MASTER OF SCIENCE IN
FINANCE

MASTERS FINAL WORK
PROJECT

EQUITY RESEARCH:
MILLENNIUM BCP

FRANCISCA GOMES PINHEIRO

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Abstract

This equity research report aims to express an investment recommendation on Millennium BCP's stock with reference to December 31st, 2024, following the CFA Institute research report guidelines.

Millennium BCP is one of Portugal's largest and most prominent banking institutions and the only Portuguese banking group listed on the stock exchange.

Founded in 1985, it has grown to become a key player in the country's financial sector, offering a wide range of banking and financial services to individuals and businesses. Millennium BCP has a strong presence both in Portugal and internationally, with branches and operations in various countries, namely Poland and Mozambique. The Bank focuses its business on the retail and investment banking segments, as well as on international services. Its current strategic positioning consolidates the Group's financial strength, targeting robust profitability, solid capital ratios and enhanced competitiveness, while seeking social sustainability.

Millennium BCP has a strong buy recommendation with a 2024YE price target of 0.34 €, representing a 55% upside potential against the stock price on June 19th, 2023 of 0.22 €.

The stock carries a medium risk due to the business's inherent risk and control risk in the face of the current macroeconomic instability and high-interest rate scenario.

The Group's undervaluation can be explained by the market's pessimism towards macroeconomic evolution and high inflation crisis, along with high interest rates and associated historically high EURIBOR rates. Still, BCP experienced record growth in 2022, with a 50.3% consolidated net profit increase, reaching 207.5 M€, and was capable of strengthening capital ratios, as the CET1 ratio improved to 12.5%, well above regulatory requirements. 2023 is proving itself to be just as successful – the Group's first quarter consolidated net profit rose 104% from December 2022, amounting to 423 M€ (BCP Interim Report 2023).

JEL classification: G10; G21; G32; G34; G35

Keywords: Equity Research; Valuation; Banking; Retail Banking; Millennium BCP

Resumo

O presente relatório de avaliação tem como objetivo emitir uma recomendação de investimento sobre as ações do Millennium BCP, com referência a 31 de dezembro de 2024, seguindo as diretrizes de investigação do CFA Institute.

O Millennium BCP é uma das maiores e mais proeminentes instituições bancárias em Portugal e o único grupo bancário português listado na bolsa de valores.
Fundado em 1985, tem vindo a tornar-se um elemento-chave no setor financeiro do país, oferecendo um leque alargado de serviços bancários e financeiros a particulares e empresas.

O Millennium BCP possui uma presença sólida tanto em Portugal como internacionalmente, com filiais e operações em vários países, nomeadamente na Polónia e em Moçambique. O Banco concentra o seu negócio nos segmentos de banca de retalho e investimento, bem como nos serviços internacionais. A sua atual posição estratégica visa consolidar a força financeira do Grupo, com o objetivo de alcançar uma rentabilidade robusta, índices de capital sólidos e uma maior competitividade, ao mesmo tempo que procura a sustentabilidade social.

O Millennium BCP tem uma recomendação de compra recomendada, com um preço alvo de 0.34 € com referência a 2024, representando um potencial de valorização de 55% em relação ao preço das ações em 19 de junho de 2023, que era de 0.22 €. O investimento apresenta um risco moderado devido ao risco inerente ao negócio e ao risco de controlo, face à atual instabilidade macroeconómica e ao cenário de taxas de juro elevadas.

A subvalorização do Grupo pode ser explicada pelo pessimismo do mercado em relação à evolução macroeconómica e à crise inflacionista, juntamente com as taxas de juro elevadas e as históricas taxas EURIBOR associadas. No entanto, o BCP registou um crescimento recorde em 2022, com um aumento do lucro líquido consolidado de 50.3%, atingindo 207.5 M€, e conseguiu fortalecer os índices de capital, com o índice CET1 a melhorar para 12.5%, muito acima dos requisitos regulamentares. O ano de 2023 está a revelar-se igualmente bem-sucedido - o lucro líquido consolidado do Grupo no primeiro semestre aumentou 104% desde dezembro de 2022, totalizando 423 M€.

Classificação JEL: G10; G21; G32; G34; G35

Palavras-Chave: Relatório de Avaliação; Avaliação; Banca; Banca de Retalho; Millennium BCP

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Dedico esta tese:

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És água no deserto, o meu palpite certo // És luz do sol // Sua explosão de graça, golo ganho na raça // Meu farol

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Se eu não morresse, nunca! E
Eternamente
Buscasse e conseguisse a perfeição das cousas!

Se nós não morrêssemos nunca e eternamente buscássemos e conseguíssemos a alegria aqui

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Abbreviations

€	Euro
ADB	African Development Bank
B	Billion
BCP	Millennium BCP Group
BD	Board of Directors
BIS	Bank for International Settlements
BoP	Bank of Portugal
bps	Basis points
BS	Balance Sheet
CAGR	Compound Annual Growth Rate
CEO	Chief Executive Officer
CET1	Common Equity Tier 1
CRD	Capital Requirements Directive
DL	Decreto-Lei
EBA	European Banking Agency
EBF	European Banking Federation
EC	European Commission
ECB	European Central Bank
EQRP	Equity Risk Premium
ESG	Environmental, Social and Governance
EU	European Union
ER	Excess Return
FCFE	Free Cash Flow to Equity
FSLI	Financial Statement Line Item
FVOCI	Fair Value through Other Comprehensive Income
FVPL	Fair Value through Profit and Loss
GAAP	Generally Accepted Accounting Principles
IAS	International Accounting Standards
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
K	Thousand
LCR	Liquidity Coverage Ratio
M	Million
M&A	Mergers & Acquisitions
MREL	Minimum Requirements of Eligible Liabilities
NGOs	Non-Governmental Organizations
NPA	Non-performing assets
NPE	Non-performing exposure
NSFR	Net Stable Funding Ratio
OCI	Other Comprehensive Income
P/B	Price to Book value ratio
P/E	Price to Earnings ratio
pp.	Percentage points
PT	Price Target
RAS	Risk Appetite Statement
ROA	Return on Assets
ROE	Return on Equity
RWA	Risk Weighted Asset
RWB	Remunerations and Welfare Board
SMEs	Small and Medium-sized Enterprises
SMP	Sustainability Master Plan
SPPI	Solely Payments of Principal and Interest
UN	United Nations
US	United States of America
WB	World Bank

1. Research Snapshot

The present Equity Research issues a strong buy recommendation for Millennium BCP, with a 2024YE PT of 0.34€, with medium risk, representing a 55% upside potential, using an ER model (Figure 1).

Millennium BCP's strategy is driven by a comprehensive set of strategic goals aimed at creating value for its stakeholders. These include achieving robust profitability and maintaining a strong balance sheet, with a focus on capital ratios. The Bank is also dedicated to operational efficiency, customer engagement, and harnessing the potential of digital solutions, as well as addressing environmental and social goals.

Driven by a sustainable growth strategic positioning already visible during 2022 (Figure 2), the strong buy recommendation considers three main factors:

- Strategic focus: strong capital ratios and robust profitability

During 2022, Millennium BCP placed a strong emphasis on bolstering capital ratios, as well as enhancing profitability.
By the close of 2022, Millennium BCP had achieved a consolidated net profit of 129.7 M€, a notable 319% from 2021. 2023 first semester's net profit was 423.2 M€ (Figure 2). Simultaneously, the bank executed a consistent effort to fortify its capital ratios throughout the year, reaching a 12.5% CET1 ratio. During the first semester of 2023, the CET1 ratio was 14%, while the total capital ratio stood at 18%.

- Rising core income

In 2022, the Group achieved a net interest income of 2,150 M€, marking a significant growth of 35.3% compared to the previous year.
This significant increase can be attributed to various factors, including the interest income generated by the sovereign debt portfolio, the rising interest rates on credit loans, the interest earned from overnight deposits held by the Bank of Portugal, and the expansion in credit volume. On the flip side, the primary interest costs stem from debt issuance. It's noteworthy that from 2020 to 2022, the Group consistently demonstrated an upward trajectory in both net interest income and net interest margin (Figure 3).

- Provisioning in Bank Millennium and legal risks of the Polish mortgage loans portfolio granted in foreign currency

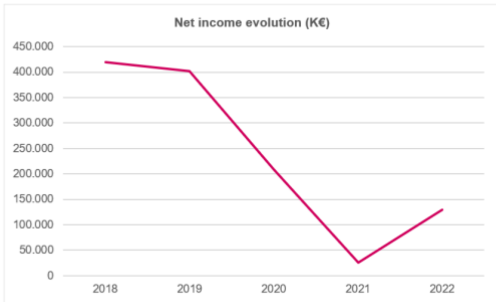
In 2022, the Bank provisioned 331.6 M€ to face the legal risks associated with the mortgage loans portfolio granted in Swiss francs.
As of 30 June 2023, the provisions estimated to address this matter amount to 1,480 M€ - 1,265 M€ deduction to assets and 215 M€ under Provisions.
As Bank Millennium is provisioning following a conservative approach, the expectation is that adverse rulings will not jeopardize the Group's results.

Figure 1: **Recommendation Summary**

STRONG BUY
2024YE PT: **0.34 €**
Closing price on 19/06/2023: **0.22 €**
Upside potential: **55%**
Annualized return: **33%**
Risk level: **MEDIUM**
Market Capitalization[(1)]: **3,970 M€**
Free Float[(1)]: **7,620 M**
YTD[(1)]: **77%**
52-week range[(1)]: **0.1184 € - 0.2685 €**

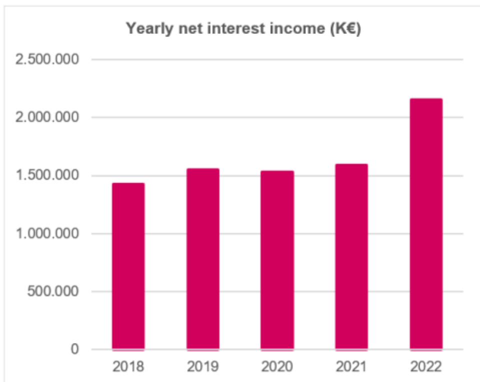
Source: Author analysis and Bloomberg [(1)] As of 22/09/2023

Figure 2: **Net income evolution 2018-2022**



Source: Author analysis and Millennium BCP Annual Reports (2018-2022)

Figure 3: **Yearly net interest income 2018-2022**



Source: Author analysis and Millennium BCP Annual Reports (2018-2022)

2. Business Description

Banco Comercial Português, S.A. (BCP or Millennium BCP) (Figure 4) is the largest private bank in Portugal. It is a significant player in various financial areas in Portugal and has a notable presence internationally, with a presence on five continents and partnerships/protocols in over ten countries.

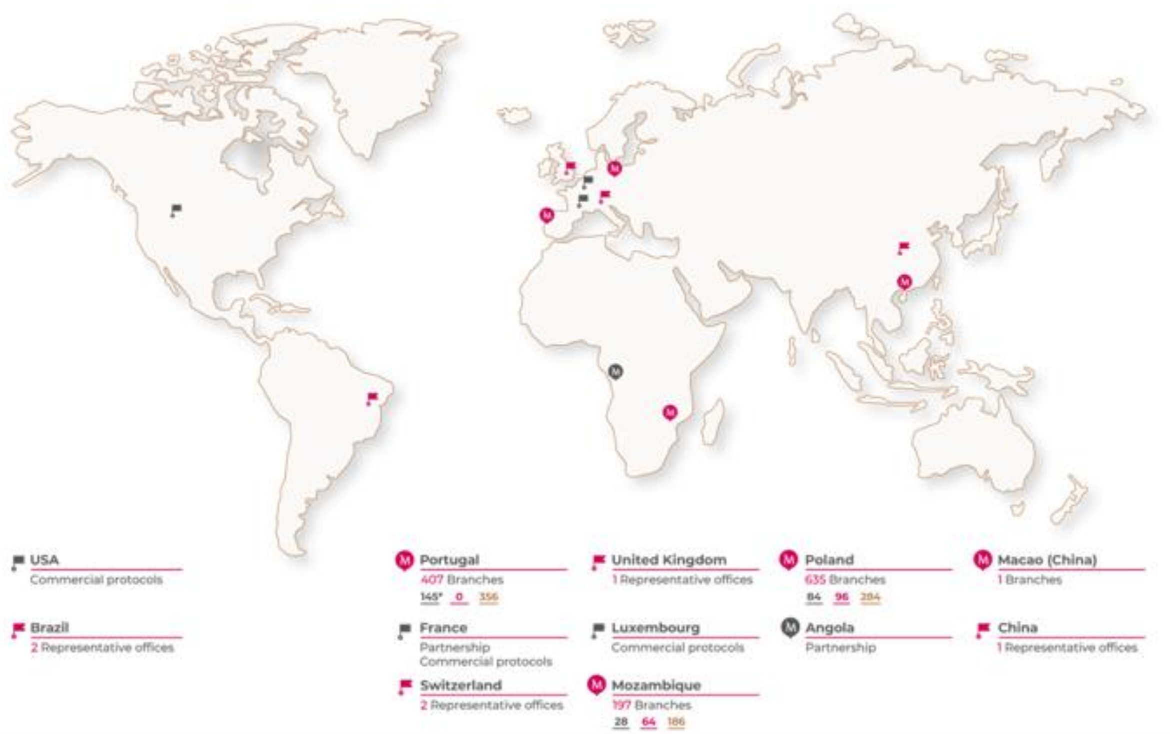
Figure 4: **Millennium BCP logos**

Millennium BCP old and present logos

Source: Author analysis

It operates under the Millennium brand in four key regions: Portugal, Poland, Mozambique, and Angola.
Portugal is its main operation, with the highest assets and market share in loans and deposits. In Poland, it is a significant player, although market shares are lower due to sector fragmentation. In Mozambique, BCP is the sector leader, holding substantial market shares in loans and deposits. In Angola, it is not among the market leaders, but it has merged its operation with Banco Privado Atlântico and retains a significant equity stake in the new firm. The bank has expanded internationally since its establishment in 1985, with a presence on five continents and partnerships or protocols with financial institutions in over ten countries (Figure 5).

Figure 5: **Millennium BCP geographic network**



Source: BCP annual report 2022

Its portfolio encompasses current accounts, payment systems, savings and investment options, private banking, asset management, and investment banking, as well as various financial products like mortgage loans, personal loans, commercial banking, leasing, factoring, and insurance, among other offerings. The Bank's back-office operations are efficiently integrated within the distribution network, capitalizing on economies of scale.

Within Portugal, Millennium BCP places significant emphasis on serving the retail and corporate sectors, providing tailored services and offering a broad spectrum of products and services.

2.1. The Bank's History

Banco Comercial Português, known as Millennium BCP, was founded on June 17th 1985, as a Portuguese financial institution after the deregulation of the Portuguese banking system (Figure 6). The Bank experienced multiple growth phases, combining organic expansion with strategic acquisitions. It engaged in these acquisitions to establish a strong position in the Portuguese market, aimed at attracting new clients by expanding its range of services and financial products. Key acquisitions included Banco Português do Atlântico, resulting in BCP becoming the largest private Portuguese Bank to this day. This merger was followed by further acquisitions, such as insurance companies Império, and other banks like Mello and Pinto & Sotto Mayor. In 2004, BCP sold certain insurance businesses and formed a joint venture with Ageas, which ended in 2014 as part of its strategic restructuring.

Figure 6: **Millennium BCP's history**

Source: Author analysis and BCP website

After consolidating its position in Portugal, BCP focused on expanding its retail activities to new international locations, particularly countries with high growth potential and strong ties to Portugal and Portuguese communities, such as Angola, Mozambique, Canada, the United States, France, and Macao. It also explored markets like Greece, Poland, and Romania, adapting its successful Portuguese business model. To enhance its global brand presence, the Bank renamed segments operating in Portugal to Millennium BCP in 2003 and completed international rebranding in 2006.

During 2012 and 2013, BCP initiated a management restructuring plan to improve profitability by concentrating on core activities and cost reduction, without financial support from the Portuguese Government.

The Bank underwent various developments (Figure 7), focusing on core operations. It divested several international operations while retaining commercial protocols for remittances from Portuguese emigrants in specific markets. A significant step involved transforming its offshore branch in Macao into an onshore branch in 2010. In 2012, BCP adopted a one-tier management and supervisory model, complying with Portuguese and European laws, and presented a restructuring plan to the Portuguese government, which was approved by the European Commission in 2013.

BCP also restructured its partnership agreements with the insurance group Ageas, aligning with its strategic priorities. The Bank underwent significant changes, including the merger of Banco Millennium Angola with Banco Privado Atlântico, becoming the second-largest private sector bank in Angola. BCP focused on strengthening its balance sheet by issuing a rights offer in 2017 to repay remaining government-subscribed securities and remove key state-aid-related restrictions.

The Bank pursued various mergers, including the incorporation of Banco de Investimento Imobiliário and the merger of Bank Millennium with Euro Bank, streamlining operations under a single brand and legal entity. In 2021, BCP entered an agreement to sell the entire share capital of Banque Privée BCP (Suisse) SA, aligning with its strategy to focus on core geographies and enhance development.

In December 2021, BCP's involvement in Banco Internacional de Moçambique included a long-term agreement with Fidelidade for bancassurance in Mozambique, reinforcing its competitive insurance products through a partnership with Fidelidade. The Bank has consistently aimed for market segmentation, streamlining operations under the Millennium brand, with its operations in Portugal also including the ActivoBank brand.

Figure 7: **Millennium BCP in recent years**

Source: Author analysis and BCP website

2.2. Business Segments

Millennium BCP engages in diverse banking operations and financial services both domestically and internationally, with particular emphasis on Retail Banking, Corporate Banking, and Private Banking, which figures for each segment result from the application of the Basel III framework (BCP, 2022).

