubio
Head of Operations and Technology	Marc Armengol Dulcet
Head of Sustainability and Efficiency	Elena Carrera Crespo
Head of People	Sonia Quibus Rodríguez

Source: *Annual Report 2023*

Governance

The bank has a Corporate Governance Structure that consists of an annual General Shareholders Meeting, a fifteen-member Board of Directors, and six committees. The shareholders structure of the bank consists of 48.02% retail investors, 48.23% institutional investors, and 3.75% members of the board of directors. The Board of Directors consists of fifteen members with experience in a variety of competences, that have the responsibility of representing all the company's shareholders. All members have previous experience in governing bodies and in organization management and direction. The six committees are: the Strategy Sustainable Committee, the Credit Delegated Committee, the Audit and Control Committee, the Appointments and Corporate Governance Committee, the Remuneration Committee, and the Risk Committee. They should support the Board in specific areas. There are also two internal control units that report to the Board of Directors, the Internal Audit Unit and the Regulations and Risks Control (figure 12).

Figure 14 - Diversity and competencies of the bank's staff

Source: *Annual Corporate Governance Report 2023*

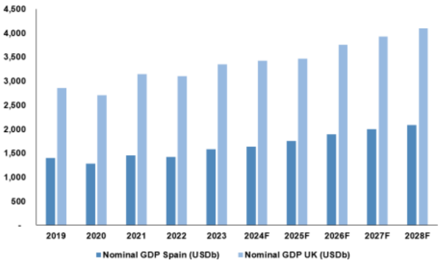
7. Industry Overview and Competitive Positioning

Macroconomic outlook

World

Global GDP growth is projected to moderate compared to the sharp rebounds seen in 2021 and 2022. The International Monetary Fund (IMF) forecasts global growth to hover around 3.0%-3.5%, depending on the region and the pace of monetary tightening. Advanced economies, particularly in Europe and North America, are expected to grow more slowly, as central banks maintain tight monetary policies to curb inflation. In contrast, many emerging markets and developing economies (EMDEs) are likely to continue to outperform advanced economies in terms of GDP growth, buoyed by stronger domestic demand, investment in infrastructure, and less restrictive monetary policy.

Figure 15 - Nominal GDP evolution, Spain and UK

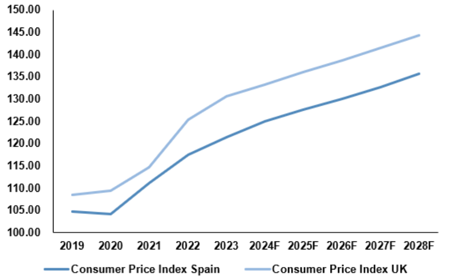


Source: *The Economist Intelligence Unit, Author*

China, while no longer experiencing the high growth rates of the past, remains a significant contributor to global growth. The country is expected to grow by around 5% in 2024, supported by government stimulus measures and a gradual rebalancing of its economy toward domestic consumption. Meanwhile, India is projected to remain one of the fastest-growing major economies, with growth rates above 6%, driven by structural reforms and strong domestic demand.

Inflation remains a key challenge globally, with many economies still grappling with high prices due to lingering supply chain disruptions, elevated energy costs, and labor market imbalances. Inflation is projected to moderate in 2024 compared to the peaks seen in 2022-2023, but it will likely remain above pre-pandemic levels in many regions.

Figure 16 - Consumer price index, Spain and UK



Source: *The Economist Intelligence Unit, Author*

In advanced economies like the United States, the Eurozone, and the UK, inflation is expected to decline gradually, but central banks remain cautious. The U.S. Federal Reserve, European Central Bank (ECB), and Bank of England (BoE) have all signaled that interest rates will remain elevated throughout much of 2024 to anchor inflation expectations. These higher rates are expected to slow consumer demand and investment, particularly in interest-sensitive sectors such as housing and real estate.

In contrast, many central banks in emerging markets, having raised rates earlier, are likely to begin easing monetary policy in 2024 as inflation comes under control. This divergence in monetary policy between advanced and emerging markets could lead to shifts in global capital flows, favoring economies with higher growth potential and lower inflation risks.

Spain

Spain’s economic recovery post-pandemic demonstrates resilience, fueled by a combination of fiscal support, improved consumer confidence, and a rebound in key sectors like tourism and manufacturing. The projected nominal GDP of $1,632 billion in 2024 indicates that the country is on a positive growth trajectory, surpassing pre-pandemic levels. This growth is supported by favorable external conditions, such as stable global demand for Spanish exports, as well as domestic factors like rising employment and increased consumer spending.

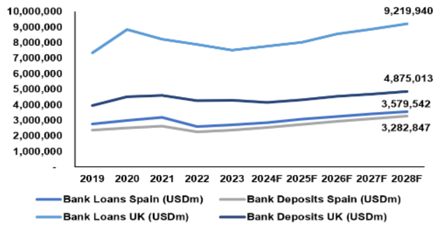
However, inflation remains a critical factor. Spain's Consumer Price Index (CPI) is expected to rise to 124.9 in 2024, reflecting ongoing inflationary pressures. This is likely due to increased energy prices and supply chain disruptions, both of which have been significant issues globally. However, Spain's inflation remains relatively controlled compared to other European economies. The European Central Bank's

(ECB) monetary policy, particularly its gradual tightening through interest rate adjustments, is a key factor in keeping inflation in check.

On the financial front, the lending interest rate in Spain is expected to rise to 4.7% in 2024, a sign of the ECB's efforts to manage inflation through monetary tightening. While higher interest rates may curb borrowing to some extent, they reflect a healthy economy where credit expansion remains robust. The domestic credit growth of 1.5% indicates continued access to credit, which is essential for business investment and household consumption.

The expansion of Spain's money supply (M2), projected to grow by 3.8% in 2024, reflects increased liquidity in the economy. This is critical for sustaining growth, as it ensures that businesses and consumers have access to capital. The steady rise in bank loans and deposits also points to the confidence in Spain's banking sector, which is crucial for the economy's broader stability.

Figure 17 - Bank loans and deposits evolution, Spain and UK



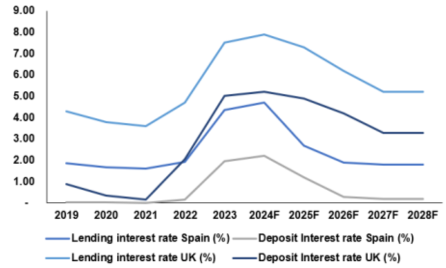
Source: *The Economist Intelligence Unit, Author*

United Kingdom

The United Kingdom faces a more complex economic landscape compared to Spain. The UK's projected nominal GDP of $3,421 billion in 2024 indicates a slower pace of recovery, hindered by a combination of domestic and international challenges, including Brexit-related trade frictions and ongoing inflationary pressures. The UK's post-Brexit trading environment has added complexity to its supply chains, increasing the costs of imports and exports, which, in turn, have contributed to inflation.

Inflation remains a key concern in the UK, with the CPI expected to rise to 133.3 in 2024. This reflects ongoing price pressures driven by elevated energy costs, supply chain disruptions, and wage increases. The Bank of England's (BoE) tightening monetary policy, through raising interest rates, aims to curb these inflationary pressures. The lending interest rate is forecasted to rise to 7.9% in 2024, a level that could restrict borrowing, particularly for businesses and households with variable-rate debt. This higher rate environment will likely cool down demand in sectors reliant on credit, such as housing and business investment.

Figure 18 - Evolution of lending and deposit rates, Spain and UK



Source: *The Economist Intelligence Unit, Author*

Despite these challenges, the UK's financial system remains resilient, with domestic credit growth projected at 1.2% in 2024. The expansion of the money supply (M2) also signals that there is still ample liquidity to support economic activity, though tighter monetary policy may slow the pace of growth. The expected rise in bank loans and deposits reflects continued demand for financial services, though at a slower pace compared to earlier years, as higher interest rates make borrowing more expensive.

Another key issue for the UK is the labour market, which has been facing challenges related to both inflation and supply shortages, particularly in industries that previously relied heavily on EU labour. Wage growth, while supporting consumer spending, is contributing to inflationary pressure, creating a balancing act for policymakers.

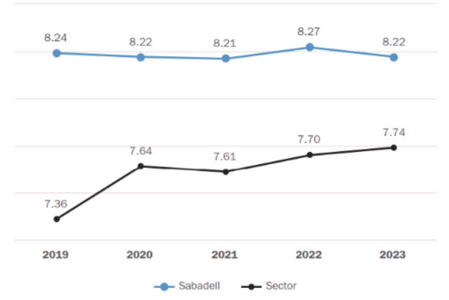
In sum, while Spain's outlook is more favourable with lower interest rates and more controlled inflation, the UK's economic environment is constrained by higher inflation and tighter monetary policy. Both economies face challenges in balancing growth with inflation control, but Spain is positioned for more stable expansion in 2024, while the UK will need to manage inflation and the cost of borrowing carefully to maintain growth.

Market Analysis

Regulatory Drive Towards Consolidation

Regulators are actively promoting the consolidation of banks by increasing regulations, preferring a smaller number of larger institutions over many smaller ones. This shift has resulted in a significant reduction in the number of banks in the European Union, leading to an oligopolistic market structure.

Figure 19 - Service quality rating



Source: *2023 Annual Report*

Transformation of Business Models

Banks are in the process of redefining their core business models in response to changing market dynamics. Three primary business model archetypes have emerged:

- Full Reimagined Digital Bank: These banks offer a comprehensive suite of products and services through digital channels, emphasizing a seamless digital customer experience.
- Banking-as-a-Service (BaaS): These institutions serve as the financial backbone, supporting partners who directly engage with customers.
- Platform Providers: They function as intermediaries, creating technological bridges between various services and their clients.

Strategic Initiatives and Collaborations

Banks are actively pursuing strategic initiatives and forming partnerships, particularly in sectors such as insurance and payments. This indicates an ongoing effort to align their strategies with the evolving industry landscape.

Embracing Digitalization and Customer Focus

The banking sector is fully embracing digitalization by investing in mobile and web applications. Physical branches are being phased out as the quality of the digital interface becomes a pivotal factor in customer satisfaction.

Harnessing Data and Advanced Technologies

Banks are harnessing industry data and advanced technologies to deliver personalized financial solutions, expedite credit decisions, combat fraud, and enhance regulatory compliance. Decentralized technologies are being explored to bolster security and transaction transparency.

Heightened Emphasis on Cybersecurity

With the growing prevalence of digitalization and connectivity, cybersecurity has taken center stage as a critical concern within the industry. It may even become a distinguishing factor for banks that prioritize robust cybersecurity measures.

ESG Focus

Banks are actively developing products and services aligned with Environmental, Social, and Governance (ESG) principles, both for their customers and as part of their own corporate strategies. This reflects a growing commitment to sustainability and responsible banking practices.

Cost Efficiency Drive

Banks are aiming to significantly reduce their cost-to-income ratios, with digital banks setting the pace for achieving lower ratios. This objective underscores the industry's quest for improved profitability and enhanced returns for investors.