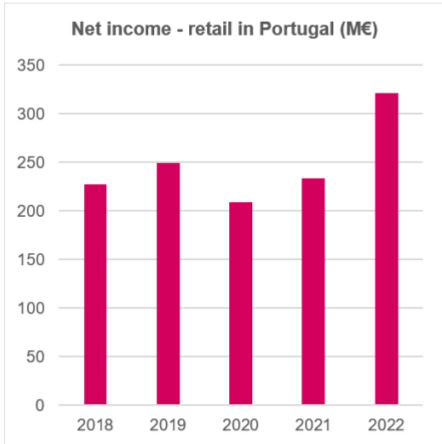
2.2.1. Retail Banking in Portugal

The Retail segment maintains its focus on loans to individuals, in which the Bank provides credit solutions aimed at customers. In 2022, BCP provided various loan solutions tailored to individual needs, particularly emphasizing digital channels and sustainable financing. Notable initiatives included a fully digital process for renewable energy equipment financing, support for high-potential customers, university credit with a mutual guarantee for young individuals, and a prominent real estate credit campaign. The Bank prioritized innovation, simplification, and speed in processes, introducing online credit applications and monitoring features. Lastly, BCP also introduced *Support Measures for Customers with Credit for their own and permanent housing at an indexed rate*, as defined by the Portuguese Government.
Additionally, in 2022, ActivoBank's branch registered strong growth, with noticeable increases in customer base, loan portfolio and net profit.

As of December 31st, 2022, Millennium BCP's income after tax from its Retail Banking segment in Portugal rose significantly to 321 M€, a 41% increase compared to 228 M€ in 2021 (Figure 8). This growth is attributed to higher net operating income, reduced impairment charges (Figure 9), and lower operating costs in 2022. Noteworthy points in the income statement include:

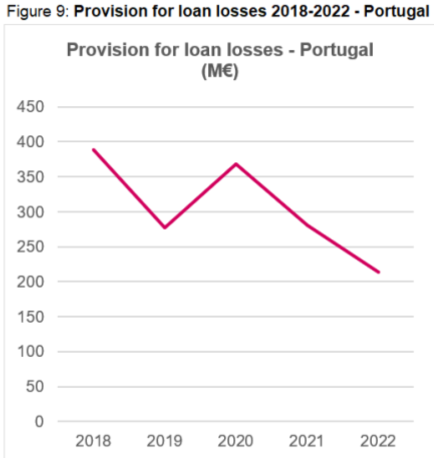
- a 22% increase in net interest income to 547 M€, driven by income from the loan portfolio (Figure 10) and internal placements of excess liquidity;
- Other net income reached 446 M€, up 4% from the previous year, primarily due to positive commission performance, including management and maintenance fees, and significant growth in market-related commissions.

Figure 8: **Net income 2018-2022 - retail in Portugal**



Source: Author analysis and Bloomberg

Figure 9: **Provision for loan losses 2018-2022 - Portugal**



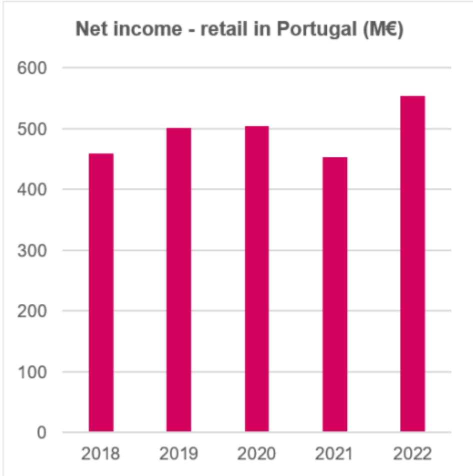
Source: Author analysis and Bloomberg

2.2.2. Companies, Corporate & Investment Banking in Portugal

The Bank holds a market share of approximately 19% in loans to SMEs and non-financial companies, and deposits from non-financial companies. 2022 was marked by significant increases in factoring, confirming and real estate leasing contracts, in which the Bank maintains market leadership.

Regarding Investment Banking and Corporate Finance activity, Millennium BCP has actively engaged in a range of projects both domestically and internationally, offering comprehensive financial advisory services to its clients across various initiatives such as M&A deals, company valuations, corporate restructuring, and financial project analysis. Additionally, the bank's investment banking arm has significantly expanded its Project Finance and Structured Finance involvement, with particular emphasis on the renewable energy sector.
Debt Capital Markets activity registered relevant operations: BCP's acted as joint lead in Government bonds issues and joint global coordinator for two public bonds offers and led several new commercial paper programs.

Figure 10: **Interest income 2018-2022 - retail in Portugal**

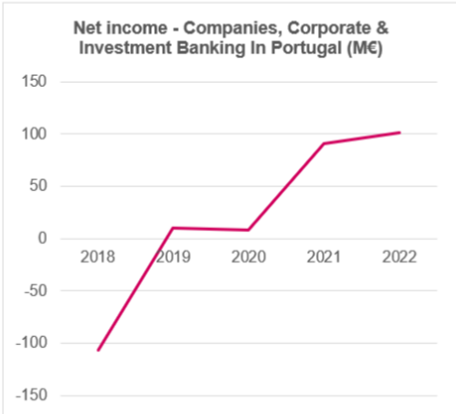


Source: Author analysis and Bloomberg

The Companies, Corporate & Investment Banking segment in Portugal reported a net income of 101 M€ in December 2022, showing a favourable increase compared to 98 M€ achieved in December 2021 (Figure 11). This positive performance is attributed to higher net operating income and reduced operating costs in 2022. However, the segment faced constraints due to the gradual implementation of a non-performing exposures reduction plan, impacting loan portfolio volumes and impairment charges. Key factors for this segment's 2022 performance include:

- A 1.4% rise in net interest income, reaching 263 M€, driven by favourable interest rates, despite increased funding costs and higher deposit remuneration;
- Other net income rose by 16% to 169 M€, primarily due to positive impacts on net fees and commissions;
- Operating costs decreased by 7.4% to 103 M€ by December 2022;
- Impairment charges increased to 182 M€, reflecting the focus on reducing non-performing exposures;
- Loans to customers (net) decreased by 1.6% to 11,885 M€, while balance sheet customer funds increased by 13.9% to 10,580 M€, mainly driven by expanded client deposits (Figure 12).

Figure 11: **Net income 2018-2022 - Companies, Corporate & Investment Banking In Portugal**



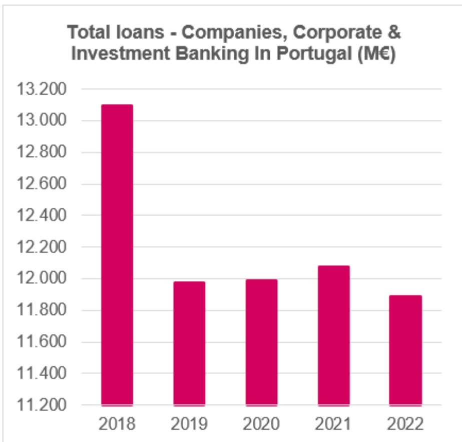
Source: Author analysis and Bloomberg

2.2.3. Private Banking in Portugal

In 2022, BCP's Private Banking activity targeted to maintain close relationships between Private Bankers and Customers, in order to promote asset monitoring and keep them informed about market changes. The Bank emphasized the "First Bank" concept, aiming to be the primary bank for Customers in both financial management and daily activities. The push for digital adoption among non-users remained important, recognizing the ongoing significance of remote channels and digital tools.

In December 2022, profit after taxes from the Private Banking segment in Portugal amounted to 22 M€, marking a substantial growth of 40.5% when compared to the net earnings recorded in the corresponding period of 2021 (15 M€).

Figure 12: **Total loans 2018-2022 - Companies, Corporate & Investment Banking In Portugal**



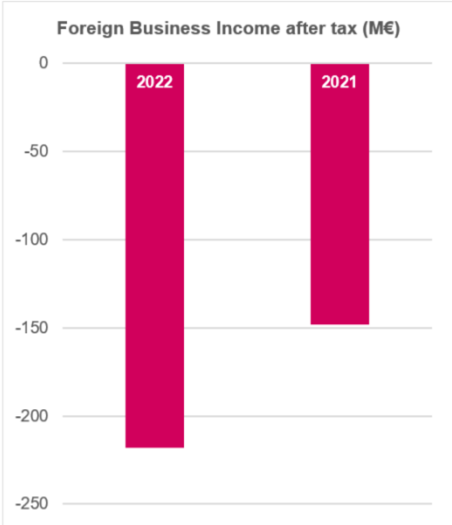
Source: Author analysis and Bloomberg

2.2.4. Foreign Business

In December 2022, the income after tax from the Foreign Business segment, analyzed from a geographical perspective, incurred losses of 218 M€, unfavourably contrasting with a loss of 148 M€ achieved in the same period of 2021 (Figure 13). This shift is primarily due to the outcome of modifications and reduced other net income, despite the positive performance in net interest income. Breaking down the income statement items, the Foreign Business segment's performance can be summarized as follows (Figure 14):

- Net interest income reached 1,199 M€ in December 2022, a notable increase compared to 757 M€ in December 2021. This result reflects the strong performance of the Polish subsidiary, driven by the increasing reference interest rates ending the period of near-zero interest rates set by the National Bank of Poland during the initial pandemic phase. In addition, the positive performance of net interest income in the Mozambican operation was also influenced by rising interest rates.
- Other net income amounted to 87 M€ in December 2022, a decrease from the 164 M€ recorded in the previous year, primarily due to the performance of the Polish subsidiary, particularly the impact of higher costs with mandatory contributions, including the contribution to the Polish Institutional Protection Scheme, absent in 2021. In contrast, the positive performance of the Mozambican subsidiary is noteworthy, driven by commissions, higher gains from foreign exchange transactions with customers, and the contribution of Seguradora Internacional de Moçambique, S.A. on equity-accounted earnings.
- Operating costs amounted to 471 M€ as of December 31st, 2022, an 11.5% increase from December 2021, mainly influenced by the evolution of the subsidiaries in Poland and Mozambique. The Polish subsidiary experienced increased staff costs due to inflation and the unique characteristics of the Polish labour market, while other administrative expenses reflected the inflationary effect. The increase in operating costs for the Mozambican subsidiary was due to factors such as salary updates and inflation.
- It is relevant to point out that the FX mortgage loans ongoing litigations for Bank Millennium (Poland) were responsible for the Group's increase in other provisions for liabilities (*despite the Bank having stopped writing new FX mortgages in 2008* (BCP Annual Report, 2022)). The Group has been reinforcing its provisions to anticipate eventual considerable impacts stemming from legal disputes and legislative measures affecting Bank Millennium in Poland. Hundreds of thousands of Poles borrowed in Swiss francs up to 2008, due to its lower interest rates and took Banks to court as the currency soared against zloty and interest rates increased.
- Impairment and provision charges at the end of December 2022 marginally increased compared to figures reported in 2021, primarily due to the total impairment of goodwill associated with the BCP Group's acquisition of the percentage of control over the Polish operation (102 M€), partly offset by the lower level of extraordinary provision charges for legal proceedings related to mortgage loans granted in Swiss francs mentioned above, amounting to 431 M€.
- Loans to customers (net) stood at 16,983 M€ at the end of December 2022, below the amount attained as of December 2021 (17,780 M€). The loan portfolio decreased mainly due to the contribution of the Polish subsidiary. The Foreign business' balance sheet customer funds increased by 6% from 21,856 M€ in 2021 to 23,173 M€ in 2022, primarily driven by the performance of the subsidiary in Poland.

Figure 13: **Millennium BCP foreign business income after tax 2021-2022**



Source: Author analysis

Figure 14: **Millennium BCP Foreign Business Profit and Loss**

Million euros

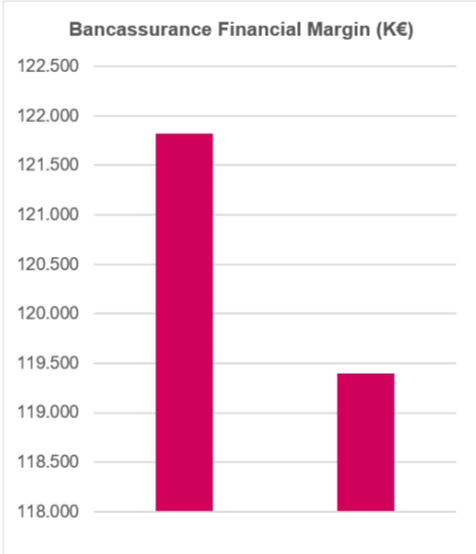
FOREIGN BUSINESS	Dec 31, 2022	Dec 31, 2021	Chg. % 22/21
PROFIT AND LOSS ACCOUNT			
Net interest income	1,199	757	58.3 %
Other net income	87	164	-46.7 %
	1,286	921	39.7 %
Operating costs	471	423	11.5 %
Result on modification	-310	–	
Impairment and provision	632	622	1.6 %
Income before tax	-127	-124	2.7 %
Income taxes	97	95	2.3 %
Income after tax from continuing operations	-224	-219	2.5 %
Income from discontinued operations	6	71	-92.2 %
Income after income tax	-218	-148	47.9 %
SUMMARY OF INDICATORS			
Allocated capital	2,036	2,784	-26.9 %
Return on allocated capital	-10.8%	-5.3%	
Risk weighted assets	16,821	16,646	1.1%
Cost to income ratio	36.6%	45.9%	
Loans to Customers (net of impairment charges)	16,983	17,780	-4.5%
Balance sheet Customer funds	23,173	21,856	6.0%

Source: BCP Annual Report 2022

2.2.5. Bancassurance Business

Throughout 2022, Bancassurance activities included the continuation of the Next Level program and digital presence expansion, prioritizing innovation and transformative models, along with the introduction of modern products adapted to market demand. Financial margin arising from the Bancassurance business totalled 122 M€ in 2022 (vs. 119 M€ in 2021) (Figure 15).

Figure 15: **Millennium BCP Bancassurance financial margin 2021-2022**



Source: Author analysis

2.3. Strategic Goals and Positioning

The ongoing 2021-2024 strategic cycle registers significant progress in Portugal with a 40% reduction in NPEs, customer growth, and increased revenue share, despite the pandemic's impact on credit risk levels, margin compression and low-interest rates recorded until mid-2022. Moreover, the Group's activity in Poland was negatively affected by the ongoing litigations regarding FX mortgage loans, yet to reach an end. The Group's ability to generate profits is additionally limited by legislative changes in Portugal involving contributions to the National Resolution Fund and restrictions on commissions and fees, as interest rates rise.
Given this situation, the Group chose to revise its strategic plan in 2022 and lay its operational emphasis on Portugal. This update aims to retain essential goals from the prior cycle, leverage existing accomplishments, and introduce fresh elements that address the current circumstances.

Overall, Millennium BCP's consolidated strategic positioning aims to (Figure 16):

1. Achieve strong profitability and a strong balance sheet, with a target ROE of approximately 10%, CET1 ratio above 12.5% and NPE ratio around 4%, all figures projected for 2024.
2. Enhance its competitive edge by improving efficiency, engaging with customers, and leveraging digital solutions, all supported by a talented workforce. The Group targets a share of mobile customers above 65% in 2024, along with a growth of high-engagement customers above 12% in 2024, compared with 2020.
3. Address societal sustainability concerns, particularly related to climate change risks, a goal materialized in a target average ESG rating above 80% in 2024.
4. Adapt to recent developments regarding international operations, particularly in Poland, by implementing a resilience plan to mitigate risks from Swiss franc-denominated mortgage loans, ensuring growth and customer satisfaction.
   In Mozambique, the Group intends to prioritize profitability, efficiency, and risk control. The target measures projected are a cost-to-income ratio of 40% in 2024, as well as a cost of risk of approximately 50 bps.

Figure 16: **Millennium BCP's strategic goals for 2024 vs. 2022 results**

	2022	2024
C/I ratio	37%	~40%
Cost of risk	52 bp	~50 bps
ROE	4.0%	~10%
CET1 ratio	12.5% (13.0% proforma***)	>12.5%
NPE ratio	3.8%	~4%
Share of mobile customers	63%	>65%
Growth of high engagement customers* (vs. 2020)	+10%	+12%
Average ESG rating**	69%	>80%

Source: Millennium BCP Annual Report 2022

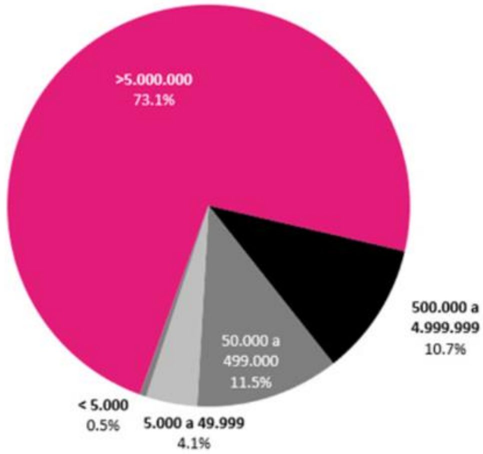
2.4. Shareholder Structure

Millennium BCP's shares are listed on Euronext Lisbon and all shares confer equal rights upon any shareholder.
As of December 2022, the Group's capital is composed of 15,113,989,952 shares of a single category, nominative, book-entry, without nominal value, fully subscribed and paid up, which represent 100% of the share capital and are distributed for 137,834 shareholders (BCP's Annual Report, 2022) (Figures 17 and 18).

At 2022 year-end, the Fosun Group and the Sonangol Group held respectively 29,95% and 19,49% of share capital, which sums to 49,44% of total voting rights. Meanwhile, 114 shareholders held more than 5 M shares and less than 5% of the share capital, representing 23.66% of the share capital and voting rights (BCP's *website*, 2022) (Figure 19).

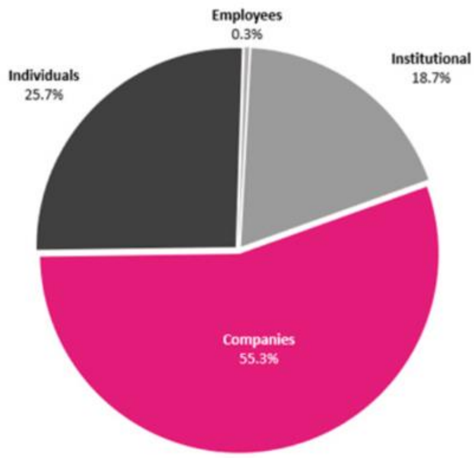
In terms of geographic breakdown, 31.2% of shares are held by Portuguese nationals or entities with registered offices in Portugal, 29.9% by Chinese, 19.7% by Africans and 7.2% by US and UK nationals (Figure 20).

Figure 17: **Number of shares per shareholder**



Source: Millennium BCP website

Figure 18: **Shareholder structure**



Source: Millennium BCP website

Figure 19: **Main shareholders**

Shareholder	No. shares	% of share capital	% voting rights
Fosun Group	4,525,940,191	29.95%	29.95%
Sonangol Group	2,946,353,914	19.49%	19.49%
Total Qualified Holdings	**7,472,294,105**	**49.44%**	**49.44%**

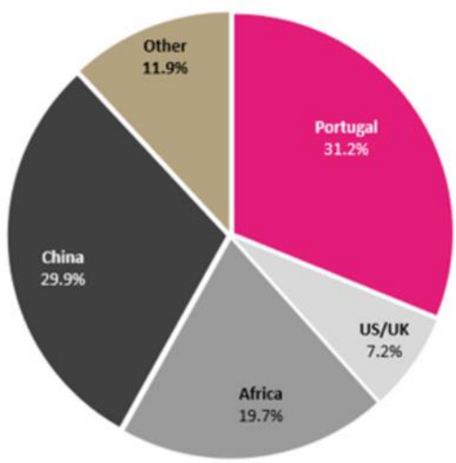
Source : Author analysis and BCP website

2.5. Dividend Policy

According to its last Annual Report (2022), the dividend policy of the BCP Group considers several factors and does not bind with any pay-out ratio.

1. Capital Ratios and Legal Provisions: The policy aims to ensure sustainable compliance with the capital ratios required by the bank, taking into account legal restrictions on the maximum distributable amount.
2. Risk Management: The policy retains its own funds to align with the Risk Appetite Statement (RAS) and the results of the internal capital adequacy self-assessment process (ICAAP), ensuring that the Bank's capital position is consistent with its risk exposure.
3. Regulatory Safeguard: There's a focus on maintaining a safety margin above regulatory requirements, as assessed by the regulator, especially regarding strategies, processes, capital, and liquidity.
4. ECB Guidance: The Bank considers guidance issued by the ECB in its decision-making.
5. General Meeting Responsibility: The decision on the use of profits for the year rests with the General Meeting, based on a proposal from the Board of Directors.

Figure 20: **Geographic breakdown**



Source: Millennium BCP website

6. Capital Needs: The Board of Directors intends to meet the capital needs of the bank to achieve its strategic objectives while aligning with the best practices in the reference banking sector.
7. Implications and Application: The Board of Directors will specify how these criteria affect the maximum limit for prospective dividend payouts and the relevant application period, which should be reflected in the bank's annual budgets.

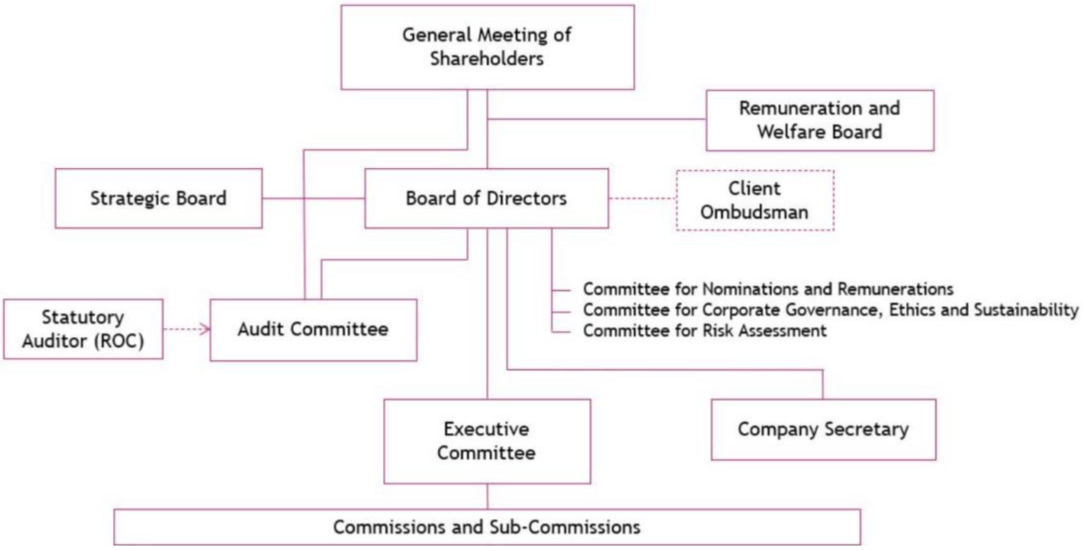
Overall, the dividend policy aims to balance the interests of shareholders, regulatory requirements, risk management, and the bank's strategic goals, with the specifics defined by the Board of Directors and subject to approval by the General Meeting.

In 2022, the above guidelines resulted in an exceptional amount of 13.6 M€ of dividends paid, considering that no dividends were paid in 2020 and 2021, following the ECB guidelines in the face of the pandemic situation. From 2018 to 2021, the Group only distributed dividends in 2019, in the amount of 30.2 M€.

3. Management & Corporate Governance

BCP, S.A. has a *one-tier management and supervision model* (BCP Annual Report, 2022) led by a General Meeting of Shareholders-elected Board of Directors, which operates with the highest executive decision-making authority. Within this framework, there is an Executive Committee comprising six members, overseeing day-to-day operations, including the CEO appointed by the General Meeting. The company also has a non-executive Audit Committee for financial oversight and a Remuneration and Welfare Board, both elected by the General Meeting of Shareholders. The company's financial accounts are audited by both a Statutory Auditor and an external auditing firm, and the General Meeting holds binding authority for all shareholders in accordance with the law and articles of association (Figure 21).

Figure 21: **Millennium BCP's Corporate Governance Model**



Source: Annual report 2022

3.1. General Meeting of Shareholders

The General Meeting of Shareholders holds the highest significance within the Group's corporate structure, acting as the representative body for all shareholders.

The authority of the General Meeting of Shareholders encompasses several key responsibilities. It can appoint and remove the Board, as well as members of administrative, and supervisory bodies, and the Remuneration and Welfare Board. It makes decisions on the management report, financial statements, and profit allocation, and addresses any matters presented by the administrative and supervisory bodies.
The current Board of General Meetings, elected for the 2020-2023 term, has Pedro Rebelo de Sousa as Chairman and Octávio Castelo Paulo as Vice-Chairman (Figure 22).

3.2. Board of Directors

The Board of Directors (BD) holds the highest authority for managing and representing the Bank. In accordance with the articles of association, the BD should be composed of fifteen to nineteen members with executive and non-executive duties, accountable for overseeing all operational aspects not assigned to other entities while adhering to the highest standards of sound banking practices. The BD composition is selected by the General Meeting of Shareholders for a four-year tenure, with the possibility of re-election.

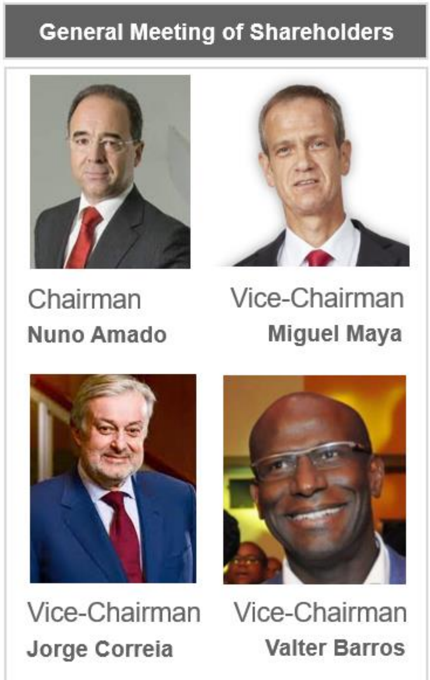
The current Board of Directors commenced its activities on September 5th, 2022 for the 2022-2025 term, with a total of seventeen members, six executive and eleven non-executive, having Nuno Amado as Chairman. Vice-Chairmen are Miguel Maya, Jorge Correia and Valter Barros (Figure 23).

The BD relies on five committees: Audit Committee, Executive Committee, Committee for Nominations and Remunerations, Committee for Corporate Governance, Ethics and Sustainability, and Committee for Risk Assessment.

Figure 22: **General Meeting of Shareholders**

Source: Author analysis

Figure 23: **Board of Directors**

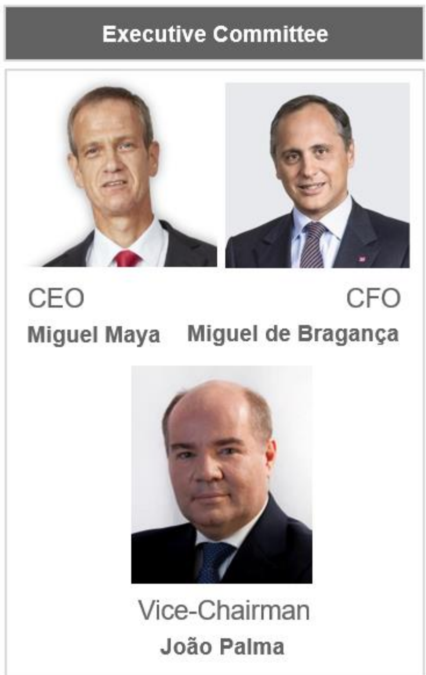


Source: Author analysis

3.3. Executive Committee

The Executive Committee was designated by the Board of Directors on September 6, 2022, to handle the Bank's operational tasks not exclusively managed by the latter.
At present day, for the 2022-2025 term-of-office, Miguel Maya is the CEO of the Group, vice-Chairmen are Miguel de Bragança (also CFO) and João Palma, and the remaining members are Rui Teixeira, José Pessanha e Maria José Campos (Figure 24).

Figure 24: **Executive Committee**



Source: Author analysis

3.4. Remuneration Policy

The Remunerations and Welfare Board (RWB), consisting of three to five members chosen by the General Meeting, primarily comprises independent members. Its key functions include establishing the compensation for Bank governance members, defining retirement benefits for directors, and presenting an annual remuneration policy report for corporate bodies at the General Meeting, following established rules and relevant recommendations, namely principles of sustainability and fairness.
For the 2022-2025 term, the Board has José Almaça as its Chairman and Jorge Correia and Valter Barros as members, and the members are independent regarding the executive members and administration in function.

Under the Legal Framework of Credit Institutions and Financial Companies (article 115-C (2)), Banks are required to disclose remunerations paid *as a whole and individually to members of the company's board of directors, including fixed and variable remuneration*. This remuneration consists of three components: fixed base remuneration and mandatory social expenses (social security, health insurance and

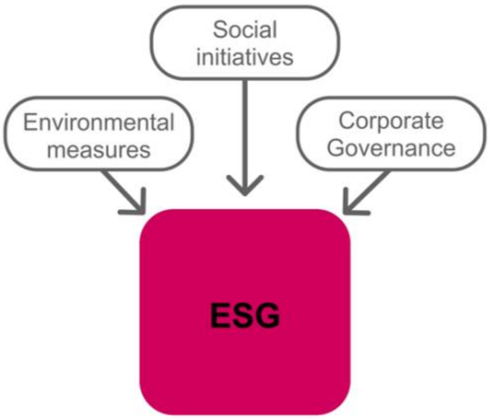
supplemental pension plan), annual variable remuneration (paid in cash and in shares), and long-term variable remuneration (paid in shares).
The Group disclosed information to all Directors, members of the Boards of Directors, Audit Committee and Executive Committee.

In the financial year of 2022, the whole fixed remunerations set by the RWB paid to the Board of Directors were approximately 1.3 M€. Annual variable remunerations paid with respect to 2021 totalled 787 K€, of which 370 K€ in cash and 418 K€ in shares, and long-term variable remuneration paid with respect to the 2018-2021 fiscal years totalled 905 K€ in shares. In total, all Directors received 4.9M€.

Individually, it is worth mentioning that the CEO, Miguel Maya, had in 2022 a fixed remuneration of 650 K€, an annual variable remuneration of 82 K€ in cash and 92 K€ in shares, and a long-term variable remuneration of 192 K€ in shares.
Further individual details are presented in Appendix 1.

3.5. Sustainability & ESG

Figure 25: **ESG core areas**



Source: Author analysis

BCP is actively enhancing its commitment to sustainability and responsible finance by swiftly adapting to new ESG requirements to meet stakeholders' expectations. The Group has established a robust governance structure, including a Corporate Governance, Ethics, and Sustainability Committee, a CEO-led Sustainability Committee, and a Sustainability Director Plan to integrate diverse ESG actions.

The Group's efforts are concentrated in three core areas (Figure 25):

1. Environmental measures, aiming for a fair transition to a decarbonized economy, incorporating climate dimensions into risk models and product offerings;
2. Social initiatives, in collaboration with the Millennium BCP Foundation, fostering shared value with internal and external communities;
3. and Corporate Governance, embedding Sustainability principles into decision-making and management processes.

The ESG goals are integrated into the *Superação 24* 2021-2024 Strategic Plan and are published in the yearly mandatory Sustainability Report.
Hence, the Group has been refining its governance approach for Sustainability and Responsible Business as part of the Sustainability Master Plan (SMP). To this end, in 2022, the Sustainability Commission suffered a reorganization, becoming the Committee for Corporate Governance, Ethics, and Sustainability. This Committee holds the responsibility for overseeing: the progress of the and the execution of the Sustainability strategy.

Figure 26: **Millennium BCP Sustainability Indexes**

Index/analyst	2022	2021
MSCI (*)	A	A
S&P DJSI	62%	64%
Carbon Disclosure Project	B	B
Bloomberg Gender-Equality Index	85%	81%
Vigeo Eiris	46%	49%
Gaïa Rating	70%	66%
Refinitiv	78%	76%
Sustainalytics	21.6	32.9

Source: Millennium BCP Sustainability Report (2022)

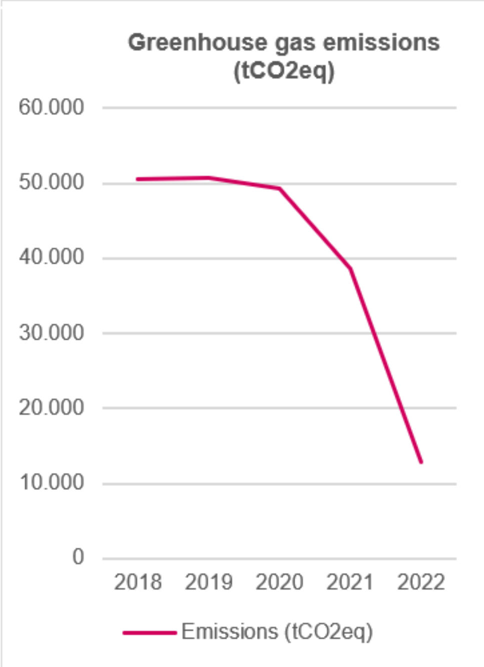
BCP's efforts in complying with ESG goals are reflected in its inclusion in 8 sustainability indexes (Figure 26).
The Bank's strategic plan towards sustainability and ESG responsibility materializes in the goal of reaching a target average ESG rating above 80% in 2024, while it stood at 69% in 2022.

3.5.1. Environmental measures

Group BCP acknowledges its duty to manage environmental effects for sustainable development and it shows engagement in various efforts to decrease adverse impacts from operations. This includes offering financial solutions reflecting its dedication to combating climate change and enhancing quality of life. Therefore, the *Superação 24* strategic plan seeks an adjustment between the Group's financial operations and environmental commitments and points to the following goals (BCP Sustainability Report 2022):

- Create novel products categorized as green and social, catering to individuals and companies with risk inclination and funding approach shaped by adopting an eco-friendly business model, such that the Group reduces *the level of exposure to coal and petroleum products in European operations* in more than 50%;
- Forge alliances to expand the range of ESG products, extending advisory services to companies for aiding their sustainability transition, in order to achieve the goal of at least 50% growth in green project finance operations;
- Amplify the origination of sustainability-linked bonds and issuance of ESG bonds, so that Millennium BCP becomes the number one bank originating green bonds in Portugal;
- Foster effective communication with internal and external stakeholders, educate all staff, and connect incentives to actions and outcomes that align with ESG standards.

Figure 27: **Millennium BCP greenhouse gas emissions - Evolutions 2018-2022**



Source: Author analysis and Millennium BCP Sustainability Report 2022

Under its environmental responsibility measures, the BCP Group reduced its 2022 greenhouse emissions by 67% vs. 2021 (Figure 27), which allowed the integration of Millennium BCP in the Financial Times *Europe's Climate Leaders* ranking.

3.5.2. Social responsibility

The strategy of the BCP Group is centred on seeking to undertake initiatives in collaboration with various Stakeholder groups, aiming to make both direct and indirect contributions to the social development of the countries in which it operates. This approach places special emphasis on involvement in cultural, educational, and social endeavours, such as (Figure 28):

- Encouraging innovation by assisting social enterprises and NGOs, for which the Group's banks created a *non-profit associations account*, resulting in the opening of 338 accounts in 2022 and 5,145 total accounts in the Banks' portfolio;
- Playing a role in enhancing quality of life and alleviating poverty, through partnerships with EPIS that gathered volunteers among Millennium BCP's workers to give tutoring classes to students in need, food collection campaigns to Food Bank Warehouse and project *Girl Move*, a partnership with the same name association to aid Mozambican students in achieving better education and break cycles of poverty;
- Promoting financial literacy and education among the public, through (i) the *#WelistenWEsupport* Bank Millennium's program with activities focused on financial education, (ii) the program of digital literacy for digital banking aimed at the senior population, (iii) the launching of *Saber de Contas* website and (iv) the

Figure 28: **Social responsibility initiatives**

Source: Author analysis

Banking Olympics contest to teach young people about financial knowledge and savings management;

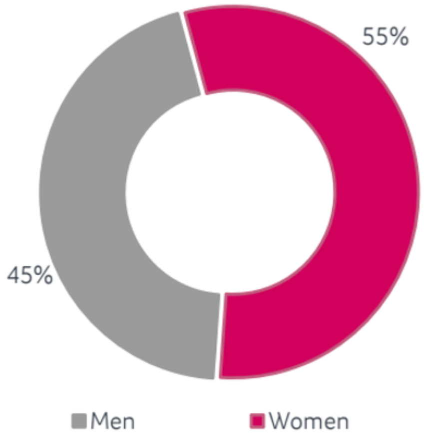
- Support the growth of social economy organizations by offering managerial training in partnerships with business schools;
- Guarantee workplace parity and mitigate internal inequalities, for which the Group seeks to effectively integrate disabled people into its workforce. For that, training sessions were given to all employees to boost concepts *that improve social skills and the employability potential of disabled individuals*. Results worth mentioning on this note are the *Wrocław without barriers* award attributed to Bank Millennium and the fact that the Group has reached a total number of 221 employees with disability in 2022.