Financial Performance Trends

While institutions supervised by the European Central Bank have demonstrated improvements in total assets and equity, some banks continue to have Price/Book ratios below 1. This suggests that their Return on Equity falls short of their Cost of Capital, often due to a reliance on interest margin revenue streams. Diversification of revenue sources is increasingly seen as essential.

Regulation

Regulation plays a crucial role in ensuring stability and balance in the banking industry. Its main goal is to protect consumers and maintain the overall stability of the financial system. Given the vast amounts of money banks manage and their vulnerability to illegal activities, these institutions hold a critical position in the economy, and their failure could lead to disastrous consequences.

Many banks also act as intermediaries, enabling more efficient capital allocation. Without regulation, banks would have the freedom to engage in risky practices that could lead to their collapse and trigger financial crises. The purpose of regulation is to promote safe banking practices by ensuring banks maintain sufficient capital to manage risks and that financial institutions are operated according to best practices, overseen by transparent and trustworthy stakeholders. Two critical areas that require particular attention are the Basel Regulatory Framework and banking licenses. While not mandatory, banking licenses serve as tools for market regulation. The Basel Committee on Banking Supervision (BCBS) sets standards and best practices that can be adopted by local banking regulators and supervisors in their national systems.

The Basel Regulatory Framework is made up of three main pillars. Pillar 1 focuses on setting minimum capital requirements to protect against credit, market, and operational risks, primarily measured by the Capital Adequacy Ratio. Regulatory capital includes a bank's Tier 1 capital, which consists of instruments that can absorb losses (CET1 and AT1), while Tier 2 capital is composed of instruments that absorb losses only in a gone-concern scenario. Risk-weighted assets (RWAs) are used to adjust a bank’s exposures based on risk. Additionally, liquidity ratios are required to ensure that banks have enough liquidity to continue operating.

Pillar 2 requires banks to assess their capital adequacy compliance, and Pillar 3 promotes market discipline through regulatory disclosure requirements. The effects of changes in capital requirements have been widely studied. The paper, *The Impact of Capital Requirements on Bank Lending*, identifies two key effects of raising capital requirements. First, it influences a bank’s capital buffer, with banks gradually replenishing these buffers to meet new regulatory minimums. Second, it affects lending to the real economy, with varying impacts across sectors. Typically, loan growth slows the most in commercial real estate and secured household lending following an increase in capital requirements.

According to *The Real Effects of Bank Capital Requirements*, a rise in capital requirements can reduce lending and investment, with a 1% increase in capital requirements leading to an 8% reduction in bank lending.

Supply and demand drivers

The demand for credit is primarily shaped by macroeconomic conditions and current monetary policy. Key events, such as the Russia-Ukraine conflict, supply chain disruptions, rising inflation, and the global tightening of monetary policies, are expected to significantly affect credit issuance. In the present economic climate, rising interest rates are likely to boost net interest income, becoming the main revenue driver for banks. Other factors, including GDP growth, real disposable income, and housing investments, also play a role in influencing credit demand.

On the supply side, the regulatory framework governing credit provision is the key factor. The amount of credit that banks can extend is regulated, and, as previously noted, higher regulatory capital requirements generally lead to a reduction in bank lending. The issuance of banking licenses also affects the credit supply, as more banks typically result in a higher overall credit capacity. Additionally, the household saving ratio is crucial to supply dynamics, as the credit banks offer is primarily funded by deposits. Therefore, a higher savings rate in an economy allows banks to extend more credit.

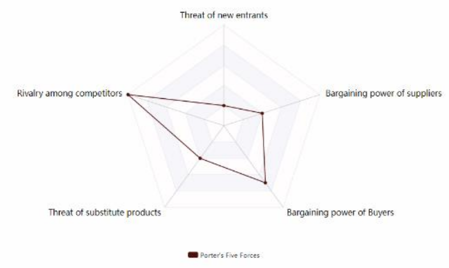
Porter's Five Forces (figure 20)

Threat of new entrants- Extremely Low

- Licenses and legal requirements
- High capital requirements
- Well-established industry
- Technology

The banking sector is recognized for having some of the most difficult to pass entry barriers among industries. The capital prerequisites for establishing a new bank are typically beyond the reach of the majority, which also limits the scope of qualitative assessments conducted by the central bank. Furthermore, established banks possess a comprehensive digital infrastructure for online payments that presents a formidable challenge for competitors. Additionally, these incumbent banks have a wealth of industry-specific expertise and knowledge that newer entrants often lack. Banking licensing is also an expensive and long process.

Figure 20 - Porter's five forces



Source: *Author*

Bargaining power of Suppliers- Low

- External services companies
- Employees

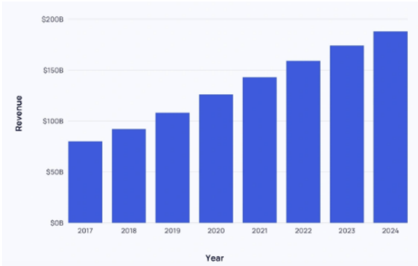
The bank's suppliers primarily consist of its employees, who have the option to establish a trade union but typically wield limited bargaining leverage. Furthermore, certain critical bank services like ATM operations and Person-to-Person (P2P) payments are not developed in-house; instead, they are outsourced to external companies. These service providers hold relatively more bargaining power compared to the employees, but this situation does not pose a significant risk to the bank.

Bargaining power of Buyers- Medium

- Customers demand discounts and better service
- Some loyalty to a bank

The bank's clientele can be categorized into two distinct groups: individual customers and corporate customers. Individual customers typically seek to maximize the range of services they receive while minimizing their interest and fee expenses. They may exhibit loyalty to a specific bank, requiring that a competing bank offer significantly improved services or substantially lower lending rates to attract them away from their current bank. In contrast, corporate customers wield considerably more bargaining power. The departure of an individual customer has a minimal impact on the bank, whereas the loss of a corporate customer can potentially harm the bank, especially if the company represents a significant client.

Figure 21 - Fintech industry size (USDb)



Source: *Deloitte Fintech Report*

Threat of Substitute Products- Low

- Fintech’s
- Cryptocurrencies

Numerous FinTech companies leverage technology to offer fee-free financial services and a more tailored experience. These firms have captured a larger market share, particularly among younger customers, which should serve as a cautionary signal to traditional banks in the coming years (figure 21). Cryptocurrencies primarily aim to establish decentralized financial systems, but there are lingering concerns about the nature of these assets and the concept of an unregulated financial ecosystem. Nevertheless, they have the potential to pose a future threat to established banking institutions.

Rivalry Among Competitors- High

- High rivalry
- Similar products and services

This sector exhibits intense competition primarily due to companies offering similar services. However, noteworthy switching costs are at play, as a customer holding a bank account with one institution is unlikely to switch merely because another offers a mortgage loan with a slightly lower 0.1% interest rate. When a market player seeks to expand its market share in deposits or loans by reducing lending rates or increasing borrowing rates, it may inadvertently initiate a price war that can negatively affect the overall industry's profitability.

SWOT Analysis

Strengths	Weaknesses
Banking Licensing obligation	Highly sensitivity to reputational damage
When it comes to efficient capital allocation, banking is a crucial industry in every country economy	Market and economic fluctuations cause unstable revenues
Valuable customer database information	Highly regulated industry, imposing restrictions on activity and mandatory capital limits
Some level of customer loyalty	-
Opportunities	**Threats**
Become a disruptive innovator, investing in progressive technology	Uncertainty about regulations and regulatory requirements
Develop customer relationship culture and shift to a customer-centric marketing outlook	Volatility and evolution in interest rates, market rates and global economy

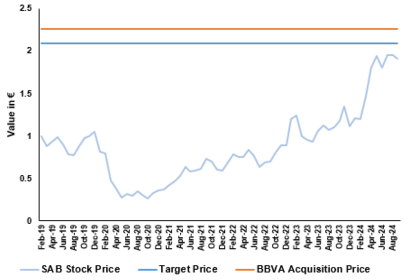
Focus on Cybersecurity development	Demographic issues (increasingly aging population and globalization)
Increase customer loyalty	Fraud and cyberattack, resulting in disclosure of confidential and sensitive information
Differentiate product offering	Consumers becoming more price sensitive and more demanding

8. Investment Summary

The recommendation for SAB stock is to BUY, with a 2025YE share price target of €2.09. The stock presents a 17.26% upside potential against the closing price of €1.78 on 1st of October and Medium risk.

Banco Sabadell's stock is currently trading below its fundamental value. The stock represents an upwards tendency primarily driven by speculation regarding a potential acquisition by BBVA and the improving market conditions, which are being reflected in the company's fundamentals.

Figure 22 - SAB share price, target price and BBVA acquisition implicit price



Source: *Author*

The market is actively speculating on the likelihood of BBVA successfully acquiring Banco Sabadell with the current offer at a 30% premium over Sabadell's April 29, 2024, closing price. This would imply a target acquisition price of approximately €2.26 per share. Investor sentiment appears optimistic, as reflected in the recent surge in Sabadell's stock price.

The valuation was performed by computing several valuation methods: Free Cash-Flow to Equity, Dividend Discount Model, Residual Income, and Multiples Valuation. The values range from €1.55 to €2.09 per share, sustaining the BUY recommendation given. The Free Cash-Flow to Equity was the base model used to support the conclusions reached in this equity research report. The Free Cash Flow to Equity method is particularly suitable for valuing banks due to their inherently high leverage and unique business model, where debt is a core part of operations rather than a separate financing decision.

The recommendation comes with medium risk, as Banco Sabadell is significantly exposed to macroeconomic conditions in Spain and the United Kingdom, its two primary markets. In both markets, the bank relies heavily on the health of the domestic economy, which is vulnerable to inflationary pressures, fluctuating consumer confidence, and potential slowdowns in GDP growth. A decline in economic activity could directly impact credit demand, increase loan delinquencies, and place downward pressure on the bank's profitability.

Another critical factor is the company's sensitivity to monetary policy shifts in both regions. An unexpected change in the monetary policy stances such as a faster-than-anticipated interest rate cut, or tighter regulation could significantly affect Sabadell's fundamentals.

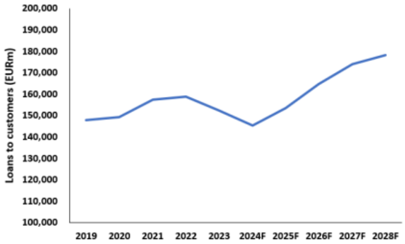
9. Valuation

Balance Sheet Forecast

Loans to customers

Sabadell's credit portfolio comprises mainly loans to customers provided in Spain and in the United Kingdom. In both markets, the bank has maintained a stable market share and there is no material evidence that the bank will gain or lose market share in the forecasted period. For that reason, the credit in both markets was forecasted by averaging the market share of the bank in the last 5 years and applying these percentages to the forecasted total loans in each country, according to *The Economist Intelligence Unit* (figure 23).