3.5.3. Corporate Governance measures

The Group commits to global frameworks, tools, and indices to conduct its operations responsibly, considering employees, customers, shareholders, suppliers and other stakeholders. Hence, the Group's goals on this subject are the following:

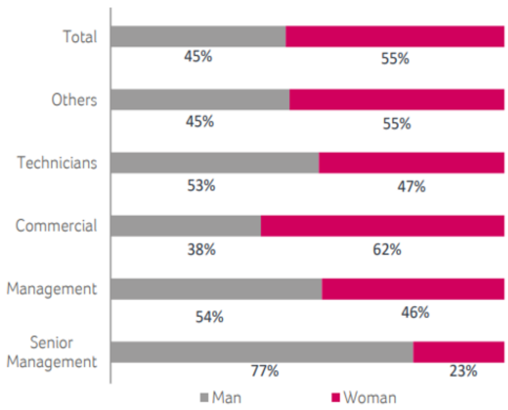
- Enhance the Group's stance in advancing gender parity and non-discrimination, which reflects on Group BCP's subscription to the Women's Empowerment Principles of the UN Global Compact. The Group points out that 55% of its employees are women (Figures 29 and 30) and that 25% of management positions are occupied by women (23% in Portugal, 58% in Poland and 29% in Mozambique). In addition, in 2023, the Group was included for the fourth time in a row in the Bloomberg Gender-Equality Index (Figure 26);
- *Promote financial inclusion products that support productive activities*, job generation and entrepreneurship, through financial advisory service packs that offer solutions to restructure/consolidate credits, preserve the financial stability of private customers, and special investment lines aimed at unemployed people who seek to fund start-up businesses. In 2022, 63 entrepreneurs were financed under the latter (Millennium BCP Sustainability Report 2022);
- Safeguarding labour rights and fostering safe, secure work settings for all employees;
- Develop employees' personal and professional skills, under which the Group launched the Millennium Banking Academy and *Rubrica DigitalMente* in Portugal, resulting in a total of 10,176 training sessions and 716,000 training hours taught in 2022 (Figure 31).

Figure 29: **Distribution of employees by gender**



Source: Millennium BCP Sustainability Report (2022)

Figure 30: **Professional categories by gender**



Source: Millennium BCP Sustainability Report (2022)

Figure 31: **Millennium BCP total internal training hours per geography**

Training hours	Trainees
Portugal	
327,700	6,144
Poland	
337,094	13,295
Mozambique	
50,535	2,605

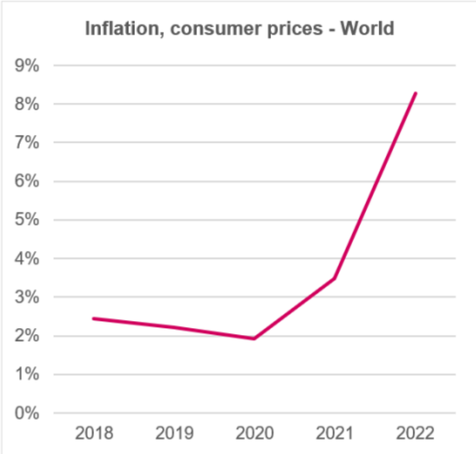
Source: Author analysis and Millennium BCP Sustainability Report 2022

4. Industry Overview & Competitive Positioning

4.1. Macroeconomic Outlook

In May 2022, the World Health Organization declared that COVID-19 was no longer a global health emergency. However, this global recovery was largely affected by Russia's Ukraine invasion and high inflation.
Central Banks' responses to inflation tightened policies and limited borrowing and economic activity and culminated in a banking crisis in the first quarter of 2023, with Silicon Valley Bank's default and the Credit Suisse potential bankruptcy episode. Although the financial sector concerns have eased since then, high-interest rates affect financial systems, leading advanced economy banks to tighten lending and reduce credit supply. This affects public finances, notably in poorer nations dealing with debt costs, constraining priority investments.

Figure 32: **Inflation, consumer prices 2018-2022 - World**

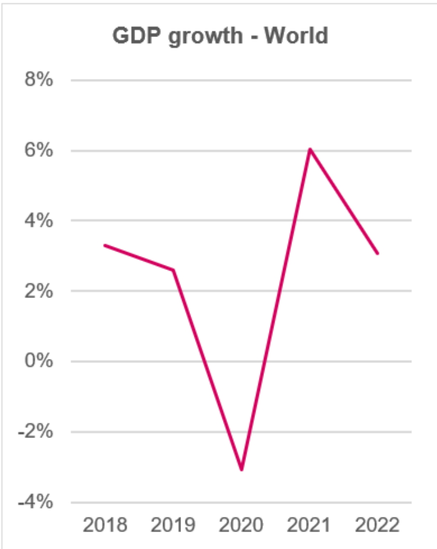


Source: Author analysis and World Bank

Despite these challenges, the first quarter of 2023 saw resilient global economic activity, led by the services sector. Post-pandemic consumption shift to services is almost complete in advanced economies, and it surged in various emerging markets. However, as mobility normalizes, further acceleration is seen as limited, namely for South-European countries. Meanwhile, non-services sectors, including manufacturing, exhibit weakness, and the second quarter high-frequency indicators point to a broader slowdown. Softening goods consumption, global uncertainty, weak productivity, and a tough financial climate have prompted firms to reduce productive investment. Major economies' capital formation and industrial production have significantly slowed, impacting international trade and emerging markets, and trade and manufacturing indicators hint at continued fragility. Also, accumulated pandemic savings are declining in advanced economies (IMF, 2022).

In conclusion, the main aspects to consider as global economic constraints are (i) the ongoing fight against inflation (Figure 32) and its impact on monetary policy, (ii) the eventual resurgence of stress situations in the banking sector and the consequences of tight credit availability, and (iii) the slowdown of the Chinese economy recovery.

Figure 33: **GDP growth 2018-2022 - World**



Source: Author analysis and World Bank

4.1.1. Global

As pointed out by the IMF (2022), in 2022, global economies were susceptible to great shocks – the vaccination plans against COVID-19 enabled a worldwide recovery from the pandemic, but the invasion of Ukraine by Russia has significantly reversed this progress and diminished global economic prospects.
Consequently, economic risks have surged. Geopolitical and societal tensions have escalated alongside rising poverty and inequality. Inflation in numerous countries has surged due to a combination of soaring energy, food, and commodity costs, coupled with labour shortages and supply disruptions.

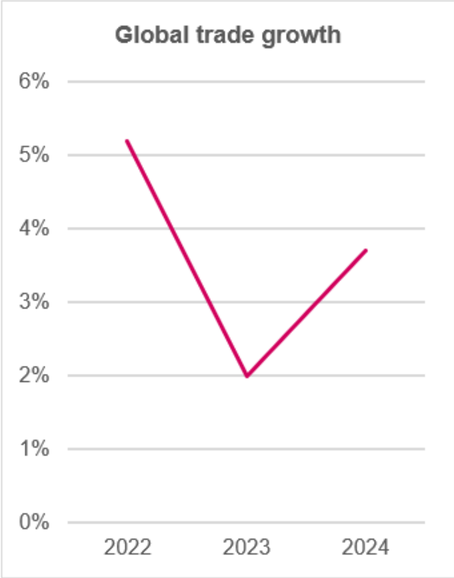
As a result, in 2022, global GDP recorded a considerable slowdown, registering 3.1%, against 6.0% in 2021 (WB, 2022) (Figure 33).

In 2023, project growth is set to decline to around 3.0% in 2023 and 2024. While this outlook for 2023 shows a slight improvement compared to earlier forecasts from the IMF, it remains weak when measured against the historical annual average of 3.8% (2000-2019). The ongoing effort by Central Banks to increase policy rates to combat inflation continues to exert downward pressure on economic performance. The global overall inflation rate is predicted to drop from 8.7% in 2022 to 6.8% in 2023 and further to 5.2% in 2024. The fundamental core inflation rate is anticipated to decrease at a more gradual pace, and there has been an upward adjustment in the inflation projections for 2024 (IMF, 2023).

Global trade growth is anticipated to decrease from 5.2% in 2022 to 2.0% in 2023, then rise to 3.7% in 2024 (Figure 34). This falls significantly short of the 2000-2019 average of 4.9%. The drop in 2023 reflects changes in global demand patterns and the transition towards domestic services (IMF, 2023).

These predictions are based on various assumptions, among which fuel and nonfuel commodity prices, as well as interest rates. After a 39% increase in 2022, oil prices are projected to decrease by approximately 21% in 2023 due to the global economic slowdown. Assumptions about worldwide interest rates have been adjusted upwards due to concrete and signalled policy tightening by major Central Banks since April. The Federal Reserve and the Bank of England are now expected to enact greater rate hikes than previously assumed. Moreover, the Federal Reserve is anticipated to peak at around 5.6% before decreasing rates in 2024. Similarly, the ECB is projected to reach a peak policy rate of 3.75% in 2023 and then gradually ease in 2024 (IMF, 2023).

Figure 34: **Global trade growth 2022-2024**



Source : Author analysis and IMF

The expected growth deceleration for 2023 remains substantial in advanced economies, dropping from 2.7% in 2022 to 1.5% in 2023 (IMF, 2023).

Within the euro area, growth is predicted to decline from 3.5% in 2022 to 0.9% in 2023, before rebounding to 1.5% in 2024 (Figure 35). While the overall forecast remains relatively stable, there is a shift in the composition for 2023. Due to robust services and improved tourism, growth projections have been adjusted upward by 0.4 percentage points for Italy and by 1.0 percentage points for Spain. However, Germany faces challenges with manufacturing output weakness and an economic contraction in the initial quarter of 2023, resulting in a downward revision of growth by 0.2 percentage points, bringing it to -0.3% (IMF, 2023).

Figure 35: **GDP growth 2018-2024 - Euro area**

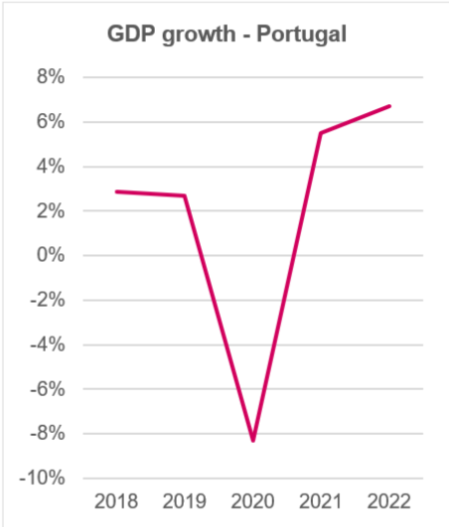
Source : Author analysis, World Bank and IMF

Regarding financial markets, market perceptions of forthcoming monetary policy tightening have shifted upwards since the 2022 year-end, although they are still below policymakers' indications. This increases the possibility that negative inflation data releases, similar to what happened in the first quarter of 2023, could elevate expectations concerning interest rates and result in declining prices in equity markets. Such shifts could intensify financial constraints, straining both banks and nonbank financial entities with susceptible balance sheets to interest rate volatility, particularly those heavily tied to commercial real estate. The potential for ripple effects exists, with detrimental repercussions for global trade and economic expansion.

4.1.2. Portugal

In 2022, there was a 6.7% expansion in the Portuguese GDP, indicating a faster pace compared to the 5.5% growth noted in the previous year (BoP, 2022) (Figure 36). The vigour displayed by personal spending and the surge in tourism exports played a vital role in stimulating economic operations and lessening the effects of the investment decline.

Figure 36: **GDP growth 2018-2022 - Portugal**



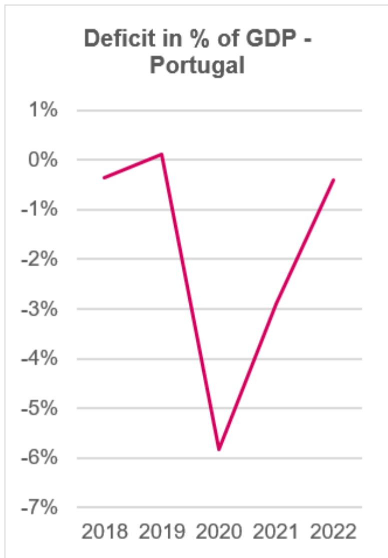
Source: Author analysis and World Bank

Meanwhile, following a robust recovery at the start of 2023, Portugal's economy's expansion is anticipated to lose momentum in the second quarter of the year before regaining strength in subsequent periods, supported by gradual improvements in households' real disposable income and private spending. The increase in investment is expected as global commodity prices stabilize, supply chains recover, and EU funds flow in, offsetting the impact of higher interest rates.

Forecasts point out a 2.4% GDP growth for 2023 and 1.8% for 2024 (EC, 2023a). Overall inflation is predicted to decrease to 5.1%, against the 8.1% figure registered in 2022 and employment levels are expected to remain elevated, with forecasted unemployment at 6.5% and 6.3% in 2023 and 2024, respectively (EC, 2023a).

In 2022, Portugal's government deficit was reduced to 0.4% of GDP (BoP, 2022) (Figure 37). Economic rebound and labour market gains boosted government revenue, driven by inflation while scaling down COVID-19 measures curbed expenditure. For the future, the government deficit is projected to narrow to 0.1% of GDP in 2023, remaining stable in 2024, a trend driven by robust revenue growth, primarily from indirect taxation due to sustained high prices. Public investment will surge in 2023-2024 through EU-funded programs, but higher interest costs pose a risk. Contingent liabilities from credit lines and financial rebalancing of public-private partnerships are downside risks.

Figure 37: **Deficit in % of GDP - Portugal**



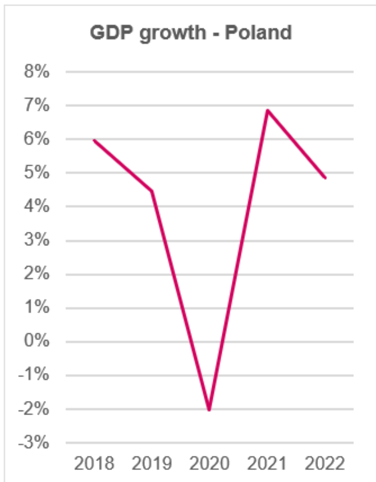
Source: Author analysis and World Bank

Portugal's public debt-to-GDP ratio dropped to 113.9% in 2022, below pre-pandemic levels, and is expected to continue declining until 2024 due to favourable growth-interest dynamics and improved government primary balance (EC, 2023a).

4.1.3. Poland

Despite substantial challenges, the Polish economy maintained robust growth throughout 2022, propelled by an expansive fiscal stance, favourable labour market conditions, and a surge in private consumption, due to the influx of displaced individuals from Ukraine, resulting in a 5.1% GDP increase (EC, 2023b) (Figure 38). However, elevated inflation, constrained financing conditions, and waning confidence among consumers and businesses exerted negative pressure on economic activity towards the year's end.

Figure 38: **GDP growth 2018-2022 - Poland**

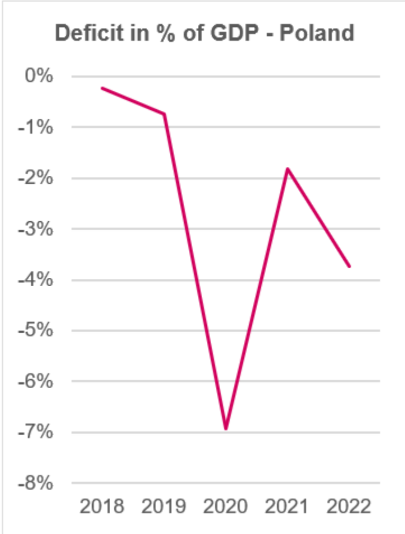


Source: Author analysis and World Bank

These adverse factors are poised to persistently influence GDP growth in the 2023-2024 forecast period. Private consumption is anticipated to moderately decline in 2023 as the boost from Ukrainian migrants diminishes and high inflation erodes real incomes. The ongoing uptrend in interest rates is also likely to suppress private consumption, particularly due to the prevalence of variable-rate mortgages.

In conclusion, diminished confidence, elevated cost pressures, and rising financing costs are expected to weigh on private investment prospects, with a projected GDP growth rate of 0.7% in 2023 and 2.7% in 2024 (EC, 2023b).
These forecasts could be negatively revised, due to Poland's tight labour market in such an inflationary environment – inflation reached 13.2% in 2022 and projections indicate 11.7% and 6.0% figures in 2023 and 2024, respectively (EC, 2023b).

Figure 39: **Deficit in % of GDP - Poland**



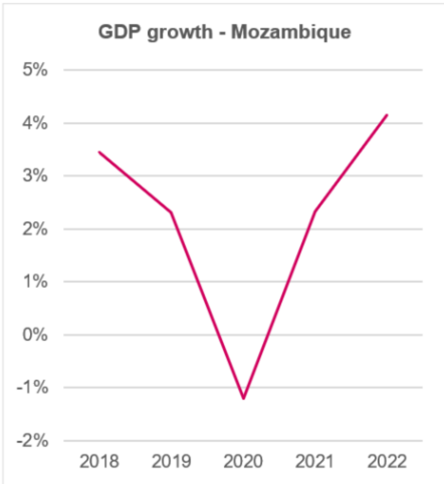
Source: Author analysis and World Bank

In 2022, the general government deficit reached 3.7% of GDP (Figure 39). The costs related to energy crisis measures, aid for displaced Ukrainians, and adverse effects of personal income tax reforms strained public finances. The fiscal balance was supported by surging revenue from corporate income taxes due to high company profits.
The general government deficit is anticipated to rise to 5.0% of GDP in 2023 and decrease to 3.7% of GDP by 2024. Other government expenditures, namely public investment, are projected to remain substantial, mainly due to military investments (EC, 2023b).

4.1.4. Mozambique

In Mozambique, economic growth achieved a 4.1% GDP growth rate in 2022, as a result of the services and agricultural sector's strong performances and the increased global demand and favourable prices of key exports like coal and aluminium (WB, 2023) (Figure 40). The registered increase from 2021 to 2022 also reflected the rebound from the COVID-19 pandemic and internal conflicts and natural catastrophes.

Figure 40: **GDP growth 2018-2022 - Mozambique**

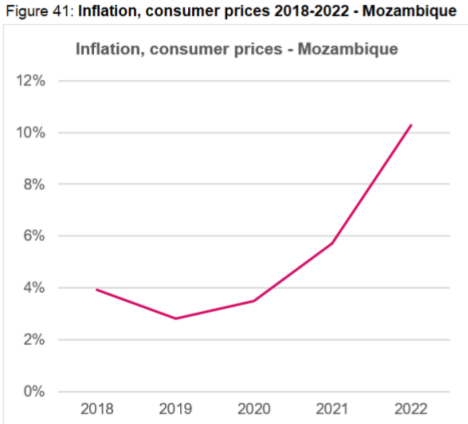


Source: Author analysis and World Bank

This growth was accompanied by elevated inflation, surging from 5.7% in 2021 to 10.3% in 2022 (Figure 41), primarily due to increases in fuel and food prices. In August 2022, the Bank of Mozambique elevated the reference interest rate to 17.25%, while the exchange rate remained stable (ADB, 2023).
The current account deficit widened to 39.1% of GDP in 2022 and the budget deficit shrank from 4.8% of GDP in 2021 to 3.7% in 2022, propelled by increased revenue stemming from higher economic activity (ADB, 2023).

GDP growth is projected to ascend to 4.8% in 2023 and reach 8.3% in 2024, driven by extractive industries and agriculture. This surge in GDP will translate to a jump in GDP per capita growth, reaching 2.0% in 2023 and 5.5% in 2024. Inflation is anticipated to decrease to 9.5% in 2023 and return to the 7.0% target in 2024. The fiscal deficit is projected to slightly deteriorate in 2023 to 4% of GDP, primarily due to wage obligations, before improving to 3.6% of GDP in 2024 (ADB, 2023).
Factors influencing this outlook encompass climate-related shocks and the insurgency in northern Mozambique. Encouraging elements include the liquefied natural gas sector's role in energy supply for electrification and sustainable transition, government investments in agricultural productivity, and subregional growth boosting the utilization of Mozambique's logistics networks (ADB, 2023). This growth outlook is also boosted by Mozambique's Government's set of measures to expand economic growth in the private sector initiated in 2022, namely through rapid job creation in the services sector (WB, 2023).

Figure 41: **Inflation, consumer prices 2018-2022 - Mozambique**

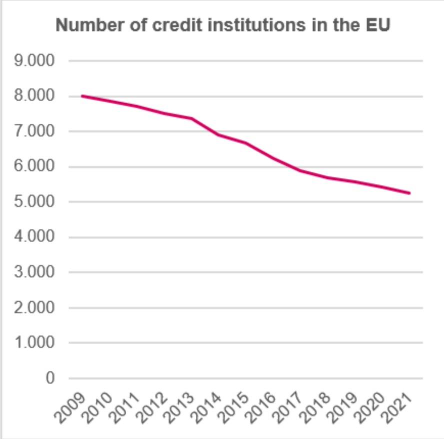


Source: Author analysis and World Bank

4.2. Market Analysis

The EU banking sector following the 2008 financial crisis exhibits features such as recapitalization, a decrease in the count of lending organizations, and operational cost improvements resulting from economies of scale (Dalla & Varelas, 2019). Indeed, since the Lehman Brothers bankruptcy and the world crisis that followed, data shows the European banking sector has been shifting into an oligopoly.
Considering the EU-27 total credit institutions, ECB data exhibits a diminishing trend from 2009 to 2021, with nearly 8,000 institutions in 2009 and approximately 5,260 in 2021 (EBF, 2022) (Figure 42).

Figure 42: **Number of credit institutions in the EU (2009-2021)**

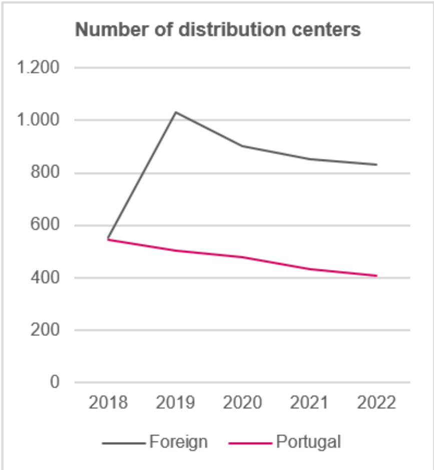


Source: Author analysis and Saravia (2022)

Moreover, the banking system is a highly regulated sector, and the increasing prudential regulation from authorities, especially since 2008, has direct impacts on banks' individual decisions and on monetary policy (Dalla & Varelas, 2019), making this a particular market, with specific mandatory rules to be met and supervised.

In 2021, Portugal's banking system registered 145 institutions, of which 61 banks, 81 mutual agricultural credit banks, and 3 savings banks. The 5 largest banking institutions represented 77% of the sector's total assets. Complying with regulatory requirements, solvency registered a historically high in 2021, as CET1 reached 15.5% (EBF, 2022).

Figure 43: **Number of distribution centers - Millennium BCP (2018-2022)**

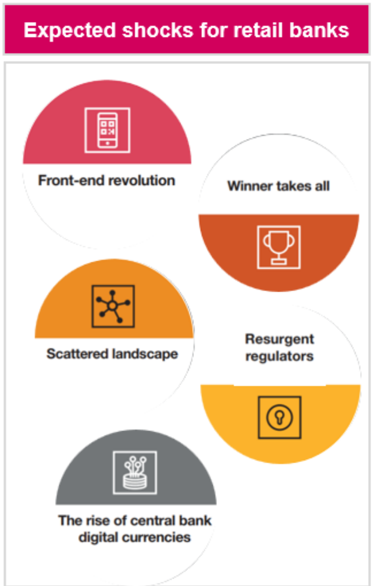


Source: Author analysis and Bloomberg

Moreover, Poland's banking system is highly stable and faces additional government regulation, with high fiscal burdens due to special banking taxes. The country registered 578 institutions in 2021 – 30 commercial banks, 511 cooperative banks, and 37 credit institution branches. Assets belonging to public banking institutions total 41%, while foreign entities with Polish branches own 43% of total assets. CET1 ratio reached 19.3% in 2021 (EBF, 2022).

In addition to regulatory challenges, the banking sector is quickly changing and evolving thanks to technological advancements that reshape the industry. Digital banking and the dematerialization of money pose threats to institutions that cannot keep up with *the massive scope of change that is underway in retail banking* (PwC, 2022), but valuable opportunities to all those that are willing to invest in the industry's future (Figure 43).

Figure 44: **Short-term challenges for retail banks**



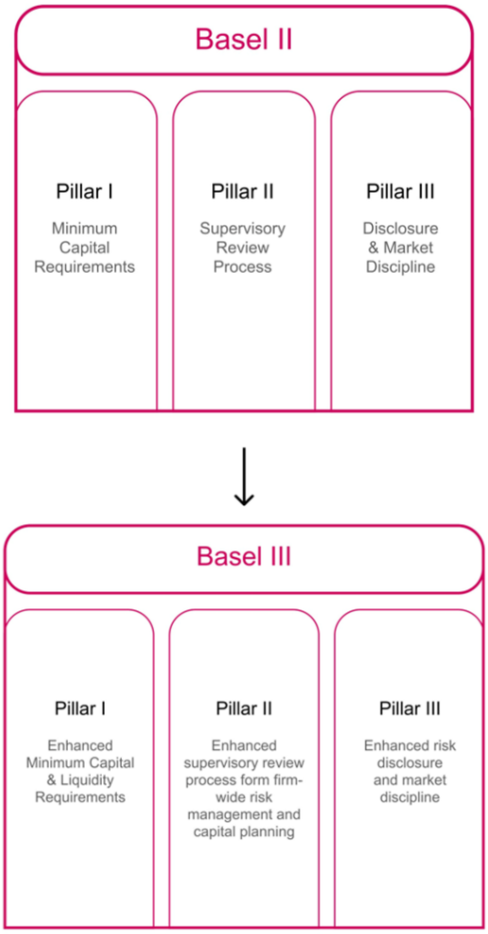
Source: Author analysis and PwC (2022)

Expectations for the industry's short-term future (Figure 44) by the Big 4 PwC include (i) big tech financial companies as new banking players, (ii) further oligopolistic changes, since *only the largest banks are able to make the technological investments necessary to create differentiated customer experience*, (iii) higher regulatory constraints, as *regulators increase barriers to entry for new entrants following concerns about data and privacy and new rules for cybercrime and antitrust*, and (iv) the rise of central bank digital currencies, *together with the development of decentralized finance and cryptocurrencies* (PwC, 2022).

4.3. Regulation

In 1988, the Basel Committee on Banking Supervision unveiled an international supervisory framework, known as the Basel Capital Accords. This set of regulations aimed to bolster the stability of the global banking sector and tackle any competitive imbalances between nations and had three phases.
The currently affecting accord, Basel III (Figure 45), was introduced in 2010 and designed to strengthen micro-prudential regulation and supervision while incorporating a macroprudential overlay featuring capital buffers (Dalla & Varelas, 2019). In June 2013, the European Parliament approved the Capital Requirements Directive (CRD) IV package became law and its implementation began in 2014, aiming to guarantee the implementation of the Basel III capital accords by all EU member states.
Overall, Basel III is a global framework on bank capital adequacy, based on three pillars, and market liquidity risk.

Figure 45: **Basel evolution - 3 pillars**



Source: Author analysis and BIS (2023)

In relation to capital requirements, the fundamental idea behind capital ratios is that banks are obligated to maintain a specific level of regulatory capital (mainly composed of equity and similar instruments) for each asset, in line with the risk associated with it. Basel III has refined the definition of what can be considered regulatory capital and has also increased the assigned risk weight for certain categories of assets. Despite CET1, the highest quality capital, only needing to account for 4.5% of Risk Weighted Assets (RWAs), the overall regulatory capital of banks must not dip below 10.5% of RWAs. Within this, 7% must be CET1 capital (comprising 4.5% for CET1 and an additional 2.5% as the Conservation Buffer) (Figure 45). Moreover, Basel III has introduced capital buffers to address and safeguard banks from specific risks they might face. These buffers can be imposed based on the unique attributes of banks, economic conditions, or evaluations by regulatory bodies (BIS, 2023).

In terms of liquidity, it became a significant concern after the 2008 financial crisis exposed numerous banks that were funding long-term investments with short-term funds, like interbank lending. This practice led to serious liquidity problems when the short-term markets froze. Subsequently, Basel III introduced two liquidity ratios, the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). These ratios aim to monitor both short-term and medium-to-long-term funding for banks and the requirement is that both surpass 100% (BIS, 2023).

Figure 46: **Basel III capital ratios vs. BCP 2022**

Basel III target	Millennium BCP @2022
CET1	
7.0%	**12.5%**
LCR	
> 100%	**212%**
NSFR	
> 100%	**154%**

Source : Author analysis

Finally, the European Sovereign Debt Crisis highlighted that several banks had excessive exposure to sovereign bonds of countries that were not entirely risk-free. As sovereign bonds of European nations commonly carried a risk weight of 0%, this risk was not accounted for in the capital ratios. Basel III introduced the leverage ratio to gauge the proportion between regulatory capital and the recorded value of assets. While the exact minimum requirement remains uncertain, regulatory bodies have indicated a probable figure of around 3% (BIS, 2023).

Millennium BCP's process of capital allocation *complies with the regulatory criteria of solvency in* force. Therefore, the RWAs*, and consequently the capital allocated to the*

business segments, are determined in accordance with the Basel III framework, pursuant to the CRD IV (BCP Annual Report, 2022).
In 2022, BCP registered a 12.5% CET1 fully implemented ratio, an LCR of 212% and an NSFR of 154% (Millennium BCP, 2022) (Figure 46).

Financial institutions are always subject to sets of accounting rules and supervision oversights they must comply with. Millennium BCP complies with the IFRS set of accounting rules for its financial statements.

4.3.1. IFRS 9

Considering the set of accounting rules financial institutions are subject to, IFRS 9 (Figure 47) emerged as a response to the Great Recession global financial crisis, driven by the G20 and other entities advocating for quicker identification of loan losses and an outlook-oriented impairment model.
This brought about the shift from the previous IAS 39 *incurred credit loss* approach to the *expected credit loss* model in IFRS 9. Unlike the prior method, which only acknowledged credit losses when an actual loss event occurred, the IFRS 9 model considers possible future credit losses even when they are anticipated.

The core aim of IFRS 9's provisions is to recognize and adjust anticipated credit losses over the duration of a financial asset's life. This results in stakeholders receiving timely information regarding anticipated credit losses.

IFRS 9 has been effective for all institutions since January 1st, 2018. Its adoption meant a true revolution for all financial services firms, especially banks, as it introduced completely new methods of classification and measurement of financial assets using a single model, avoiding exceptions and preventing arbitrary classifications (PwC, 2017). Thus, under IFRS 9, firms conduct SPPI tests for all financial assets, to rightly classify them under one of the following balance sheet categories: amortized cost, FVPL or FVOCI.

The SPPI test aims to establish if an arrangement exclusively involves paying interest and principal, without quantifying their individual amounts. IFRS 9 restricts the application of amortized cost and FVOCI to financial assets passing the SPPI test since these accounting bases are appropriate for straightforward assets. More complex instruments should be valued at FVPL. In consequence, in BCP's balance sheet:

- Loans and advances are classified at amortized cost (*Loans to credit institutions* and *to customers)*;
- Financial instruments held for trading are classified at FVPL;
- Financial instruments in the bank's own portfolio can be classified at amortized cost (*Debt securities*), FVPL (*Financial assets not held for trading mandatorily at FVPL*) or FVOCI.

Figure 47: **IFRS 9 categories**

IFRS 9 Category	Impact on financial statements
Amortized cost	The asset is measured at the amount recognized at initial recognition minus principal repayments, plus or minus the cumulative amortization of any difference between that initial amount and the maturity amount, and any loss allowance. Interest income is calculated using the effective interest method and is recognized in profit and loss. Changes in fair value are recognized in profit and loss when the asset is derecognized or reclassified.
FVOCI	Loans and receivables. Interest revenue, impairment gains and losses, and a portion of foreign exchange gains and losses, are recognized in profit and loss on the same basis as for Amortized Cost assets. Changes in fair value are recognized initially in Other Comprehensive Income (OCI). When the asset is derecognized or reclassified, changes in fair value previously recognized in OCI and accumulated in equity are reclassified to profit and loss on a basis that always results in an asset measured at FVOCI having the same effect on profit and loss as if it were measured at Amortized Cost. Investments in equity instruments. Dividends are recognized when the entity's right to receive payment is established, it is probable the economic benefits will flow to the entity and the amount can be measured reliably. Dividends are recognized in profit and loss unless they clearly represent recovery of a part of the cost of the investment, in which case they are included in OCI. Changes in fair value are recognized in OCI and are never recycled to profit and loss, even if the asset is sold or impaired.
FVPL	The asset is measured at fair value. Changes in fair value are recognized in profit and loss as they arise.

Source : Author analysis and PwC (2017)

The application of IFRS 9 had three major consequences (PwC, 2017):

i. More income statement volatility: as the new standard results in more assets being measured at FVTPL, changes in fair value can be recognized as profit or loss, according to mark-to-market variations;

ii. Earlier recognition of impairment losses on receivables and loans: Within the *expected credit loss* framework, a company determines its allowance for credit losses by assessing potential cash shortfalls in multiple default scenarios across defined future periods. As all loans bear some default risk, they inherently possess an anticipated impairment from their origination onward. As such, impairment is calculated by (a) identifying default scenarios, either individual or collective, (b) estimating the cash shortfall for each default scenario, (c) multiplying that loss by the probability of default, and (d) summing the results of all default scenarios;

iii. Significant new disclosure requirements: firms are required to detail all relevant information related to IFRS 9, which requires banks to create new systems, collect more data and enhance internal control procedures.

In conclusion, given that (i) banks' credit and financial instruments portfolios are confidential, and (ii) these may undergo significant annual changes based on adopted strategic positioning and economic circumstances, it becomes unattainable to adopt an estimation method for future impairment amounts of financial assets that aligns with the principles of IFRS 9. Nevertheless, it is essential to understand its scope to critically evaluate impairment outcomes in the projected financial statements for future periods.

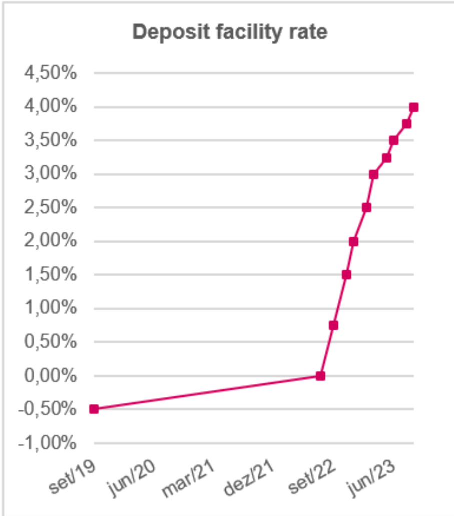
4.4. Demand & Supply Drivers

For a banking group such as Millennium BCP, present in three geographies and with multiple branches worldwide, the analysis of its demand and supply drivers considers the most relevant macroeconomic factors, according to its core activity as a retail banking group – to give credit to and capture deposits from the private sector. These drivers are not static and differ according to economic situation.