Figure 23 - Loans to customers evolution



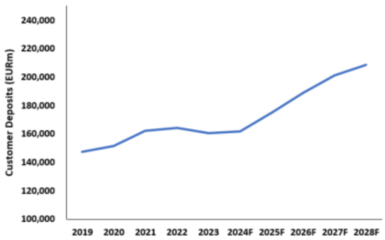
Source: *Author*

The bank cost of risk faced a sharp increase in 2023 from 0.44% to 0.54%, due to the macroeconomic environment faced in Spain and in the United Kingdom. It was conservatively forecasted that it would reach 0.6% and maintain this value until 2028.

Customer deposits

Sabadell's costumer deposits are mainly comprised of deposits in its Spain and United Kingdom branches. Similar to its Credit, the bank maintains a constant market share on its customers sight accounts and fixed-term deposits in both countries. There is no material evidence that the bank will increase or decrease its market share in both countries. For that reason, the customer deposits were forecasted by averaging the market share of the last 5 years and applying these percentages to the forecasted total deposits in each country, according to *The Economist Intelligence Unit* (figure 24).

Figure 24 - Customer deposits evolution

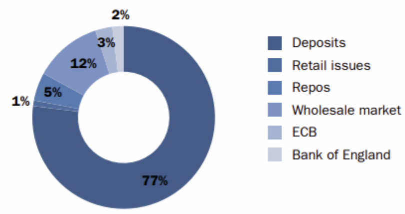


Source: *Author*

Other Balance Sheet Accounts

To project other balance sheet accounts, a consistent historical correlation was identified between these accounts and two key financial variables: Loans to Clients and Customer Resources. Specifically, the asset-side accounts demonstrated a stable relationship with total customer deposits, suggesting that asset values move in tandem with customer deposit levels. On the liabilities side, the accounts exhibited a similar stable relationship with total loans, indicating that liability values are closely aligned with loan activity over time. This approach provides a reliable basis for forecasting, as the historical relationships between these variables have shown consistency.

Figure 25 - 2023YE funding structure (*)



(*) Excl. accrual adjustments and hedging derivatives.
Source: *2023 Annual Report*

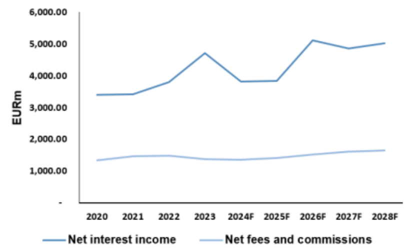
Income Statement Forecast

Interest Income

The interest income of Banco Sabadell is the main revenue source of the bank. The interest income is divided in 5 sub-sources of revenue: income from cash and cash equivalents, income from loans to costumers in Spain, income from loans to customers in the United Kingdom, income from fixed-income securities and income from other assets.

Income from Cash and Cash Equivalents: The forecast for income from cash and cash equivalents was developed by analyzing the historical relationship between the income generated from this account and the Euribor rate. By comparing the historical income rate with the corresponding Euribor rates, the average spread between them was calculated. Based on this analysis, it was projected that the spread would remain consistent with the 2023 levels for the next two years before reverting to its historical average.

Figure 26 - NII and NFC evolution



Source: *Author*

Income from loans in Spain and in the UK: The forecast for income from loans in Spain and in the UK was developed by analyzing the historical relationship between the income generated from these accounts and the lending rate in Spain and in the UK. By comparing the historical income rate with the corresponding lending rate, the average spread between them was calculated. Based on this analysis, it was projected that the spread would remain consistent with the 2023 levels for the next two years before reverting to its historical average.

Income from fixed-income securities and other assets: The income from fixed-income securities and other assets was calculated by computing the average rate of income from these accounts on the balance sheet for the last 5 years.

Interest Expense

The interest expense of the bank is the main expense the bank historically has and it is composed by the expenses from financial institutions, expenses from customer deposits in Spain and in the UK, expenses from capital markets and other liabilities.

Expense from financial institutions: The forecast for expenses related to financial institutions was developed by analyzing the historical relationship between the expenses incurred from these accounts and the Euribor rate. By comparing the historical expense rates with the corresponding Euribor rates, the average spread between them was calculated. Based on this analysis, it was projected that the spread would remain in line with 2023 levels for the next two years, before reverting to 2019 values.

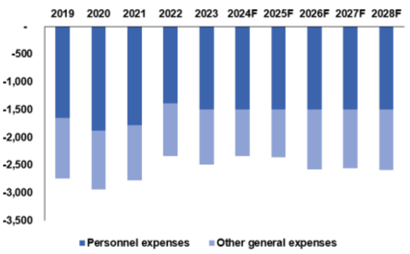
Expenses from customer deposits in Spain and in the UK: The forecast for interest expenses in Spain and the UK was developed by analyzing the historical relationship between the interest expenses from these accounts and the deposits rates in both countries. By comparing the historical expense rates with the corresponding deposits rates, the average spread between them was calculated. Based on this analysis, it was projected that the spread would remain consistent with 2023 levels over the next two years, before returning to its 2019 value.

Expenses from capital markets and other liabilities: The expenses from capital markets and other liabilities were calculated by computing the average rate of income from these accounts in the balance sheet for the last 5 years.

Net Fees and Commissions

Net fees and commissions represent the second-largest source of revenue for Banco Sabadell. Over the past five years, this revenue stream has maintained a steady correlation with the volume of loans provided to customers. This consistent relationship suggests that as the bank's loan portfolio grows, fees and commissions have followed a similar trend. To forecast future revenues from net fees and commissions, the average performance over the last five years was used as a basis.

Figure 27 - Operating expenses (EURm)



Source: *Author*

Personnel Expenses

Personnel expenses are a significant cost for the bank. Over the past five years, Banco Sabadell has followed a trend of gradually reducing its workforce while maintaining a stable cost per employee. This strategy has allowed the bank to manage personnel expenses efficiently. For the purpose of forecasting, it was assumed that both the number of employees and the cost per employee will remain consistent with 2023 levels (figure 27).

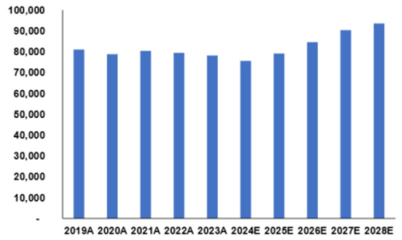
Other general expenses

General expenses represent a key cost component for Banco Sabadell. Over the past five years, the proportion of these expenses relative to the bank's core revenue has shown a declining trend, indicating improved cost efficiency as the bank grows. This suggests that Banco Sabadell has successfully managed its operational costs while increasing its revenue base. To forecast future general expenses, it was assumed that the current proportion of these expenses to core revenue will remain stable, reflecting the bank's continued focus on cost control while supporting its core operations (figure 27).

Cost of Equity

To determine the cost of equity for the company, the Capital Asset Pricing Model (CAPM) was employed. This widely used financial model calculates the required return on equity by factoring in the risk-free rate, the beta (which measures its volatility relative to the broader market), and the equity market risk premium. By incorporating these elements, CAPM provides an estimate of the return that investors expect for taking on the risk of investing in the company's equity, which is crucial for evaluating the company's overall cost of capital and making informed financial decisions. The cost-of-equity was calculated by considering the 10-year German bond as the euro risk-free rate, the average Beta of Sabadell's peers, and the average market risk premium of the countries the bank operates in, weighted by the percentage of revenues of each location.

Figure 28 - RWAs evolution (EURm)



Source: *Author*

Figure 29 – Cost-of-Equity

Risk Free Rate	Germany 10y Bond	2.14%
Beta	Peers Beta 5 Year Monthly	1.37
Equity Risk Premium	Damodaran's Equity Risk Premium (Weighted Average	6.18%
Total		**10.61%**

Source: *Author*

Terminal Growth Rate

The terminal growth rate was calculated taking into consideration the long-term GDP growth according to the IMF for Spain, United Kingdom, and Mexico. It was computed the weighted average based on the percentage of the company's revenues by market (figure 30).

Figure 28 – Terminal Growth Rate

Country	GDP Growth Rate by IMF	% of Revenues
Spain	1.60%	69%
UK	1.50%	24%
Mexico	1.30%	7%
Average	**1.55%**	

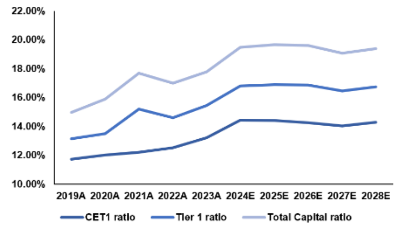
Source: *Author, IMF.*

Regulatory Capital

To estimate the Risk-Weighted Assets (RWAs), the method used was to apply the average ratio of RWAs to total assets from the past five years. This approach takes into consideration the bank's historical risk exposure and asset mix, offering a dependable basis for projections. By assuming that the RWA-to-total-assets ratio remains consistent, the bank's risk profile is expected to align with past patterns (figure 28).

To estimate the CET1, Tier 1, and Total Capital Ratios, the approach was to use the average capital-to-total equity ratio from the past five years. This method reflects the bank's historical capital structure and risk management practices, providing a solid foundation for forecasting future capital adequacy. By maintaining the average capital-to-equity ratio, it is assumed that the bank will continue to manage its capital levels in line with previous trends, ensuring sufficient capital buffers to meet regulatory requirements (figure 31).

Figure 31 - Capital ratios evolution



Source: *Author*

Free Cash-Flow to Equity

The Free Cash-Flow to Equity (FCFE) model was the primary approach used for the valuation of Banco Sabadell. This model is particularly suited for financial institutions, as it focuses on the cash flows available to equity holders after accounting for operational expenses, capital investments, and necessary regulatory capital requirements. It's important to highlight that valuing financial institutions like banks differs significantly from valuing industrial companies due to their unique balance sheets and regulatory requirements. While the fundamental principles of valuation - such as discounting future cash flows - are similar for both financial and non-financial companies, banks' business models, which rely heavily on lending, deposits, and capital adequacy, require a specialized approach.

Figure 32 - Capital adequacy ratio peers

Company Name	Capital Adequacy Ratio (%)
Unicaja Banco SA	19.50%
Bankinter SA	16.50%
Caixabank SA	16.30%
Banco Bilbao Vizcaya Argentaria SA	16.70%
Banco Santander SA	16.70%
Banco Comercial Português	16.80%
Intesa Sanpaolo SpA	19.20%

Source: *Author*

In this case, the free cash flow was determined by the difference between the bank's net income and the capital that needs to be retained to meet regulatory requirements. Specifically, this was calculated by multiplying the annual change in Risk-Weighted Assets (RWA) by the solvency ratio mandated by the Bank of Portugal. This solvency ratio ensures that Banco Sabadell holds sufficient capital to absorb losses and maintain stability under stress conditions. As a result, the FCFE model not only incorporates the bank's earnings but also accounts for its capital needs, providing a comprehensive view of its value from an equity perspective. The valuation was conducted based on the aforementioned assumptions, along with a terminal growth rate of 1.55%, resulting in a calculated share price of €2.09 (figure 33).