As concluded by Al-Shammari and El-Sakka (2018), the main drivers affecting credit demand in OECD countries are macroeconomic stability, including GDP growth and inflation, and monetary policy.
Concerning the supply drivers, the regulatory framework and monetary policy are the main factors affecting credit and deposits (Figures 48, 49 and 50), as they have direct consequences on banks' balance sheet positions (Altavilla et al., 2018).

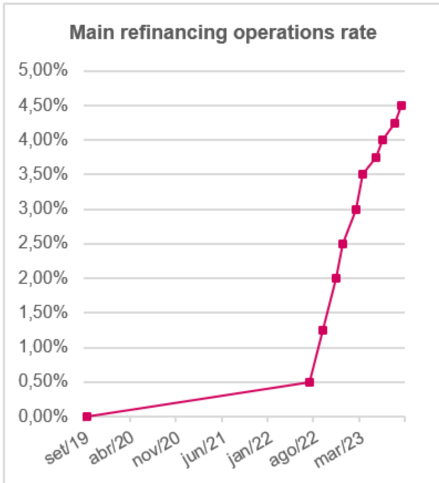
In terms of global GDP growth, the slowdown registered in 2022 is expected to persist up to 2024 – the IMF projects that the 3.1% real GDP growth of 2022 will decline to 3.0% in 2023 and 2024. Portugal and Poland's GDP growth is also expected to decelerate – *vide* further detail in previous sections 4.1.1., 4.1.2. and 4.1.3.. This is a clear sign of financial instability and a consequence of the ongoing geopolitical tensions. As the economic activity shrinks, credit growth is affected – although it may still grow over time, it may happen so at a slower pace.

Figure 48: **ECB's deposit facility rate (September 2019 - September 2023)**



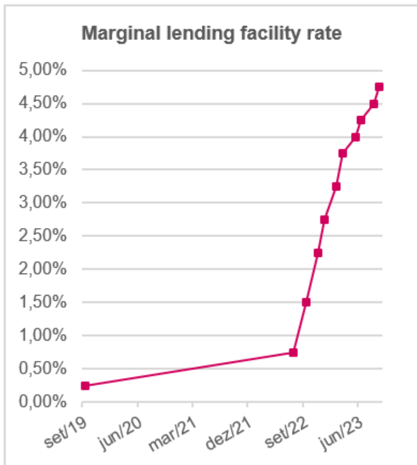
Source: Author analysis and ECB

Figure 49: **ECB's main refinancing operations rate (September 2019 - September 2023)**



Source: Author analysis and ECB

Figure 50: **ECB's marginal lending facility rate (September 2019 - September 2023)**



Source: ECB and author analysis

In addition, worldwide supply constraints of essential products, the rapid recovery in demand after the pandemic and the Ukraine-Russia war (Figure 51) caused an inflation rate increase to unprecedented levels in the EU. As the private sector suffers a decrease in its real disposable income, loan default risk surges and credit growth is negatively affected. Moreover, high levels of inflation cause a rise in public debt yields, exposing banks to higher interest rate risks.

In response to the rising inflation, the ECB put in action restrictive monetary policy mechanisms and raised its reference interest rate from 0.0% in July 2022 to 3.75% in August 2023 (ECB, 2023), and financial analysts expect one more rise in 2023 (Figures 48, 49 and 50). Relevant consequences are high volatility of the financial markets, in both equity markets and governmental bond yields and a decrease in credit growth, as Euribor rates hit historical records. Simultaneously, as the key interest rates increased, banks in the Eurozone got higher returns for their deposits in the ECB and were able to offer higher deposit rates to savers. This resulted in a higher demand for deposits.

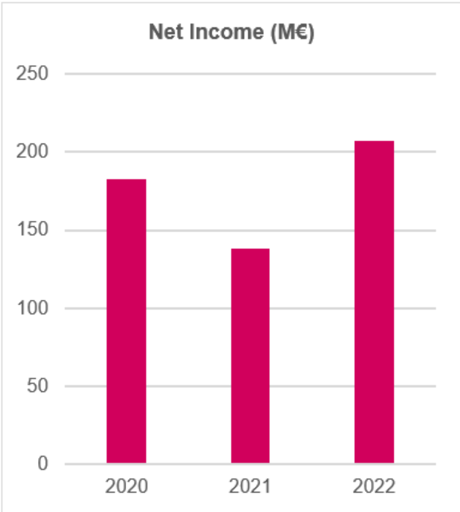
Finally, concerning the regulatory framework:

- the Russia-Ukraine conflict remains a relevant factor for the regulatory and supervisory context, *both in monitoring and in establishing the restrictions adopted by the European Union* (BCP Annual Report, 2022) (Figure 51);
- all exceptional capital and liquidity measures allowed by the ECB in the pandemic context have fallen;
- countercyclical capital buffers applicable to credit exposures remained at 0% in 2022, but as systemic risks stay persistently elevated and residential real estate prices surge, Central Banks may increase capital buffer rates to strengthen bank resilience, as already done by Croatia;
- increased pressure on capital ratios and credit policies is also likely, due to ESG regulation that may arise.

Figure 51: **Millennium BCP campaign to support Ukraine**

Source: Millennium BCP Sustainability Report (2022)

Figure 52: **Millennium BCP Net Income 2020-2022**



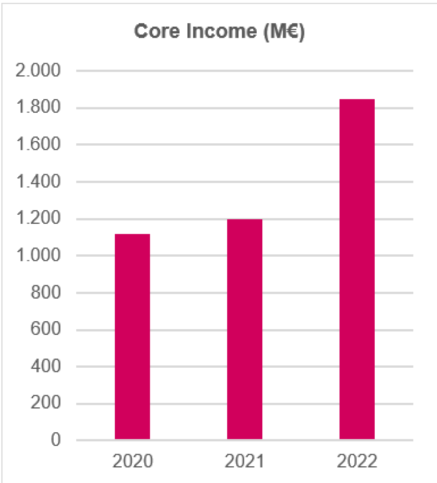
Source: Author analysis

4.4.1. Key Profitability Drivers

In 2022, Millennium BCP's combined net profit reached 207 M€, marking a considerable increase from the 138 M€ attained in the prior year (Figure 52). The Group's core income (Figures 53-54) derives from the following key profitability drivers:

1. Net interest income (Figure 55): It includes revenue the Bank generates from its interest-bearing assets (mainly loans and financial instruments) and the amount it pays for the deposits it collects (from clients and financial institutions). In 2022, the Group's net interest income reached 2,150 M€, a growth of 35.3% compared to 2021, motivated by the interests generated by the sovereign debt portfolio, the increasing interest rates for credit loans and interests from overnight deposits paid by BoP, and the increase in credit volume. The main interest costs arise from debt issuance. From 2020 to 2022, the Group exhibits increasing net interest income and net interest margin in all three geographies.

Figure 53: **Millennium BCP Core Income 2020-2022**



Source: Author analysis

2. Net commissions (Figure 56): It includes both commissions associated with banking operations (commissions generated by cards and transfers, management and maintenance of accounts, bancassurance, and credit and guarantees) and those tied to financial markets. In 2022, net commissions grew 6.1%, reaching 772 M€, due to, in part, the gradual return to normalcy in economic operations, propelled by the favourable progression of the COVID-19 pandemic. In consolidated terms, there was a notable enhancement in bank-related commissions in all geographies, but particularly significant in Portugal's operations.

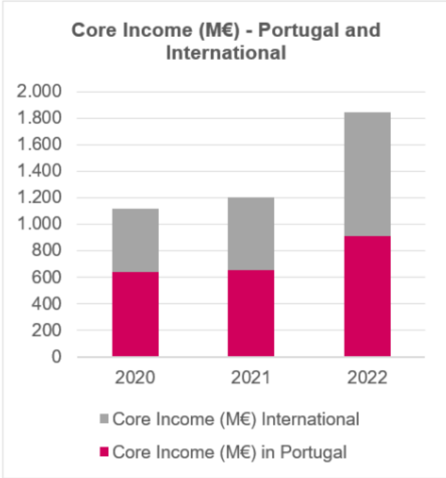
3. Dividends from equity instruments: These refer to dividends and returns from equity shares received from financial assets classified at fair value through other comprehensive income and as held for trading. In 2022, these dividends increased from 1 M€ in 2021 to 10 M€. This evolution underscores the performance of income linked to investments within the Bank's equity portfolio in Portugal, which amounted to 9 M€.

4. Net trading income: Net trading income includes results from financial operations at fair value through profit or loss (FVPL), results from foreign exchange, results from hedge accounting operations, results from derecognition of financial assets and financial liabilities measured at amortized cost and results from derecognition of financial assets measured at fair value through other comprehensive income. For the year 2022, net trading income tallied up to 50 M€, marking a decline of 42.3% from the prior year's 87 M€. This shift was predominantly guided by international operations, as a result of a Visa shares revaluation and a lower mark-to-market income from the loan portfolio mandatorily classified at FVPL, but also by a decrease in net trading income in Portugal, due to lower results associated with Portuguese sovereign debt securities.

5. Other net operating income: In 2022, other net operating income stood at -183 M€, compared to -126 M€ in 2021. This change was influenced by increased costs related to mandatory banking contributions, both domestically and internationally. Specifically in Portugal, other net operating income declined from -66 M€ in 2021 to -76 M€ in 2022. Internationally, other net operating income reached -107 M€ in 2022, compared to -60 M€ in 2021. This was driven by the Polish subsidiary's increased costs with mandatory contributions and impacts related to the foreign exchange mortgage loan portfolio.

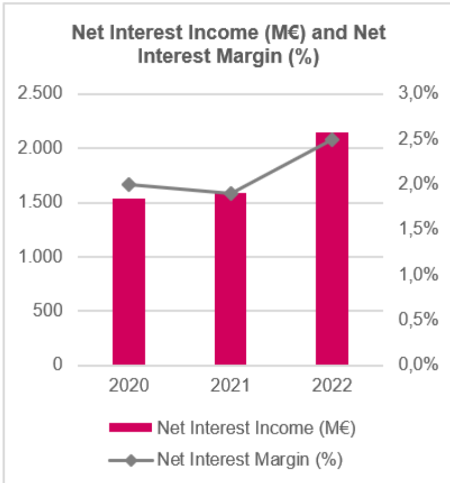
6. Equity accounted earnings: It includes results related to entities where the Group holds influence but does not control. In 2022, equity-accounted earnings from associates increased favourably from 57 M€ in 2021 to 69 M€, primarily driven by noteworthy contributions from participation in Unicre and Millennium BCP Ageas.

Figure 54: **Millennium BCP Core Income PT & International 2020-2022**



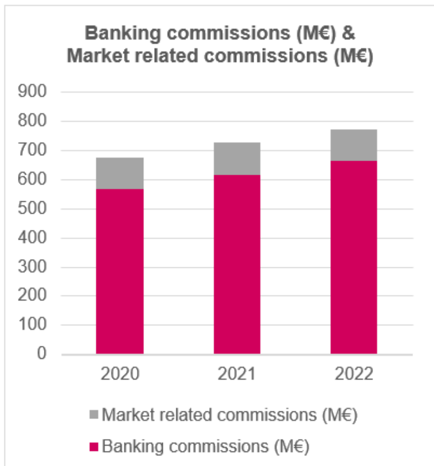
Source: Author analysis

Figure 55: **Millennium BCP Net Interest Income (€) and Net Interest Margin (%)**



Source: Author analysis

Figure 56: **Millennium BCP Commissions 2020-2022**



Source: Author analysis

4.5. Porter's Five Forces

As an essential pillar in the functioning of modern economies, the European retail banking sector holds significant influence and is highly influential in the face of industry disruptions (Figure 57).

Concerning the bargaining power of suppliers, as capital takes centre stage in the retail banking sector, its primary source revolves around customer deposits, debt securities issued, mortgage-backed securities, and resources from credit institutions. Furthermore, the ECB is another significant supplier, as it controls monetary policy, namely interest rates, and dictates regulatory requirements. Considering that these are heavily influenced by market dynamics and macroeconomic conditions (as seen in 4.4.) and that the industry integrates solid banking groups, with reliable financial positions, the power in question is seen as medium.

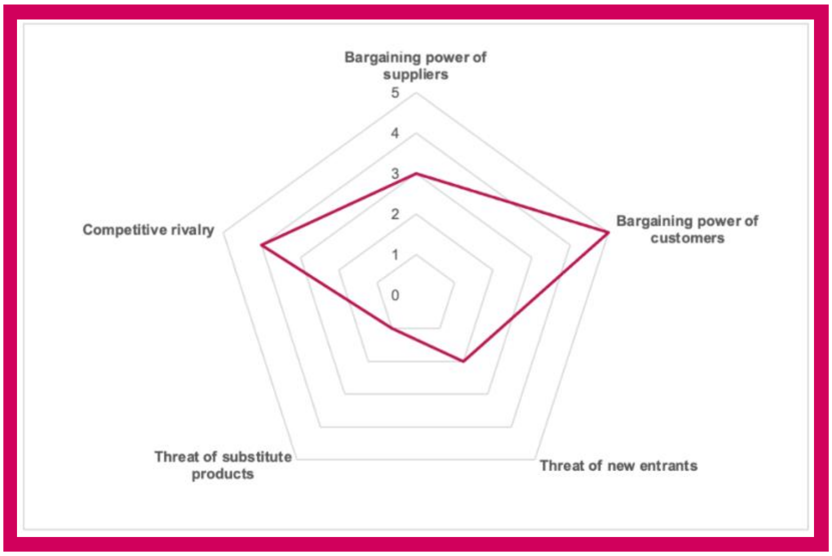
As for the bargaining power of customers, loans and advances can be hired by credit institutions, individual customers, or corporate customers. Corporate customers also hire other investment banking services, such as corporate, structured and trading products. Although individual consumers have relatively low bargaining power – the loss of a single client has minimal impact on a bank, other credit institutions and large corporate customers have greater influence, due to their potential to inflict substantial setbacks on the bank's earnings through the departure of substantial accounts and revenue streams. In conclusion, the bargaining power of customers is high.

The industry must also consider the threat of new entrants. It may, on the one hand, seem low – it is true that the threat of new entrants from within the financial industry is small, especially to a large banking group such as Millennium BCP. There are many obstacles, namely capital and legal requirements, and the time it takes to build confidence and captivate clients. On the other hand, the market consolidation tendency has been creating new large industry players through M&A among already existing banks and new financial firms such as fintechs have been disrupting the market. As such, the threat of new entrants is medium-low.

Furthermore, the threat of substitute products is low. In the realm of retail banking, substitute products are offered by fintech and consulting firms, but banks' advantage relies on the fact they presently offer bundled services with tailored conditions, especially for large corporate clients, that remain unrivalled by superior alternatives.

Finally, in relation to competitive rivalry, the fact the industry tends to be increasingly concentrated, with large banking groups as primary players, intensifies competition, making it medium-high. The almost inexistent obstacles to changing banks have heightened competitive pressures. Even though slight adjustments to factors interest rates on loans and deposits might not prompt most customers to switch banks, the competition remains pronounced, as there are no new markets to explore in Europe. Furthermore, the emergence of fintech startups offering cost-effective financial services has spurred banks to reassess their business models to align with technological advancements, create innovative products that captivate younger clients and sustain competitiveness.

Figure 57: **Porter's Five Forces pentagram**



Source: Author analysis

4.6. SWOT Analysis

Millennium BCP, the largest private banking group in Portugal, stands as a robust entity with a range of strengths that underpin its market position and well-recognized brand across all the regions it operates in (Figure 58). Moreover, being the sole Portuguese banking group listed on the stock exchange bolsters its visibility and accountability.
However, along with these strengths come certain weaknesses that Millennium BCP must address. Regulatory hurdles, particularly concerning Bank Millennium and the associated legal risks related to foreign currency mortgage loans in Poland, pose a significant concern. Moreover, managing the sovereign debt portfolio within the context of rising interest rates requires careful navigation.

Amidst these challenges, a realm of opportunities is also identified. The surge in digital customers and the growing prevalence of online transactions present avenues for innovation and digitization to drive competitive differentiation. Additionally, the alignment of ESG principles with the loan portfolio and financial operations origination presents a route for sustainable growth.
Yet, the landscape also presents threats. The potential approval of extraordinary fiscal measures and mandatory contributions could impact financial results, adding to the uncertainty. The emerging ESG regulations also impose pressure on capital ratios, warranting careful financial management. The risk of cybersecurity incidents remains a concern, alongside the challenges of macroeconomic instability, geopolitical conflicts, and market volatility.

Figure 58: **SWOT matrix**

Strengths	**Weaknesses**
○ Largest Portuguese privately-owned banking group ○ Well-known brand in all geographies where it operates ○ Diversification of business segments, including investment banking and bancassurance, which diminishes segment concentration risks ○ Being the only Portuguese banking group listed on the stock exchange ○ Strong focus on ESG and sustainable operations ○ Best consumer digital bank	○ Capacity to quickly react to regulatory challenges, especially concerning Bank Millennium and the legal risks associated with the portfolio of mortgage loans granted in foreign currency in Poland ○ The size of the group's sovereign debt portfolio classified as FVOCI in a context of increasing interest rates
Opportunities	**Threats**
○ Growing number of digital customers and increase in online transactions as an incentive to invest in innovation and digitalization and accelerate BCP's competitive differentiation ○ Further integrating ESG principles on the loan portfolio and financial operations origination	○ Risks of approval of extraordinary fiscal measures and mandatory contributions that may affect results ○ Pressure on capital ratios arising from ESG regulation ○ Eventual cybersecurity incidents ○ Macroeconomic instability, as GDP growth weakens, inflation persists, and the Ukraine-Russia conflict continues ○ Volatility in capital markets ○ Limitations on access to available and qualified labor

Source: Author analysis

5. Investment Summary

Millennium BCP has a strong buy recommendation with a 2024YE PT of 0.34 €.