Figure 29 - FCFE assumptions and conclusions

FCFE	
Target Capital Ratio	17.39%
Long-term growth	1.55%
Equity Value (EURm)	11,277.72
Number of Shares (m)	5,403.04
Estimated Share Price (EUR)	2.09
Current Share Price (EUR)	1.78
Upside Potential	17.26%

Source: *Author*

Dividend Discount Model

The Dividend Discount Model (DDM) is a widely used financial valuation method that estimates the intrinsic value of a stock by calculating the present value of its expected future dividend payments. This model is particularly useful for companies with a stable dividend payout policy, such as mature firms in sectors like utilities or banking, where dividends are a primary form of return for investors. The DDM operates on the principle that the true value of a stock is determined by the cash flows it generates for its shareholders, specifically through dividends, which represent a tangible return on investment.

Figure 34 - DDM assumptions and conclusions

DDM	
Payout Ratio	40.00%
Long-term growth	1.55%
Equity Value (EURm)	8,374.34
Number of Shares (m)	5,403.04
Estimated Share Price (EUR)	1.55
Current Share Price (EUR)	1.78
Downside Potential	-12.93%

Source: *Author*

By discounting future dividends to the present using an appropriate discount rate - typically the required rate of return for equity investors - the model provides insight into whether a stock is overvalued or undervalued based on anticipated dividend streams. This is especially useful for long-term investors who prioritize dividend income as a key component of their returns. The DDM was calculated using an assumed constant payout ratio of 40%, which was derived from a weighted average of the previous year's payout ratio and the projected payout ratio provided by the bank's management team, and a terminal dividend growth rate of 1.55%. The estimated share price was €1.55 (figure 34).

Residual Income

The Residual Income (RI) Model, also known as the Abnormal Earnings Model or Economic Value Added (EVA), is a valuation method closely related to the Dividend Discount Model (DDM) and shares similarities with the Discounted Cash Flow (DCF) approach. However, unlike DCF, which focuses on future free cash flows, the RI Model is rooted in accounting measures and offers a more direct link to financial statement metrics such as equity (Net Asset Value) and earnings. This model calculates the value of a company by combining its invested capital (equity) with the present value of its anticipated residual income, which represents the income generated above the required return on equity. In the context of Banco Sabadell, the total value of the bank is determined as the sum of its estimated equity for 2024, the present value of expected residual income (representing profitability above the required return), and the terminal value, which reflects the bank's value beyond the forecast period. Assuming a terminal growth rate of 1.55%, the company reaches a share price of €2.02 (figure 35).

Figure 30 - RI assumptions and conclusions

Residual Income	
Book Value of Equity BoY 2025 (EURm)	13,879.21
Long-term growth	1.55%
Acc. NPV Equity Excess Return	- 3,648.65
Equity Value (EURm)	10,938.03
Number of Shares (m)	5,403.04
Estimated Share Price (EUR)	2.02
Current Share Price (EUR)	1.78
Upside Potential	13.73%

Source: *Author*

Market Approach

Multiples valuation, also known as relative valuation, is a financial analysis approach that assesses the value of an asset, often a company or its stock, by comparing it to similar assets or industry benchmarks. It involves calculating ratios such as Price-to-Earnings (P/E), Price-to-Sales (P/S), or Price-to-Book (P/B) ratios based on market prices or financial metrics. By comparing these multiples to those of comparable companies or the broader market, investors and analysts can gauge whether the asset is overvalued or undervalued relative to its peers. Multiples valuation provides a quick and straightforward way to assess the relative attractiveness of an investment, but it should be used in conjunction with other valuation methods for a more comprehensive analysis. Regarding the banking industry, the main ratio is the Price-to-book ratio. The peers were selected by reviewing the peer recommendations provided by Eikon Refinitiv, with a focus on their business operations and geographic location, resulting in the selection of six comparable banks. The regression analysis used to estimate the Price to Book Value (P/BV), with ROE and the five-year Beta as independent variables, produced the highest R-

Figure 31 - Multiples valuations P/BV

Company Name	Price to Book	ROE	Beta
Bankinter SA	1.23	15.85	1.10
CaixaBank SA	1.09	14.58	1.06
Banco Bilbao Vizcaya Argentari	1.03	16.85	1.72
Banco Santander SA	0.72	11.51	1.56
Banco Comercial Portugues SA	0.91	23.35	1.64
Intesa Sanpaolo SpA	1.04	12.74	1.36
P/BV	0.81		
Estimated Share Price (m)	2.072		

Source: *Author*

squared value of 0.7671. Based on this regression model, the estimated share price for the bank was calculated to be €2.07 (figure 36).

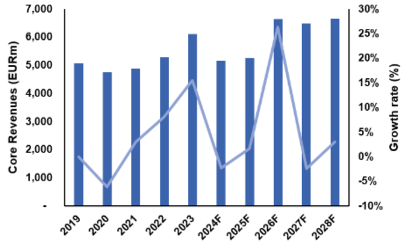
10. Financial Analysis

Income Statement

Core Revenues

Core revenues showed significant growth in 2023, rising to €6.109m, a 16% increase from the previous year. This marks a strong recovery after a modest growth of 8% in 2022. Looking ahead, revenues are projected to decline by 2% in 2024 before rebounding by 26% in 2026, signaling an overall positive growth trajectory in the coming years (figure 37).

Figure 32 - Core revenues evolution and yearly growth rate



Source: *Author*

Attributable Net Profit

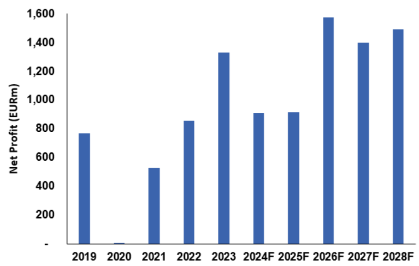
Attributable net profit grew impressively in 2023, reaching €1.332m, representing a 55% increase from 2022. This follows strong growth in 2022 (62%), showing a consistent trend of profitability improvements after the significant challenges in 2020. Moving forward, net profit is forecasted to stabilize, with €909m projected for 2024, increasing to €1.575m by 2026 (figure 38).

Balance Sheet

Loans and Advances to Customers

The bank's loan portfolio decreased slightly in 2023, down 4% to €152.260m after reaching €158.730m in 2022. This decline is expected to continue in 2024, with a 9% reduction, before beginning a steady recovery from 2025 onward, reaching €178.123m by 2028.

Figure 33 - Net profit evolution



Source: *Author*

Customer Deposits

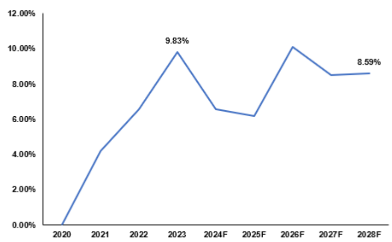
Customer deposits decreased slightly by 2% in 2023, following consistent growth in prior years. Despite this dip to €160.331m, deposits are projected to recover in the coming years, with a forecasted increase to €208.367m by 2028, showing robust future growth.

Profitability

ROAA (Return on Average Assets)

ROAA improved to 0.55% in 2023, up from 0.34% in 2022, indicating stronger asset profitability. Although a slight decrease is expected in 2024 to 0.37%, the metric is forecasted to recover to 0.49% by 2028, suggesting a stable and improving return on assets.

Figure 34 - ROAE evolution



Source: *Author*

ROAE (Return on Average Equity)

The bank’s ROAE increased to 10% in 2023, compared to 7% in 2022, demonstrating enhanced equity performance. Projections show a slight drop in 2024 (7%), followed by stabilization around 9% from 2026 to 2028, reflecting sustained profitability (figure 39).

RORWA (Return on Risk-Weighted Assets)

RORWA also saw an increase in 2023, rising to 1.76%, up from 1.10% in 2022. Forecasts suggest RORWA will peak at 1.86% in 2026 before stabilizing around 1.59% by 2028, indicating a consistent return on risk/weighted assets.

Efficiency Ratio

The efficiency ratio improved significantly, dropping to 42.59% in 2023 from 45.12% in 2022, reflecting better cost management. However, future forecasts show a slight increase to 54.31% in 2024 before stabilizing below 50%, indicating continued forecasted efforts to maintain operational efficiency (figure 40).

Figure 35 - Efficiency ratio evolution

Source: *Author*

Credit Quality

Credit Cost of Risk

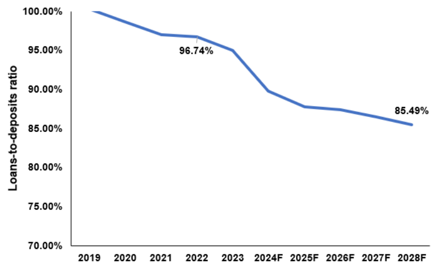
The credit cost of risk remained stable at 53bps in 2023, showing a slight increase from the 52bps presented in 2022. This metric is expected to stabilize at 60bps from 2024 to 2028.

Liquidity

Loans-to-Deposit Ratio

The loans-to-deposit ratio stood at 94.97% in 2023, slightly lower than 96.74% in 2022, indicating a healthy liquidity position. The ratio is forecasted to decrease further, dropping to 85.49% by 2028, reflecting a more conservative approach to lending relative to deposit levels, improving the bank's liquidity profile (figure 41).

Figure 36 - Loans to deposits ratio



Source: *Author*

Regulatory Ratios

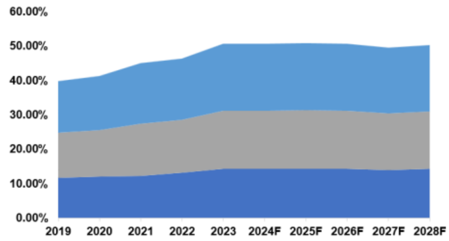
CET1 Ratio

The CET1 ratio improved to 14.38% in 2023, up from 13.21% in 2022, reflecting a stronger capital position. It is expected to remain stable at 14.38% through 2024, ensuring the bank's solid compliance with regulatory requirements (figure 42).

Tier 1 Ratio

Similarly, the Tier 1 ratio increased to 16.74% in 2023 from 15.44% in 2022, demonstrating strengthened capital reserves. Forecasts indicate that this ratio will stay consistent around 16.74% in the coming years, maintaining strong capital adequacy (figure 42).

Figure 37 - Regulatory ratios evolution



Source: *Author*

Total Capital Ratio

The total capital ratio grew to 19.43% in 2023, up from 17.84% in 2022, indicating the bank's solid capital position. The ratio is expected to remain around 19.43% in the years to come, further reinforcing Banco Sabadell's regulatory compliance (figure 42).

Payout Ratio

Banco Sabadell's payout ratio was 45% in 2023, reflecting a balanced approach to shareholder returns. This ratio is expected to remain consistent through 2028, signaling the bank's commitment to stable dividend policies while maintaining capital for future growth.

11. Investment Risks

Risk identification and characterization

Interest Rate Risk (MR1)

Banks are highly exposed to interest rate changes. Interest rate risk is the risk that banks and other financial institutions face due to changes in interest rates, which can impact on their profitability, financial performance, and the value of their assets and liabilities (figure 45).

Figure 38 - Bank's risk control processes

Source: *2023 Annual Report*

Credit Risk (MR2)

Credit risk, also known as default risk, is the risk that banks face when borrowers or counterparties fail to meet their financial obligations as agreed upon. It is one of the most significant risks in banking (figure 45).