This represents an upside potential of 55% based on the June 19th, 2022 closing price of 0.22€ (Figure 59), considering the investment's medium risk.

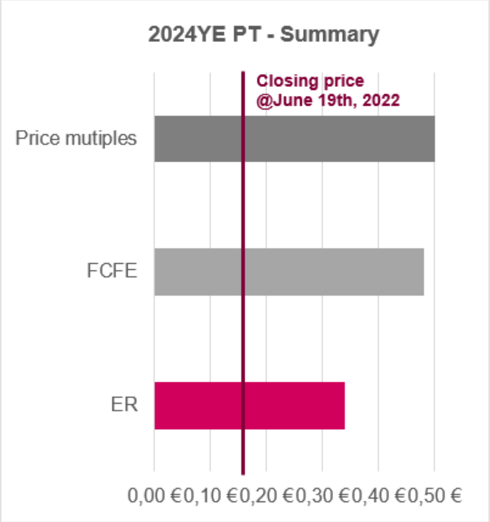
Hence, Millennium BCP's stock is trading at a discount (Figure 60) due to:

- Interest rate risk, and the imminent prospect of another rate hike;
- Macroeconomic instability, considering the Russian-Ukrainian war and high inflation pressure on European economies;
- Market expectations are that the historical peaks of banks' profitability are near their highest point.

Nonetheless, the recommendation considers the Bank's:

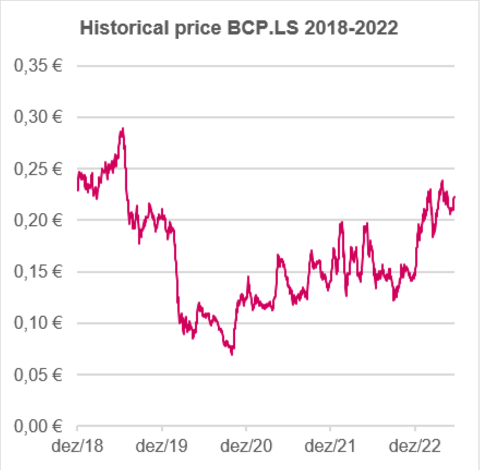
- Robust business model, with a solid CET1 ratio and reinforced liquidity position;
- The decrease of NPAs;
- Profitable results, despite conservative provisioning in Poland;
- Capacity to increase its customer base;
- Number one offer of financing credit lines with European public guarantees;
- Activity as Portugal's main lead bank in debt capital market operations.

Figure 59: **BCP 2024YE PT per valuation method**



Source: Author analysis

Figure 60: **Millennium BCP's historical price (€) 2018-2022**



Source: Author analysis and Yahoo Finance

5.1. Valuation Methods

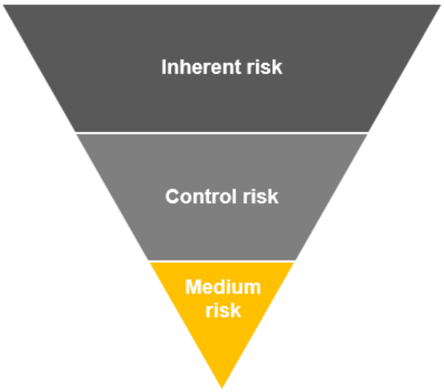
The absolute valuation methods computed were the Excess Return (ER) and the Free Cash Flow to Equity (FCFE), considering Damodaran's analysis (section 6.1. below). Both methods led to similar conclusions, ranging from 0.34 € to 0.48 € (Figure 56). The ER result was the base model to support the present investment conclusion, as the net income considered to the FCFE is a lacking approximation to the remaining cash flow after debt payments and reinvestments.

Lastly, a comparative valuation analysis was performed using multiple comparables with equal weighting, based on a specific set of criteria while selecting peer companies for comparison. The multiples results are in line with the absolute valuation conclusion and reinforce the strong buy recommendation.

5.2. Investment Risk

Despite a strong buy recommendation, Millennium BCP's stock carries a medium risk, considering the inherent risk and the control risk the Bank faces – inherent risk, due to the risk posed by any errors or omissions the financial statements may have, given its activity's complexity; and control risk, if the Bank's control framework reveals itself insufficient or inadequate in face of the current macroeconomic instability (Figure 61). The medium risk assessment also considers the tight requirements the Bank's internal control system governance model must meet and its close monitoring by external auditors and banking supervision authorities (section 8.1. below).

Figure 61: **Investment risk**



Source: Author analysis

6. Valuation

Millennium BCP's valuation conducted in the present research considers the Bank's forecasted financial statements (Appendices 2-4), the assumptions underlying the financial statements forecast (Appendices 5-11), and the absolute and relative valuation methods (Figure 59).

6.1. Financial Service Firms' Valuation

Valuing financial service firms is a difficult exercise in comparison with valuing other firms in the market. Traditionally, a business or asset's value is estimated using two pilar methods:

(i) the expected cash flows that come from ownership, discounted back at a risk-adjusted rate or

(ii) a relative valuation, considering the asset's market value (Damodaran, 2013). Although this is also true for banks (retail and investment), insurance companies and other financial institutions, these firms operate under circumstances that pose a challenge to an effective valuation using the above methodologies, especially retail banking institutions.

Firstly, banks are globally subject to stringent regulations, that may be categorized into three types:

a) First, banks and insurance companies must maintain specific capital ratios based on their risk exposure to ensure they operate within their financial capacity and don't jeopardize the interests of their claim holders or depositors (Damodaran, 2013);
b) Second, regulatory authorities control the entry of new firms into the financial sector, as well as any mergers between existing firms, as seen with the recent UBS-Credit Suisse acquisition, a solution directly promoted by the Swiss Financial Market Supervisory Authority;
c) Third, financial service firms often face limitations on how they can invest their funds.

The significance of all three restrictions pointed out above lies in their impact on the valuation of financial services firms since assumptions made about growth and reinvestment are closely tied to regulatory constraints.

Secondly, the accounting rules and standards that banks are subject to are different from those applied to the rest of the market. Banks and financial firms either adopt the IFRS framework or GAAP standards, which guide banks in valuing their assets, consisting mainly of financial instruments and/or loans and advances. Under the IFRS framework, IFRS 13 and IFRS 9 are respectively key mandatory guidelines, as seen before for the latter in section 4.3.1.

Unlike what happens for most firms, banks own tradable financial instruments, such as securities and bonds, valued at fair value, as it is possible to know at any given moment their mark to market value.

If a substantial portion of banks' assets is marked to market, while most nonfinancial services firms' assets are not, it becomes difficult to compare and interpret ratios based on book value (such as price-to-book ratios and return on equity) between financial and nonfinancial firms. For nonfinancial services firms, the return on equity can be seen as a measure of the return earned on the equity initially invested in assets. However, banks' return on equity is influenced by the book value of equity, which represents an updated market value, rather than the original investment in assets (Damodaran, 2013).

Furthermore, banks' assets are also subject to an extensive amount of accounting estimates, as described by IAS 8 and IAS 37, increasing the complexity of the analyst's valuation. This becomes clear in the risk of credit default and its estimation, which influences the provisions created for losses.

Thirdly, determining debt in a bank poses a significant challenge. If we were to categorize all short-term and long-term borrowings as debt, the resulting debt ratios for banks would reach exceedingly high levels (Damodaran, 2009). As a result, financial services firms have a restricted definition of capital, including only equity capital. This limited scope of capital is further supported by regulatory entities, which primarily use equity as the core measure for regulatory capital (Damodaran, 2013).

Lastly, estimating cash flows for banks is much harder than for other firms, as they do not invest in tangible assets. Banks' investments are usually disclosed under operating expenses such as human capital costs, and intangible assets and can be highly volatile. Hence, the cash flow statement of a bank normally indicates minimal capital expenditures and, as a result, reflects low depreciation expenses. Moreover, future investments are often undisclosed information.

As pointed out by Damodaran (2013), this created two problems: *the first is that we cannot estimate cash flows without estimating reinvestment. In other words, if we cannot identify how much a company is reinvesting for future growth, we cannot estimate its free cash flows today. The second is that estimating expected future growth becomes more difficult if the reinvestment rate cannot be measured.*

In the face of all four circumstances described, Damodaran (2009) concludes that, as an absolute valuation model, a discounted cash flow model adapted to an equity basis is the correct approach to value a financial services firm. The variants of this model for a firm such as a bank are the following:

1. To use dividends as cash flows to equity and presume that companies gradually distribute their available free cash flows to equity in the form of dividends (as dividends are directly observable, this eliminates the need to address the problem about the extent of reinvestment undertaken by firms);
2. To modify the free cash flow to equity calculation to accommodate the regulatory capital ratios;
3. To adopt excess returns as the core focus, rather than fixating on earnings, dividends, and growth rates.

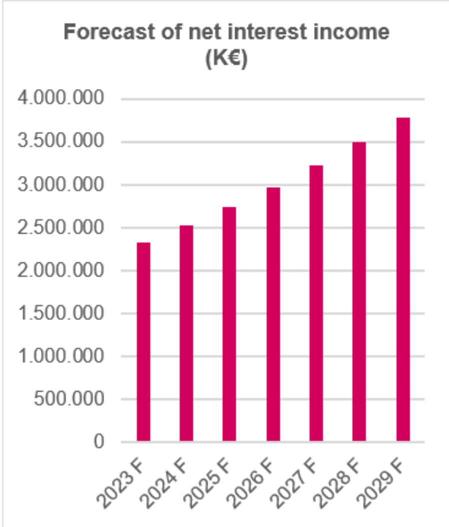
Regarding relative valuation models for financial services firms, Damodaran (2009) points out the price-to-earnings ratio (excluding provisions for bad loans from earnings) and the price-to-book value ratio as the most reliable.

In conclusion, the present equity research follows the Damodaran guidelines discussed above and calculates the FCFE and the ER as absolute valuation models, and the price-to-earnings ratio and the price-to-book value ratio as relative.

6.2. Valuation Methods' Main Drivers

As highlighted in section 6.1., financial institutions possess distinct traits that constrain the range of valuation methods suitable for their assessment. While both absolute valuation methods rely on net profit and estimated cost of equity, the substantial difference between the two lies in the concept of *excess equity return* versus *investment in regulatory capital*. In contrast, the relative valuation considers an initial peers' selection and results based on the P/E and P/B ratios.

Figure 62: **Forecast of net interest income (2023-2029)**

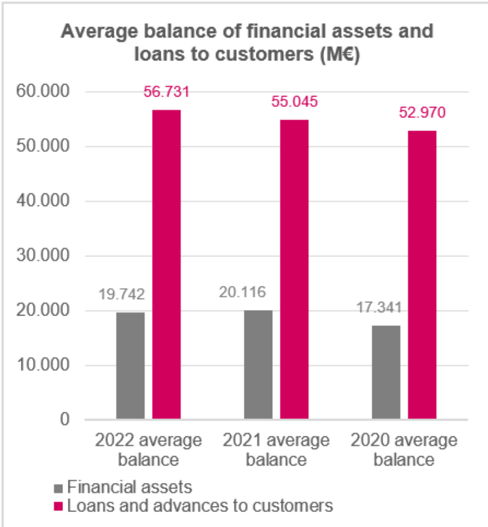


Source: Author analysis

Firstly, regarding net profit, BCP's results are mainly driven by the Group's net interest income. In 2022, net interest income surged to 2,150 M€, marking a growth of 35.3% compared to the previous year's figure of 1,589 M€. This favourable increase in net interest income was evident across all three geographical regions where the Bank conducts its operations. In the international sphere, net interest income closed the year 2022 at 1,199 M€, reflecting a growth of 58.3% from the 757 M€ recorded in 2021.

As net interests are driven by favourable interest rates and higher increasing interests paid on loans than deposits, the 2023-2029 forecast is based on a 7.69% yearly increase of interest and similar income and a 4.74% yearly increase of interest expense and similar changes (Figure 62). Both rates result from 2018-2022 CAGR and are in accordance with BCP's client's deposit and loan base increase, as well as increasing results from the Bank's public debt portfolio (Figure 63).

Figure 63: **Millennium BCP's historical price (€) 2018-2022**



Source: Author analysis

Secondly, the estimated cost of equity is a common characteristic for both absolute models used. *The cost of equity for banks equates to the compensation that market participants demand for investing in and holding banks' equity* (Altavilla et al, 2021). The estimated cost of equity underlying Millennium BCP's 2024YE PT is 17.72%.

It reflects a 3.029% risk-free rate, equal to the Portuguese Government 10-year bond yield, an 8.371% EQRP and a 1,755 Beta, as of June 19th, 2023 (Figure 64).

Figure 64: **Estimated cost of equity of BCP forecast**

2024YE PT underlying cost of equity	
17.72%	
Risk-free rate	3.029%
EQRP	8.371%
Beta	1.755

Source: Author analysis

6.2.1. Excess Return Method

The ER method employed for the Bank's valuation (Appendix 16) results in a 2024YE PT of 0.34 € (Figure 65), meaning a 55% upside potential from the June 19th, 2023 price. This is the base model used to support the investment conclusion as it captures the business complexity and disregards the challenges associated with regulatory capital changes. The ER concept determines that growth is valuable only when it comes with surplus returns, meaning returns on equity that surpass the cost of equity or capital. Hence, the model calculates the Bank's value based on anticipated excess returns.

The final ER valuation considers 7.4 M€ of equity invested at 2024YE , assuming:

- a 3 M€ share capital;
- constant share premium and other equity instruments;
- constant Net income for the year attributable to the Bank's Shareholders, as increases in net income are assumed to be distributed between Legal and

statutory reserves and Reserves and retained earnings, in compliance with DL no. 201/2002 (September 26).

The present value of Equity Excess Return totals -2.3 M€ (Figure 65), denoting a cost of equity higher than BCP's ROE. This reflects the industry's tight regulatory constraints and mandatory capital requirements, but the forecast predicts a decreasingly negative excess equity return up to 2029.

Figure 65: **Excess Return valuation**

2024YE PT under ER valuation	
Equity Invested	7.395.764
PV of Equity Excess Return	-2.313.435,95
Value of Equity	5.082.328,46
Number of shares	15.114.000
Value Per Share	0,34 €

Source: Author analysis

6.2.2. Free Cash Flow to Equity

The FCFE method employed for the Bank's valuation (Appendix 17) results in a 2024YE PT of 0.48 € (Figure 66), meaning a 117% upside potential from June 19th, 2023. This model considers the difference between net income and investment in regulatory capital, and it does not capture the difference between operating and investment cashflows.

Figure 66: **FCFE valuation**

2024YE PT under FCFE valuation	
Value of Equity	7.207.360
Number of shares	15.114.000
Value Per Share	0,48 €

Source: Author analysis

On the one hand, fluctuations in regulatory capital have an adverse impact on shareholder returns, ultimately destroying value. Estimating changes in regulatory capital requires evaluating future capital ratios and projected RWAs. Millennium BCP's RWAs from 2023 to 2029 forecasted years are expected to be consistently higher than in 2022, the reason why the investment in regulatory capital is considered zero. Indeed, the Bank already met all regulatory capital requirements imposed by European authorities in 2022. As a result, the FCFE in each forecasted year equals Net income.

Figure 67: **Multiples valuation - peers selected**

Selected Peers		
Peer Banks	P/E	P/B
Bankinter	10,06	1,15
Sabadell	6,78	0,37
Powszechna	11,34	1,06
CGD	11,21	1,00
BPI	10,59	1,00

Source: Author analysis

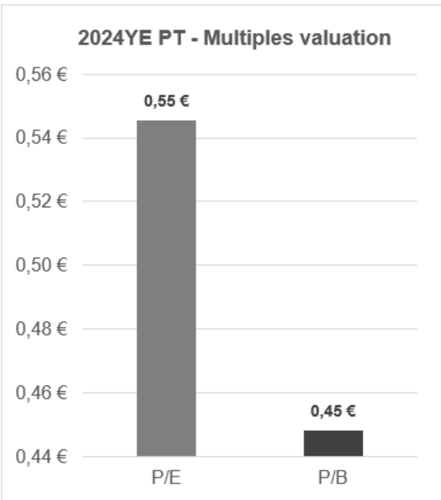
On the other hand, the terminal growth rate exposes the long-term growth of the company's FCFE. It is a crucial estimation step, as it directly influences the terminal value. For BCP, the projected expected growth in earnings is 7.8%, following Damodaran's approach: ROE · (1 – Dividend Payout ratio) (Damodaran, 2013).

As this method uses a lacking remaining cash flow after debt payments and reinvestments and considers an estimated expected future growth which may not reflect the reinvestment rate, the FCFE approach is less accurate.

6.2.3. Market-Based Valuation

The multiples valuation is a method used to ascertain a company's value by comparing it to a peer group operating in the same industry (Figure 67). For Millennium BCP, a relative valuation was performed based on a group of nine peers and their multiple values. In order to select five benchmark peers (Figure 67), the following indicators were used: Market cap at 2022YE, earning-per-share growth, ROE, total deposits, total loans, total assets and total loans/total assets (Appendix 18).

Figure 68: **BCP 2024YE PT - Multiples valuation**



Source: Author analysis

The price multiples considered to compute the PT were the following (Figure 68):
- P/E ratio, with a benchmark average of 10.00, resulting in a 2024YE PT of 0.55 €;
- P/B ratio, with a benchmark average of 0.92, resulting in a 2024YE PT of 0.45 €.

The final average between the two price multiples results in a 2024YE PT of 0.50 €.

7. Financial Analysis

7.1. Capital

Regarding capital ratios (Figure 69), the ECB prescribed Millennium BCP a 9.41% CET1 ratio, an 11.38% Tier 1 capital ratio and a 14% total capital ratio from January 1st, 2023. In 2022, the Bank surpassed all three, reaching 12.5%, 11.3% and 14.4%, respectively. The conducted forecasts from 2023 to 2029 result in robust capital ratios, always above the minimum requirements pointed out by the ECB.