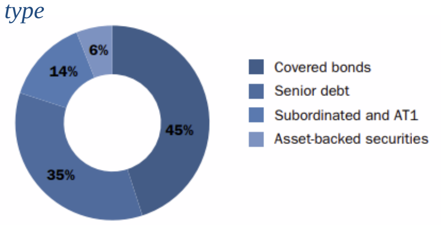
Currency Rate Risk (MR3)

Currency rate risk, often referred to as exchange rate risk or foreign exchange risk, is the hazard confronted by banks and other financial institutions when they participate in transactions or possess assets and liabilities denominated in foreign currencies. This risk emerges because of the possibility of variations in exchange rates, which have the potential to affect the worth of these assets and liabilities (figure 45).

Liquidity risk (LR)

Liquidity risk is one of the key risks that banks face, and it refers to the risk that a bank may not have enough liquid assets to meet its short-term financial obligations as they come due. Insufficient liquidity has already led to bankruptcies in the banking sector (figure 45).

Figure 39 - 2023YE institutional issues by type



Source: *2023 Annual Report*

Legal and Regulatory Risk (LRR)

Banking activities are highly regulated, and banks are constantly exposed to fines and other regulatory measures (figure 45).

Reputational Risk (RR)

Reputational risk refers to the potential danger that a bank encounters when its public perception suffers due to actions, choices, or incidents that result in an erosion of trust and confidence among its customers, investors, regulators, and the public. This type of risk can carry substantial implications for a bank's operations, given that its reputation is a prized asset within the financial sector (figure 45).

Systemic risk (SR)

Systemic risk refers to the potential danger confronting banks and the wider financial system when the collapse or turmoil of one or more financial institutions can set off a series of events that jeopardize the overall stability of the entire financial system. This is a substantial concern due to its potential for extensive economic and societal ramifications (figure 45).

Operational risk (OR)

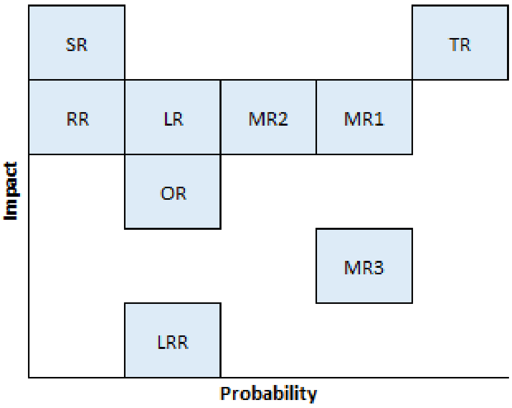
Operational risk refers to the potential danger encountered by banks and other financial institutions arising from internal process breakdowns, system failures, human errors, and external events. It represents a comprehensive risk category encompassing various potential challenges that can impact a bank's operational functions (figure 45).

Takeover risk (TR)

Price volatility during a takeover process can lead to sharp fluctuations, making it difficult to time the market or predict the final market value of the company (figure 45).

It was performed a categorization of the main risks of the bank by Impact and probability, as stated below:

Figure 40 - Risk Matrix



Source: *Author*

Sensitivity Analysis

To assess how sensitive the estimated share price is to changes in the cost of equity and long-term growth rate, a sensitivity analysis was conducted. This type of analysis is crucial to understanding how variations in key assumptions can impact the valuation outcome. By examining different scenarios where the cost of equity and growth rate fluctuate, we gain insight into the robustness of the share price estimate and the potential risks or opportunities that may arise under varying market conditions. The results of this analysis are outlined in figure 46, illustrating the extent to which these factors influence the bank's estimated share price.

Figure 41 - Sensitivity analysis

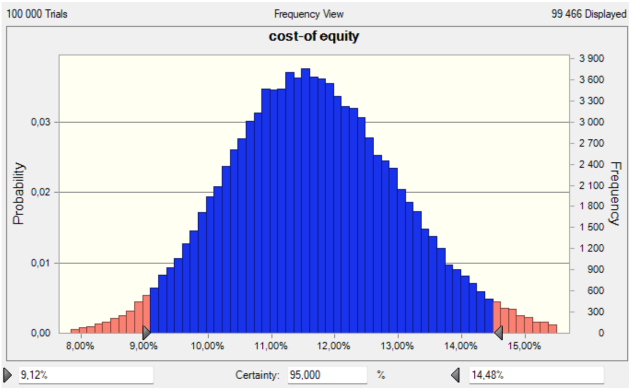
		Long-term GDP growth				
	ı 2.09	0.6%	1.1%	1.6%	2.1%	2.6%
Cost-of-equity	9.6%	2.12	2.21	2.32	2.43	2.57
	10.1%	2.02	2.10	2.19	2.30	2.42
	10.6%	1.93	2.01	2.09	2.18	2.28
	11.1%	1.85	1.92	1.99	2.07	2.16
	11.6%	1.78	1.84	1.90	1.98	2.06

Source: *Author*

Monte Carlo

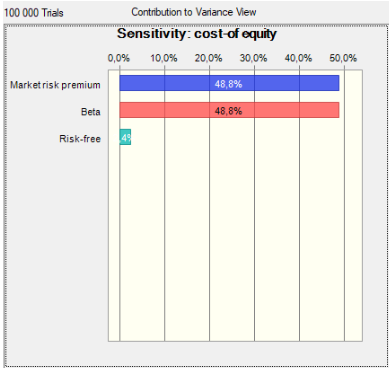
Additionally, two Monte Carlo simulations were conducted to further analyze key sensitivities in the valuation model. The first simulation aimed to evaluate how fluctuations in the market risk premium, Beta, and the risk-free rate affect the cost of equity, providing a deeper understanding of the potential volatility in the bank's required return. The second simulation focused on assessing the sensitivity of the estimated share price to variations in the target capital ratio, cost of equity, and long-term growth rate. These simulations allow for a more comprehensive view of how uncertainties in critical financial variables can influence the overall valuation, as detailed in the analysis on figure 48 to 50.

Figure 43 - Cost of equity Monte Carlo simulations



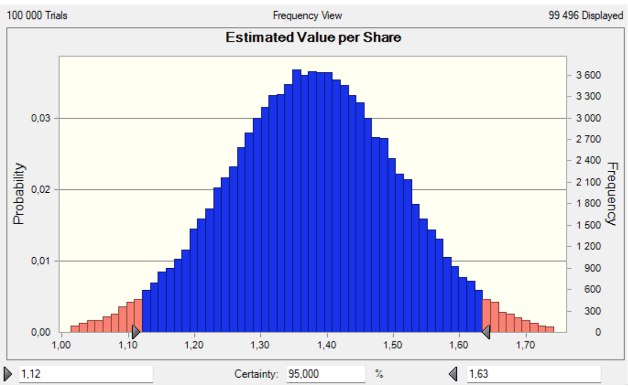
Source: *Crystal Ball, Author*

Figure 42 - Cost of equity Monte Carlo simulations



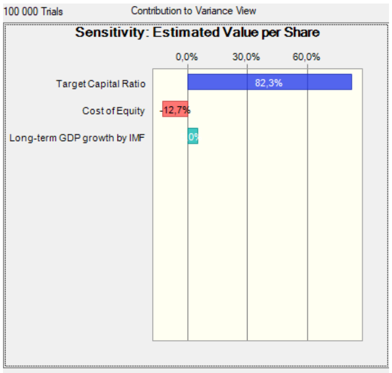
Source: *Crystal Ball, Author*

Figure 45 - FCFE Monte Carlo simulations



Source: *Crystal Ball, Author*

Figure 44 - FCFE Monte Carlo simulations



Source: *Crystal Ball, Author*

Appendices

Appendix 1: Balance Sheet

EURm	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
Balance Sheet										
Cash, cash balances at central banks and other demand deposits	15,169.20	35,184.90	49,213.20	41,260.40	29,985.85	49,590.57	56,200.72	59,623.27	60,793.88	63,938.61
Financial assets held for trading and fair value with changes in PL	2,611.92	2,793.03	2,051.19	4,094.68	2,859.67	2,964.45	3,222.04	3,477.60	3,937.36	3,860.90
Financial assets in fair value OCI	7,802.03	6,676.80	6,869.64	5,802.26	6,269.30	6,920.37	7,117.59	7,555.75	7,957.10	8,430.62
Financial assets at amortised cost	181,422.65	174,488.26	178,869.32	185,045.45	180,913.79	172,089.09	182,050.65	195,817.13	207,926.09	213,301.12
Loans and advances to customers	147,815.50	149,183.48	157,366.29	158,729.68	152,260.40	145,184.60	153,303.23	164,769.52	173,792.85	178,122.79
Loans and advances of central banks and credit institutions	14,388.42	7,213.59	6,312.82	4,862.95	7,152.47	7,216.83	7,792.89	8,412.75	8,961.46	9,295.39
Debt securities	19,218.72	18,091.19	15,190.21	21,452.82	21,500.93	19,687.66	20,954.53	22,634.86	25,171.77	25,882.94
Investments in subsidaries, joint ventures and associates	733.93	779.86	638.78	515.25	462.76	466.92	504.19	544.29	579.80	601.40
Tangible assets	3,462.40	3,200.38	2,776.76	2,581.79	2,296.70	2,317.37	2,502.35	2,701.39	2,877.58	2,984.81
Intangible assets	2,564.98	2,596.08	2,581.42	2,484.16	2,483.07	2,505.42	2,705.41	2,920.60	3,111.09	3,227.02
Other assets	9,986.53	10,043.98	8,946.29	9,595.55	9,901.81	9,990.92	10,788.41	11,646.54	12,406.16	12,868.45
Total assets	**223,753.64**	**235,763.29**	**251,946.59**	**251,379.53**	**235,172.95**	**246,845.11**	**265,091.35**	**284,286.58**	**299,589.07**	**309,212.92**
Financial liabilities held for trading and fair value with changes in PL	2,714.37	2,653.85	1,379.90	3,598.48	2,867.46	2,734.20	2,887.10	3,103.04	3,272.97	3,354.52
Financial liabilities at amortised cost	205,636.02	217,390.77	235,179.22	232,529.93	216,071.77	227,130.68	244,490.54	262,388.93	276,571.11	285,139.39
Central banks	20,064.64	31,881.35	38,250.03	27,843.69	9,776.36	24,162.62	26,454.62	27,077.52	25,823.90	25,511.63
Credit institutions	11,471.19	10,083.38	8,817.11	11,373.39	13,840.18	10,562.91	11,004.89	11,966.22	13,198.34	13,680.02
Customer deposits	147,362.35	151,269.71	162,239.45	164,076.45	160,330.65	161,773.46	174,686.44	188,581.39	200,881.28	208,366.61
Debt securities issued	22,569.90	20,413.40	21,050.96	22,577.55	25,791.29	24,592.72	25,967.93	27,910.20	29,438.65	30,172.10
Other financial liabilities	4,167.94	3,742.93	4,821.67	6,658.86	6,333.29	6,038.97	6,376.66	6,853.60	7,228.93	7,409.03
Provisions	430.43	983.51	886.14	644.51	536.09	659.63	746.54	745.60	747.99	775.29
Other liabilities	1,998.42	2,243.53	1,505.05	1,382.18	1,818.43	1,733.93	1,830.89	1,967.83	2,075.59	2,127.30
Total Liabilities	**210,779.24**	**223,271.65**	**238,950.31**	**238,155.11**	**221,293.75**	**232,258.44**	**249,955.07**	**268,205.39**	**282,667.66**	**291,396.50**
Shareholders' equity	13,171.81	12,943.59	13,356.91	13,840.72	14,343.95	15,051.42	15,601.02	16,545.93	17,386.15	18,281.15
Accumulated other comprehensive income	-266.75	-523.59	-385.60	-650.65	-498.95	-498.95	-498.95	-498.95	-498.95	-498.95
Minority interest	69.35	71.63	24.98	34.34	34.21	34.21	34.21	34.21	34.21	34.21
Net equity	**12,974.40**	**12,491.64**	**12,996.28**	**13,224.42**	**13,879.21**	**14,586.68**	**15,136.28**	**16,081.19**	**16,921.41**	**17,816.41**
Total liabilities and equity	**223,753.64**	**235,763.29**	**251,946.59**	**251,379.53**	**235,172.95**	**246,845.11**	**265,091.35**	**284,286.58**	**299,589.07**	**309,212.92**

Source: Author

Appendix 2: Income Statement

EURm	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
P/L										
Net interest income	3,622.40	3,399.12	3,425.46	3,798.73	4,723.22	3,816.94	3,840.31	5,113.19	4,868.51	5,029.77
Net fees and commissions	1,438.74	1,350.33	1,467.54	1,490.21	1,386.16	1,353.20	1,416.21	1,528.28	1,610.22	1,645.96
Core revenues	**5,061.14**	**4,749.44**	**4,893.00**	**5,288.93**	**6,109.38**	**5,170.13**	**5,256.52**	**6,641.48**	**6,478.74**	**6,675.73**
Net trading income and exchange differences	126.26	799.64	344.22	103.64	68.38	313.99	372.06	284.98	270.66	309.26
Income from equity method and dividends	60.94	36.94	101.54	124.78	131.22	126.69	134.07	144.24	158.79	163.54
Other operating income/expense	-316.58	-283.87	-312.63	-337.31	-447.04	-334.16	-341.93	-439.04	-431.14	-447.95
Gross operating income	**4,931.75**	**5,302.16**	**5,026.13**	**5,180.04**	**5,861.93**	**5,276.66**	**5,420.72**	**6,631.66**	**6,477.05**	**6,700.58**
Operating expenses	-2,743.46	-2,938.13	-2,780.89	-2,337.41	-2,496.36	-2,866.00	-2,921.96	-3,194.02	-3,207.15	-3,263.67
Personnel expenses	-1,648.84	-1,884.58	-1,776.80	-1,391.61	-1,494.64	-1,494.64	-1,494.64	-1,494.64	-1,494.64	-1,494.64
Other general expenses	-1,094.62	-1,053.56	-1,004.09	-945.81	-1,001.72	-847.72	-861.88	-1,088.96	-1,062.28	-1,094.58
Amortisation & depreciation	-469.66	-523.25	-526.51	-545.09	-518.97	-523.64	-565.43	-610.41	-650.22	-674.45
Pre-provisions income	**1,718.64**	**1,840.77**	**1,718.73**	**2,297.53**	**2,846.61**	**2,410.66**	**2,498.76**	**3,437.64**	**3,269.90**	**3,436.90**
Provisions for NPLs	-671.81	-1,832.19	-950.46	-825.32	-812.99	-895.68	-950.09	-1,025.04	-1,085.69	-1,118.38
Provisions for other financial assets	-21.81	-188.23	-96.61	-111.08	-17.69	-92.82	-113.26	-100.23	-102.72	-99.89
Other impairments	-244.05	-254.47	-177.94	-95.94	-79.64	-163.11	-163.26	-156.95	-155.44	-168.59
Gains on sale of assets and other results	170.11	313.29	126.28	-22.55	-45.51	-45.92	-49.58	-53.52	-57.02	-59.14
Profit before tax	**951.08**	**-120.83**	**619.99**	**1,242.65**	**1,890.78**	**1,213.15**	**1,222.57**	**2,101.89**	**1,869.04**	**1,990.89**
Income tax	-174.20	123.84	-81.28	-373.26	-557.18	-303.29	-305.64	-525.47	-467.26	-497.72
Minority interest	9.06	1.01	8.47	10.75	1.42	-0.91	-0.92	-1.58	-1.41	-1.50
Attributable net profit	**767.82**	**2.00**	**530.24**	**858.64**	**1,332.18**	**908.95**	**916.01**	**1,574.84**	**1,400.37**	**1,491.67**

Source: Author

Appendix 3: Key Financial Ratios

Financial Analysis (€m)		2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
P&L											
Core Revenues		5,061	4,749	4,893	5,289	6,109	5,170	5,257	6,641	6,479	6,676
(% gowth)	-		-6%	3%	8%	16%	-2%	2%	26%	-2%	3%
Attributable net profit		768	2	530	859	1,332	909	916	1,575	1,400	1,492
(% gowth)	-		-100%	26399%	62%	55%	6%	1%	72%	-11%	7%
Balance Sheet											
Loans and advances to customers		147,816	149,183	157,366	158,730	152,260	145,185	153,303	164,770	173,793	178,123
(% gowth)	-		1%	5%	1%	-4%	-9%	6%	7%	5%	2%
Customer deposits		147,362	151,270	162,239	164,076	160,331	161,773	174,686	188,581	200,881	208,367
(% gowth)	-		3%	7%	1%	-2%	-1%	8%	8%	7%	4%
Profitability											
ROAA	-		0.00%	0.22%	0.34%	0.55%	0.37%	0.36%	0.57%	0.48%	0.49%
ROAE	-		0%	4%	7%	10%	7%	6%	10%	8%	9%
RORWA	-		0.00%	0.66%	1.10%	1.76%	1.20%	1.16%	1.86%	1.55%	1.59%
Efficiency Ratio	-		55.41%	55.33%	45.12%	42.59%	54.31%	53.90%	48.16%	49.52%	48.71%
Credit Quality											
Credit Cost of Risk (bps)		0.45%	1.23%	0.60%	0.52%	0.53%	0.60%	0.60%	0.60%	0.60%	0.60%
Liquidity											
Loans-to-deposit Ratio		100.31%	98.62%	97.00%	96.74%	94.97%	89.75%	87.76%	87.37%	86.52%	85.49%
Regulatory Ratios											
CET1 Ratio		11.71%	12.02%	12.22%	13.21%	14.42%	14.42%	14.41%	14.27%	14.05%	14.28%
Tier1 Ratio		13.13%	13.49%	15.19%	15.44%	16.79%	16.79%	16.91%	16.89%	16.45%	16.73%
Total Capital Ratio		14.99%	15.90%	17.70%	17.78%	19.49%	19.49%	19.68%	19.60%	19.09%	19.40%
Payout Ratio		7.10%	5624.14%	0.00%	20.55%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%

Source: Author

Appendix 4: Common-Size Balance Sheet

EURm	FY19	FY20	FY21	FY22	FY23	FY24F	FY25F	FY26F	FY27F	FY28F
Balance Sheet										
Cash, cash balances at central banks and other demand deposits	7%	15%	20%	16%	13%	20%	21%	21%	20%	21%
Financial assets held for trading and fair value with changes in PL	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%
Financial assets in fair value OCI	3%	3%	3%	2%	3%	3%	3%	3%	3%	3%
Financial assets at amortised cost	81%	74%	71%	74%	77%	70%	69%	69%	69%	69%
Loans and advances to customers	66%	63%	62%	63%	65%	59%	58%	58%	58%	58%
Loans and advances of central banks and credit institutions	6%	3%	3%	2%	3%	3%	3%	3%	3%	3%
Debt securities	9%	8%	6%	9%	9%	8%	8%	8%	8%	8%
Investments in subsidaries, joint ventures and associates	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tangible assets	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Intangible assets	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Other assets	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Total assets	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Financial liabilities held for trading and fair value with changes in PL	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Financial liabilities at amortised cost	92%	92%	93%	93%	92%	92%	92%	92%	92%	92%
Central banks	9%	14%	15%	11%	4%	10%	10%	10%	9%	8%
Credit institutions	5%	4%	3%	5%	6%	4%	4%	4%	4%	4%
Customer deposits	66%	64%	64%	65%	68%	66%	66%	66%	67%	67%
Debt securities issued	10%	9%	8%	9%	11%	10%	10%	10%	10%	10%
Other financial liabilities	2%	2%	2%	3%	3%	2%	2%	2%	2%	2%
Provisions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other liabilities	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Total Liabilities	94%	95%	95%	95%	94%	94%	94%	94%	94%	94%
Shareholders' equity	6%	5%	5%	6%	6%	6%	6%	6%	6%	6%
Accumulated other comprehensive income	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Minority interest	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Net equity	6%	5%	5%	5%	6%	6%	6%	6%	6%	6%
Total liabilities and equity	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Author

Appendix 5: Cost of Equity

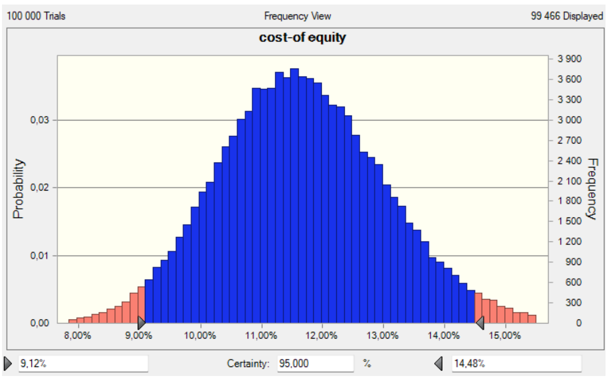
Cost-Of-Equity	**10.61%**
Risk Free Rate	
Germany 10y Bond	2.14%
Market and Country Risk Premium	
Damodaran's Market Risk Premium Spain	6.46%
Damodaran's Market Risk Premium UK	5.13%
Damodaran's Market Risk Premium Mexico	6.87%
Weighted Average	6.18%
Beta	
Peers 5y Monthly	1.37

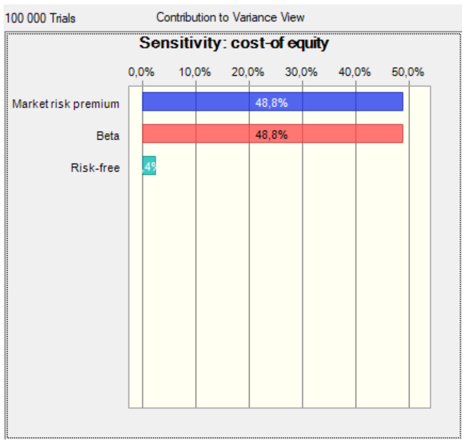
Beta Peers

Identifier	Company Name	Beta 5 Year Monthly
BKT.MC	Bankinter SA	1.10
CABK.MC	CaixaBank SA	1.06
BBVA.MC	Banco Bilbao Vizcaya Argentaria SA	1.72
UNI.MC	Unicaja Banco SA	1.15
SAN.MC	Banco Santander SA	1.56
BCP.LS	Banco Comercial Portugues SA	1.64
ISP.MI	Intesa Sanpaolo SpA	1.36

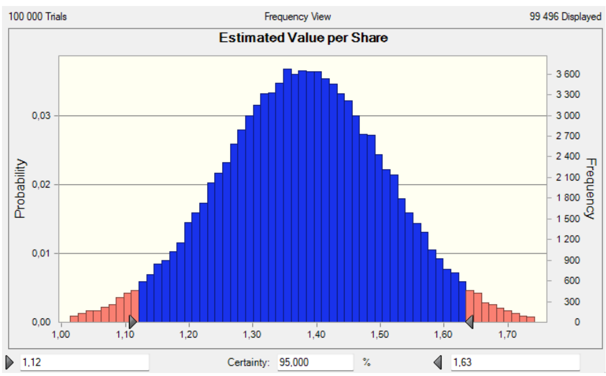
Source: Author

Appendix 6: Sensitivity Analysis

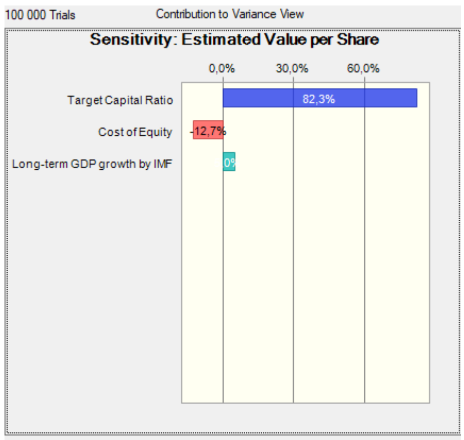


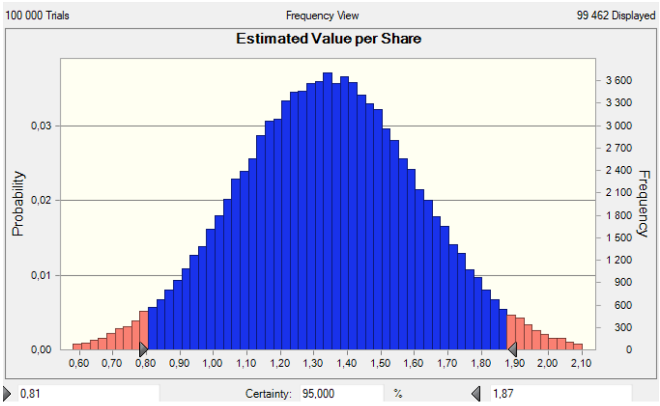


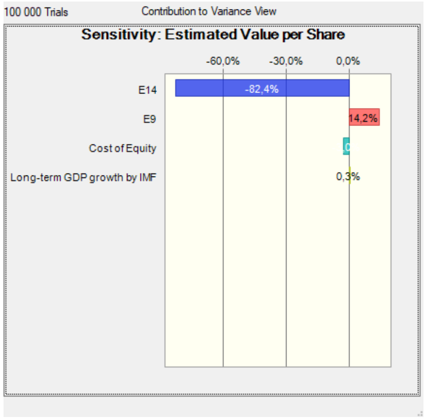
Source: Crystall Ball, Author



Source: Crystall Ball, Author







Source: Crystall Ball, Author

Market Risk Prem	Beta				
2.09	1.17	1.27	1.37	1.47	1.57
5.98%	2.44	2.28	2.14	2.02	1.92
6.08%	2.41	2.25	2.12	2.00	1.89
6.18%	2.38	2.22	2.09	1.97	1.87
6.28%	2.35	2.19	2.06	1.94	1.84
6.38%	2.32	2.16	2.03	1.92	1.82

Source: Author

Cost-of-equity	Long-term GDP growth				
2.09	0.6%	1.1%	1.6%	2.1%	2.6%
9.6%	2.12	2.21	2.32	2.43	2.57
10.1%	2.02	2.10	2.19	2.30	2.42
10.6%	1.93	2.01	2.09	2.18	2.28
11.1%	1.85	1.92	1.99	2.07	2.16
11.6%	1.78	1.84	1.90	1.98	2.06

Source: Author

Appendix 7: Multiples Valuation

Company Name	Price to Book	ROE	Beta
Bankinter SA	1.23	15.85	1.10
CaixaBank SA	1.09	14.58	1.06
Banco Bilbao Vizcaya Argentari	1.03	16.85	1.72
Banco Santander SA	0.72	11.51	1.56
Banco Comercial Portugues SA	0.91	23.35	1.64
Intesa Sanpaolo SpA	1.04	12.74	1.36
P/BV	0.81		
Estimated Share Price (m)	2.072		

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.767121468
R Square	0.588475347
Adjusted R Square	0.382713021
Standard Error	0.153777698
Observations	7

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2	0.135263033	0.067631516	2.859976157	0.16935254
Residual	4	0.094590322	0.02364758		
Total	6	0.229853355			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	1.313161518	0.365913003	3.588726026	0.022987927	0.29722415	2.329098885	0.297224151	2.329098885
X Variable 1	0.025302102	0.01388741	1.82194539	0.142554587	-0.0132555	0.063859733	-0.013255529	0.063859733
X Variable 2	-0.517607873	0.257673387	-2.008775059	0.114959461	-1.2330239	0.197808141	-1.233023886	0.197808141

Source: Author

Appendix 8: Residual Income Model

				0	1	2	3	
EURm	**2022A**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**Perpetuity**
Book Value of Equity BoY	12,996.28	13,224.42	13,879.21	14,586.68	15,136.28	16,081.19	16,921.41	
Cost-of-Equity	10.61%	10.61%	10.61%	10.61%	10.61%	10.61%	10.61%	10.61%
Equity Cost	1,378.71	1,402.92	1,472.38	1,547.43	1,605.74	1,705.98	1,795.11	
Net Income	858.64	1,332.18	908.95	916.01	1,574.84	1,400.37	1,491.67	
Excess Equity Return	- 520.07	- 70.73	- 563.43	- 631.42	- 30.90	- 305.60	- 303.44	- 3,403.68
Discount factor	-	-		1.00	0.90	0.82	0.74	0.74
Discounted Residual Income	-	-		- 631.42	- 27.93	- 249.79	- 224.24	- 2,515.26
Long-term GDP growth by IMF	1.55%							
Accumulated Present Value of Equity Excess Return	- 3,648.65							
Equity Value	10,938.03							
# Shares	5,403.04							
Estimated Value per Share	2.02							
Current Share Price	1.78							
Upside/Downside Potential	14%							

Source: Author

Appendix 9: Flow to Equity Model

Identifier (RIC)	Company Name	Country	Capital Adequacy Ratio (%)
UNI.MC	Unicaja Banco SA	Spain	19.50%
BKT.MC	Bankinter SA	Spain	16.50%
CABK.MC	Caixabank SA	Spain	16.30%
BBVA.MC	Banco Bilbao Vizcaya Argenta	Spain	16.70%
SAN.MC	Banco Santander SA	Spain	16.70%
BCP.LS	Banco Comercial Português	Portugal	16.80%
ISP.MI	Intesa Sanpaolo SpA	Italy	19.20%
Average			**17.39%**

Source: Author

			0	1	2	3
EURm	**2023**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**
RWAs	78,343.20	75,885.12	79,129.73	84,805.56	90,498.21	93,685.19
Target Capital Ratio	17.39%	17.39%	17.39%	17.39%	17.39%	17.39%
Regulatory Capital	13,620.53	13,193.17	13,757.27	14,744.05	15,733.76	16,287.84
Reinvestment in Regulatory Capital			- 564.10	- 986.78	- 989.71	- 554.08
Total Capital	13,928.25	14,786.89	15,569.86	16,625.07	17,273.66	18,174.68
Available Capital FY23			1,593.72			
Net Income	1,332.18	908.95	916.01	1,574.84	1,400.37	1,491.67
Free Cash Flow to Equity			1,945.63	588.06	410.67	937.59
Discount Factor			1.00	0.90	0.82	0.74
Discounted FCFE			1,945.63	531.66	335.67	692.87
Terminal Value	7,771.90					
Long-term GDP growth by IMF	1.6%					
Cost of Equity	11%					
Equity Value	11,277.72					
# Shares	5,403.04					
Estimated Value per Share	2.09					
Current Share Price	1.78					
Upside Potential	17.26%					

Source: Author

Appendix 10: Dividend Discount Model

			0	1	2	3	3
EURm	**2023**	**2024F**	**2025F**	**2026F**	**2027F**	**2028F**	**Perpetuity**
Available Capital FY23			1,593.72				
Net Income			916.01	1,574.84	1,400.37	1,491.67	
Payout Ratio			40.00%	40.00%	40.00%	40.00%	
Dividends			366.40	629.94	560.15	596.67	
Discount Factor			1.00	0.90	0.82	0.74	0.74
Discounted Dividend			1,960.13	569.52	457.85	440.93	4,945.91
Long-term GDP growth by IMF	1.55%						
Cost of Equity	10.61%						
Equity Value	8,374.34						
Outstanding Shares	5,403.04						
Estimated Value per Share	1.55						
Current Share Price	1.78						
Upside/Downside Potential	-12.93%						

Source: Author

Appendix 11: Macroeconomic Data

Spain	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
Nominal GDP Spain ($b)	1,394.50	1,277.10	1,446.60	1,418.90	1,581.20	1,632.00	1,751.00	1,894.00	1,998.00	2,084.00
EUR/USD (average closing)	1.12	1.14	1.18	1.05	1.08	1.08	1.08	1.08	1.08	1.08
Consumer Price Index (period end)	104.68	104.19	111.17	117.38	121.35	124.90	127.60	130.10	132.60	135.60
Domestic Credit (growth %)	-1.71	9.35	0.94	1.20	-3.49	1.50	3.30	3.50	3.20	2.50
M2 Spain (growth %)	4.73	10.72	6.04	3.56	0.03	3.80	7.90	7.50	7.10	6.30
Bank Loans Spain ($m)	2,780,326.90	3,008,029.50	3,195,349.20	2,599,055.10	2,710,250.00	2,873,750.00	3,082,311.00	3,263,882.00	3,428,085.00	3,579,542.00
Bank Deposits Spain ($m)	2,383,326.30	2,519,830.10	2,637,886.50	2,260,797.10	2,372,168.00	2,538,870.00	2,748,571.00	2,937,658.00	3,114,572.00	3,282,847.00
Lending interest rate (%)	1.85	1.67	1.62	1.94	4.36	4.70	2.70	1.90	1.80	1.80
Deposit Interest rate (%)	0.04	0.02	0.01	0.15	1.96	2.20	1.20	0.30	0.20	0.20

Source: The Economist Inteligence Unit

UK	2019	2020	2021	2022	2023E	2024F	2025F	2026F	2027F	2028F
Nominal GDP ($b)	2,853.50	2,701.30	3,143.10	3,100.80	3,342.50	3,421.00	3,465.00	3,748.00	3,925.00	4,101.00
Consumer Price Index (period end)	108.52	109.40	114.68	125.28	130.55	133.30	136.00	138.70	141.40	144.30
Domestic Credit (growth %)	4.87	3.07	1.67	1.05	-1.21	1.20	1.00	2.10	3.40	3.20
M2 (growth %)	3.83	12.57	6.36	1.55	-1.19	1.70	0.50	2.50	3.80	3.50
Bank Loans ($m)	7,363,185.90	8,857,840.00	8,221,957.50	7,881,639.30	7,528,977.00	7,790,355.00	8,034,282.00	8,560,507.00	8,872,078.00	9,219,940.00
Bank Deposits ($m)	3,977,804.90	4,528,458.60	4,624,482.80	4,275,608.10	4,302,242.00	4,149,392.00	4,330,508.00	4,543,772.00	4,704,725.00	4,875,013.00
Lending interest rate (%)	4.31	3.79	3.61	4.71	7.53	7.90	7.30	6.20	5.20	5.20
Deposit Interest rate (%)	0.88	0.36	0.16	2.07	5.03	5.20	4.90	4.20	3.30	3.30

Source: The Economist Inteligence Unit

Source: The Economist Intelligence Unit

Appendix 12: Forecasting Assumptions

Assumptions	Observation
Macro and Industry	
Nominal GDP Spain	Data and forecast form The Economist Inteligence Unit
EUR/USD	Data from Yahoo Finance till 2023, forecasted as constant
Inflation (growth %, end of the period)	Data and forecast form The Economist Inteligence Unit
Domestic Credit (growth %)	Data and forecast form The Economist Inteligence Unit
M2 Spain (growth %)	Data and forecast form The Economist Inteligence Unit
Bank Loans Spain	Data and forecast form The Economist Inteligence Unit
Bank Deposits Spain	Data and forecast form The Economist Inteligence Unit
Lending interest rate (%)	Data and forecast form The Economist Inteligence Unit
Assets	
Cash and cash balances at central banks	The banks is expected to mantain the same percentage of the customers resources in cash and cash balances at central bank
Loans and advances of central banks and credit institutions	The banks is expected to mantain the same percentage of the customers resources in loans and advances of central banks and credit institutions.
Financial assets held for trading and fair value with changes in PL	The bank is expected to keep it as the average percentage of the customer resources for the last 5 years.
Financial assets in fair value OCI	The bank is expected to keep it as the average percentage of the customer resources for the last 5 years.
Debt Securities at Amortized Cost	The bank is expected to keep it as the average percentage of the customer resources for the last 5 years.
Loans and advances to customers	Sabadell's credit portfolio comprises mainly loans to customers provided in Spain and in the United Kingdom. In both markets, the bank has maintained a stable market share and there is no material evidence that the bank will gain or lose market share in the forecasted period. For that reason, the credit in both markets was forecasted by averaging the market share of the bank in the last 5 years and applying these percentages to the forecasted total loans in each country, according to The Economist Intelligence Unit
Cost of Risk	The bank cost of risk faced a sharp increase in 2023 from 0.44% to 0.54%, due to the macroeconomic environment faced in Spain and in the United Kingdom. It was conservatively forecasted that it would reach 0.6% and maintain this value until 2028.
Investments in subsidiaries, joint ventures and associates	The banks is expected to mantain the same percentage of the customers resources in investments in subsidiaries, joint ventures and associates.
Tangible assets	The banks is expected to mantain the same percentage of the customers resources in tangible assets.
Intangible assets	The banks is expected to mantain the same percentage of the custome resources in intangible assets.
Other assets	The banks is expected to mantain the same percentage of the custome resources in other assets.
Liabilities	
Central Banks	The bank is expected to keep it as the average percentage of the loan to customers for the last 5 years.
Credit Intitutions	The bank is expected to keep it as the average percentage of the loan to customers for the last 5 years.
Debt Securities Issued	The banks is expected to mantain the same percentage of the customers resources in debt securities issued.
Other Financial Liabilities at Amortized Cost	The banks is expected to mantain the same percentage of the customers resources in other financial liabilities at amortized cost.
Customer Resources	Sabadell's costumer deposits are mainly comprised of deposits in its Spain and United Kingdom branches. Similar to its Credit, the bank maintains a constant market share on its customers sight accounts and fixed-term deposits in both countries. There is no material evidence that the bank will increase or decrease its market share in both countries. For that reason, the customer deposits were forecasted by averaging the market share of the last 5 years and applying these percentages to the forecasted total deposits in each country, according to The Economist Intelligence Unit.
Financial liabilities held for trading and fair value with changes in PL	The banks is expected to mantain the same percentage of the customers resources in financial liabilities held for trading and fair value with changes in PL.
Provisions	The bank is expected to keep it as the average percentage of the loan to customers for the last 5 years.
Other liabilities	The banks is expected to mantain the same percentage of the customers resources in other liabilities.
Equity	
Capital	The bank is expected to mantain the same amount.
Share premium	The bank is expected to mantain the same amount.
Other equity	The bank is expected to mantain the same amount.
Retained earnings	Calculated based on the expectation that the bank will increase its payout ratio to 40%
Other reserves	The bank is expected to mantain the same amount.
(-) Treasury shares	The bank is expected to mantain the same amount.
Profit and loss attributable to owners of the parent	Forecasted net profit of the year.
(-) Interim dividends	Estimated at 0, assuming all dividend is paid at annual dividend.
Accumulated other comprehensive income	The bank is expected to mantain the same amount.
Non-controlling interests	The bank is expected to mantain the same amount.

P&L	
Income from C&CE	The forecast for income from cash and cash equivalents was developed by analyzing the historical relationship between the income generated from this account and the Euribor rate. By comparing the historical income rate with the corresponding Euribor rates, the average spread between them was calculated. Based on this analysis, it was projected that the spread would remain consistent with the 2023 levels for the next two years before reverting to its historical average.
Income from Loans Group ex-TSB	The forecast for income from loans in Spain and in the UK was developed by analyzing the historical relationship between the income generated from these accounts and the lending rate in Spain and in the UK. By comparing the historical income rate with the corresponding lending rate, the average spread between them was calculated. Based on this analysis, it was projected that the spread would remain consistent with the 2023 levels for the next two years before reverting to its historical average.
Income from Loans TSB	The forecast for income from loans in Spain and in the UK was developed by analyzing the historical relationship between the income generated from these accounts and the lending rate in Spain and in the UK. By comparing the historical income rate with the corresponding lending rate, the average spread between them was calculated. Based on this analysis, it was projected that the spread would remain consistent with the 2023 levels for the next two years before reverting to its historical average.
Income from fixed-income securities	The income from fixed-income securities and other assets was calculated by computing the average rate of income from these accounts in the balance sheet for the last 5 years.
Income from other assets	The income from fixed-income securities and other assets was calculated by computing the average rate of income from these accounts in the balance sheet for the last 5 years.
Expense from financial institutions	The forecast for expenses related to financial institutions was developed by analyzing the historical relationship between the expenses incurred from these accounts and the Euribor rate. By comparing the historical expense rates with the corresponding Euribor rates, the average spread between them was calculated. Based on this analysis, it was projected that the spread would remain in line with 2023 levels for the next two years, before reverting to 2019 values.
Expense from customer deposits ex-TSB	The forecast for interest expenses in Spain and the UK was developed by analyzing the historical relationship between the interest expenses from these accounts and the deposits rates in both countries. By comparing the historical expense rates with the corresponding deposits rates, the average spread between them was calculated. Based on this analysis, it was projected that the spread would remain consistent with 2023 levels over the next two years, before returning to its 2019 value.
Expense from customer deposits TSB	The forecast for interest expenses in Spain and the UK was developed by analyzing the historical relationship between the interest expenses from these accounts and the deposits rates in both countries. By comparing the historical expense rates with the corresponding deposits rates, the average spread between them was calculated. Based on this analysis, it was projected that the spread would remain consistent with 2023 levels over the next two years, before returning to its 2019 value.
Expense from capital markets	The expenses from capital markets and other liabilities were calculated by computing the average rate of income from these accounts in the balance sheet for the last 5 years.
Expense from other liabilities	The expenses from capital markets and other liabilities were calculated by computing the average rate of income from these accounts in the balance sheet for the last 5 years.
Net fees and commissions	Net fees and commissions represent the second-largest source of revenue for Banco Sabadell. Over the past five years, this revenue stream has maintained a steady correlation with the volume of loans provided to customers. This consistent relationship suggests that as the bank's loan portfolio grows, fees and commissions have followed a similar trend. To forecast future revenues from net fees and commissions, the average performance over the last five years was used as a basis.
Net trading income and exchange differences	The bank is expected to keep it as the average income rate of the fiancial assets for the last 5 years.
Income from equity method and dividends	The bank is expected to keep it as a constant percentage of Financial Assets.
Other operating income/expense	The bank is expected to keep it as a constant percentage of the core revenue.
Personnel expenses	Personnel expenses are a significant cost for the bank. Over the past five years, Banco Sabadell has followed a trend of gradually reducing its workforce while maintaining a stable cost per employee. This strategy has allowed the bank to manage personnel expenses efficiently. For the purpose of forecasting, it was assumed that both the number of employees and the cost per employee will remain consistent with 2023 levels.
Other general expenses	General expenses represent a key cost component for Banco Sabadell. Over the past five years, the proportion of these expenses relative to the bank's core revenue has shown a declining trend, indicating improved cost efficiency as the bank grows. This suggests that Banco Sabadell has successfully managed its operational costs while increasing its revenue base. To forecast future general expenses, it was assumed that the current proportion of these expenses to core revenue will remain stable, reflecting the bank's continued focus on cost control while supporting its core operations.
Amortisation & depreciation	The bank is expected to keep it as the average percentage of the tangible plus intangible assets for the last 5 years.
Provisions for NPLs	Calculated based on the cost-of-risk for the year.
Provisions for other financial assets	The bank is expected to keep it as the average percentage of the financial assets for the last 5 years.
Other impairments	The bank is expected to keep it as the average percentage of the other assets for the last 5 years.
Gains on sale of assets and other results	The bank is expected to keep it as a constant percentage of other assets.
Income tax	Assumed the 25% income tax in Spain.

Regulatory Capital	
RWAs	Average % of total assets in the last 5 years
CET1	Average % of net equity in the last 5 years
Tier1	Average % of net equity in the last 5 years
Total Capital	Average % of net equity in the last 5 years

Source: Author

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Level of Risk	SELL	REDUCE	HOLD/NEUTRAL	BUY	STRONG BUY
High Risk	0%≤	>0% & ≤10%	>10% & ≤20%	>20% & ≤45%	>45%
Medium Risk	-5%≤	>-5% & ≤5%	>5% & ≤15%	>15% & ≤30%	>30%
Low Risk	-10%≤	>-10% & ≤0%	>0% & ≤10%	>10% & ≤20%	>20%

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14/10/2024