Results for the Portuguese banking system with reference to December 31st, 2022 show the total capital ratio reached 18.1% (BoP, 2023). Although BCP's ratio was still below this figure, the present forecast predicts the Bank will surpass it in 2027. Nevertheless, the Bank's results are in line with an overall European tendency of capital requirements strengthening.

7.2. Profitability & Return

In 2022, the Portuguese banking system registered significant increases in ROA and ROE, reaching 0.7% and 8.8%, respectively (BoP, 2023). Although BCP's 2022 results are still far from those, the 2023 forecast is in line with these results, showing 0.8% and 11.1%, respectively. Future results reflect this positive evolution.

Developments in profitability are also a result of an increase in net interest margin (Figure 70) – it registered a 3.1% in 2022, with predictions showing 0.16-0.27 pp. increases until 2029.

7.3. Liquidity

Regarding liquidity, BCP ended 2022 on a rather positive note: it registered 212% and 154% LCR and NSFR, way above Basel III requirements.

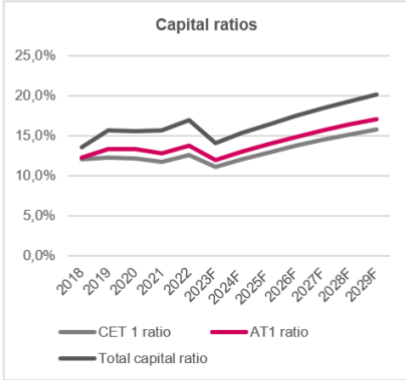
For the 2023-2029 forecast, the loan-to-deposit and loan-to-asset ratios are projected to stay above 80% and 60%, respectively (Figure 71).

7.4. Efficiency

In 2022, Millennium BCP registered a 42.26% cost-to-income ratio, a better result than the 50.40% of the Portuguese banking system (BoP, 2023). This reflects a total increase in total operating income rather than in operational costs, a pattern that will positively evolve according to the forecast conducted.

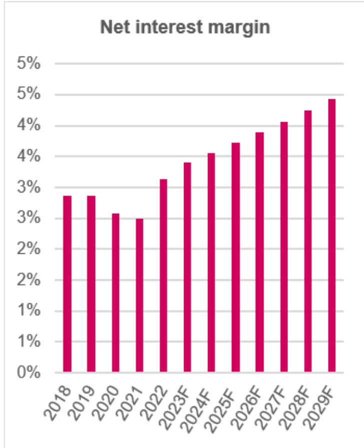
In addition, as BCP's asset quality portfolio is predicted to increase while loans to customers increase as well, the loan loss provision ratio is expected to decrease from 16.4% in 2023 to 13.1% in 2029 (Figure 72). The only increase is predicted to happen from 2022 (10.8%) to 2023, as the interest rate increase will generate difficulties in debt payments for families and companies.

Figure 69: **Capital ratios (2018-2029)**



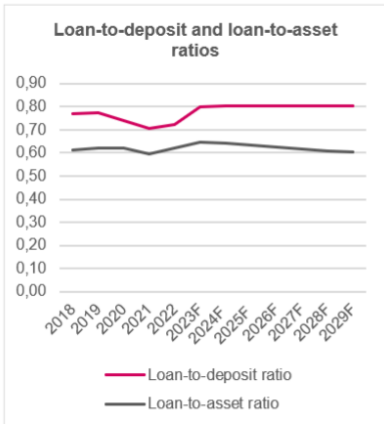
Source: Author analysis

Figure 70: **Net interest margin (2018-2029)**



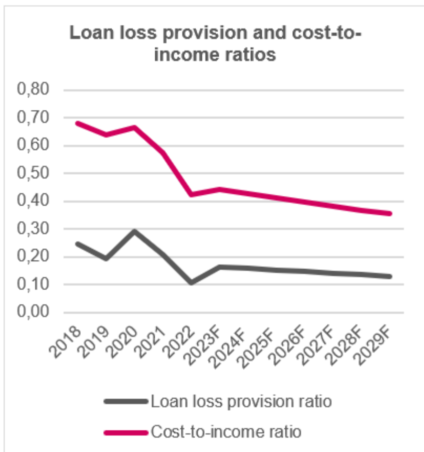
Source: Author analysis

Figure 71: **Loan-to-deposit and loan-to-asset ratios (2018-2029)**



Source: Author analysis

Figure 72: **Loan loss provision and cost-to-income ratios (2018-2029)**



Source: Author analysis

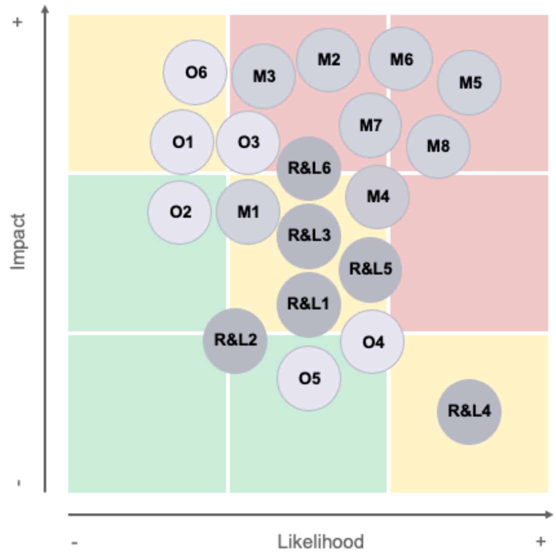
8. Investment Risks

8.1. Risk Identification

Every bank carries its business based on the compatibility between the goals it sets and the levels of risk tolerance it considers acceptable to achieve sustainability and profitability results. Millennium BCP is no exception, as the *Group establishes and implements controls and limits on the material risks to which its activities may be subject, based on its "Risk Appetite Statement"* (BCP Annual Report, 2022).

The risks presented below (Figure 74) can be both internal – operational risks, or external – market risks and regulatory risks, and can be considered globally, forming a risk matrix (Figure 73).

Figure 73: **Risk Matrix**



Source: Author analysis

Figure 74: **Millennium BCP's internal and external risks**

Risk	Sources of Risk	Level of risk	Risk trend
Regulatory and legal (R&L)	Increase in regulatory complexity in Europe (R&L1)	Medium	Rising
	Fast-changing ESG regulatory framework (R&L2)		
	Changing provisioning requirements imposed by EBA (R&L3)		
	Mortgage moratoria as an extraordinary measure imposed by Portuguese Government (R&L4)		
	Anti-money laundering additional requirements stemming from the war in Ukraine (R&L5)		
	Impacts of the Central Bank Digital Currency on the banking model (R&L6)		
Market (M)	High public deficit and weight of debt in GDP in Portugal (M1)	High	Rising
	Impact of rising interest rates on the cost of sovereign debt and NPL (M2)		
	Exposure to Eurozone, Polish and Mozambican sovereign debt (M3)		
	No prospects of a short-term resolution of the geopolitical conflict in Ukraine (M4)		
	Possibility of stagflation in Europe (M5)		
	Potential deterioration of economic and financial situation of companies and families in Europe caused by inflation and rising interest rates (M6)		
	Delay in implementing the Recovery and Resilience Plan in Portugal (M7)		
	Litigation associated with the Swiss franc loan portfolio in Poland (M8)		
Operational (O)	Rising cyber threats related to remote work and increasing digital channels and solutions for clients (O1)	Medium	Stable
	Greater rigor in data management and control related to increasing data storage and digital channels use (O2)		
	Need to manage individual requests for the mortgage moratoria and closely follow financial deterioration signs in debt repayment (O3)		
	Need to comply with MREL and difficulty in market access in Poland (O4)		
	Management of pension fund assets and liabilities in face of increasing wages of employees (O5)		
	Need to manage and adapt investment portfolios to increasing volatility in financial markets (O6)		

Source: Author analysis and BCP Annual Report (2022)

8.2. Sensitivity Analysis

Considering the potential risks that Millennium BCP may encounter, we conducted a sensitivity analysis on various factors to evaluate the robustness of the recommendation provided.

Two sensitivity scenarios were conducted – (1) the relation between the percentage of impairment for financial assets at amortized costs over financial assets at amortized costs and the growth rate of interest and similar income; and (2) the joint effect of the EQRP and beta.

8.2.1. Price Sensitivity to Impairment of Financial Assets and Growth Rate of Interest and Similar Income

The 2024YE PT of 0.34 € assumes a 7.69% growth rate of interest and similar income, alongside a 0.70% average of impairment for financial assets at amortized cost over financial assets at amortized cost (Figure 75).

- In the <u>best case scenario</u> – a 9.19% increase in interest and similar income and a 0.25% average impairment for financial assets held at amortized cost compared to financial assets held at amortized cost, BCP's PT is equal to 0.45 €.
- In the <u>worst case scenario</u> – a 6.19% increase in interest and similar income and a 1.15% average impairment for financial assets held at amortized cost compared to financial assets held at amortized cost, BCP's PT is equal to 0.17 €.

Figure 75: **Price sensitivity – % of impairment of financial assets and growth rate of interest income**

Average of Impairment for financial assets at amortised cost over Financial assets at amortised cost (%)	Growth rate of interest and similar income						
	6,19%	6,69%	7,19%	7,69%	8,19%	8,69%	9,19%
0,25%	0,30	0,33	0,35	0,38	0,40	0,43	0,45
0,40%	0,28	0,31	0,34	0,36	0,39	0,42	0,44
0,55%	0,27	0,30	0,32	0,35	0,38	0,40	0,43
0,70%	0,25	0,28	0,31	0,34	0,36	0,39	0,41
0,85%	0,23	0,26	0,29	0,32	0,35	0,37	0,40
1,00%	0,21	0,25	0,28	0,31	0,33	0,36	0,39
1,15%	0,17	0,23	0,26	0,29	0,32	0,35	0,37

Source: Author analysis

8.2.2. Price Sensitivity to EQRP and Beta

The 2024YE PT of 0.34 € assumes an 8.37% EQRP, alongside a 1.755 beta (Figure 76).

- In the <u>best-case scenario</u> – a 5.37% EQRP and a 1.155 beta, BCP's PT is equal to 0.50 €.
- In the <u>worst-case scenario</u> – an 11.37% EQRP and a 2.355 beta, BCP's PT is equal to 0.19 €.

Figure 76: **Price sensitivity – EQRP and beta**

Beta	Equity risk premium						
	5,37%	6,37%	7,37%	8,37%	9,37%	10,37%	11,37%
1,155	0,50	0,47	0,45	0,42	0,40	0,38	0,36
1,355	0,48	0,45	0,42	0,39	0,37	0,35	0,33
1,555	0,45	0,42	0,39	0,36	0,34	0,31	0,29
1,755	0,43	0,40	0,36	0,34	0,31	0,29	0,26
1,955	0,41	0,37	0,34	0,31	0,28	0,26	0,24
2,155	0,39	0,35	0,32	0,29	0,26	0,24	0,22
2,355	0,37	0,33	0,30	0,27	0,24	0,22	0,19

Source: Author analysis

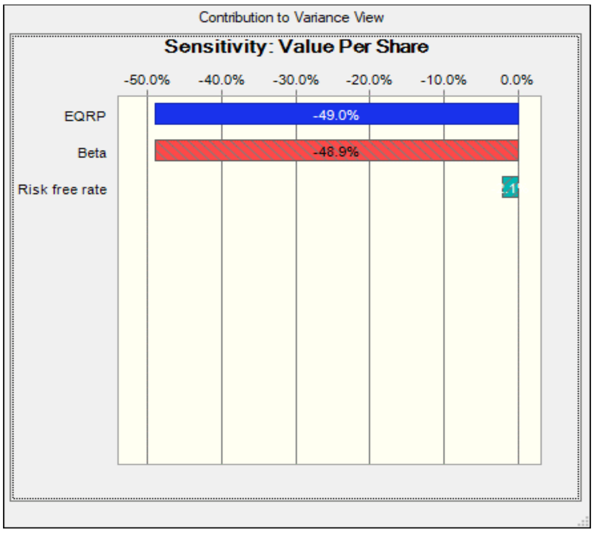
8.3. Monte Carlo Simulation

A Monte Carlo simulation of simulations was performed using *Crystal Ball* and stressing growth rates for 3 variables – EQRP, Beta and Risk-free rate.

Results confirm that the most relevant drivers in Millennium BCP's valuation are the EQRP and the Beta (Figure 77), reason why the simulations consider these two variables.

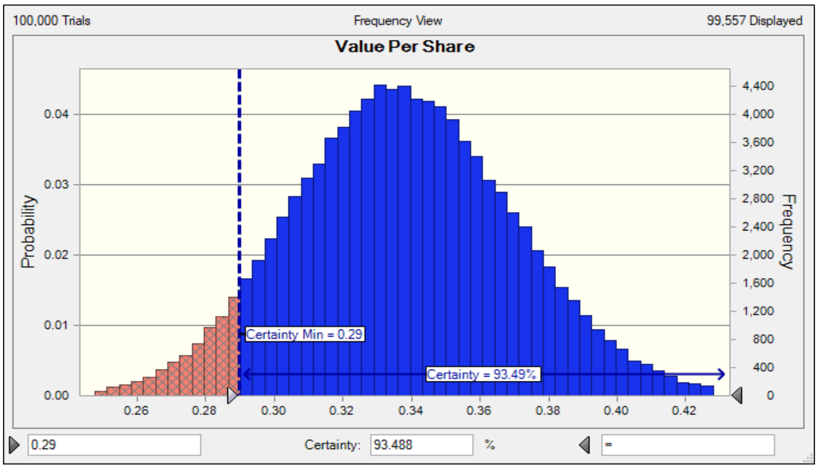
Following the simulations, results show that with 93.49% certainty Millennium BCP's 2024YE PT will fall above 0.29 €, i.e., be compatible with a strong buy recommendation (Figure 78). The mean and median values are 0.34 €, consistent with the PT achieved through the ER method. Additionally, simulations confirm the 2024YE PT will vary between 0.29 € and 0.39 € with 90% certainty (Figure 79).

Figure 77: **Sensitivity Analysis: Value Per Share significant variables**



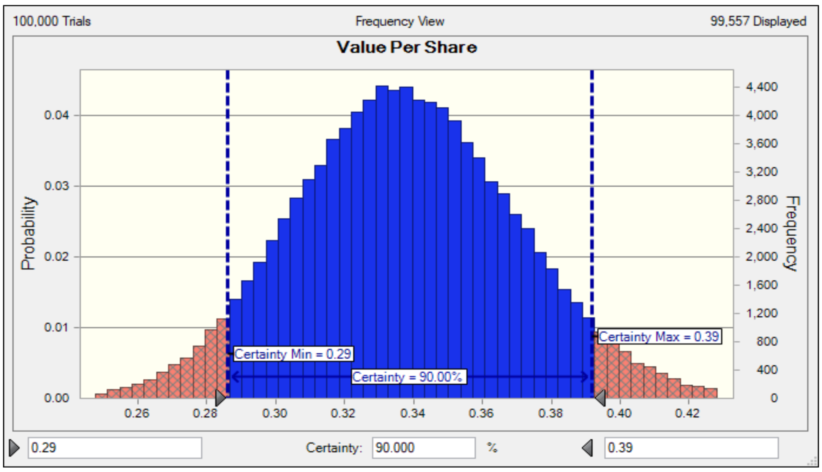
Source: Author analysis using the *Crystal Ball* software

Figure 78: **Monte Carlo Simulation: probability of a strong buy recommendation**



Source: Author analysis using the *Crystal Ball* software

Figure 79: **Monte Carlo Simulation: 90% probability-PT**



Source: Author analysis using the *Crystal Ball* software

Appendix 1

Annual remuneration paid in 2022 to members of Corporate Governance bodies

	Annual Fixed Remuneration			
	A	B	A + B	
Members of the Board of Directors	Directly paid by BCP (€)	Received through other Companies (€)	Remuneration of Corporate Bodies set by the RWB (€)	IRS withheld from the Fixed Remuneration (€)
Nuno Manuel da Silva Amado (Chairman of the Board of Directors)	664,463.15	25,536.85	690,000.00	291,029.00
Jorge Manuel Baptista Magalhães Correia (Vice-Chairman of the Board of Directors)	110,000.04	0.00	110,000.04	41,904.00
Ana Paula Alcobia Gray (Member of the Board of Directors)	125,000.04	0.00	125,000.04	41,364.00
José Manuel Alves Elias da Costa (Member of the Board of Directors)	98,680.52	0.00	98,680.52	33,550.00
Julia Gu (*) (Member of the Board of Directors)	0.00	0.00	0.00	0.00
Lingjiang Xu (Member of the Board of Directors)	125,000.04	0.00	125,000.04	48,864.00
Smilla Lingzi Yuan (**)	38,333.33	0.00	38,333.33	9,583.00
Altina de Fátima Sebastian Gonzalez Villamarin (***) Member of the Board of Directors	6,666.66	0.00	6,666.66	2,353.00
José Pedro Rivera Ferreira Malaquias (***) Member of the Board of Directors	6,666.66	0.00	6,666.66	2,346.00
Teófilo César Ferreira da Fonseca	105,486.13	0.00	105,486.13	41,703.00
Sub-Total	**1,280,296.57**	**25,536.85**	**1,305,833.42**	**512,696.09**

Members of the Audit Committee (AudC)				
Cidália Maria da Mota Lopes (Chairwoman of the Audit Committee)	170,972.24	0.00	170,972.24	67,868.00
Fernando da Costa Lima (Member of the Audit Committee)	142,569.47	0.00	142,569.47	56,476.00
Valter Rui Dias de Barros (Member of the Audit Committee)	135,000.00	0.00	135,000.00	33,744.00
Wan Sin Long (Member of the Audit Committee)	102,083.33	0.00	102,083.33	25,520.00
Sub-Total	**550,625.04**	**0.00**	**550,625.04**	**183,608.00**

Members of the Executive Committee (EC)				
Miguel Maya Dias Pinheiro (Vice-Chairman of the BoD and Chairman of the EC)	624,463.13	25,536.85	649,999.98	267,207.00
Miguel de Campos Pereira de Bragança (Vice-Chairman of the Executive Committee)	481,577.55	38,422.49	520,000.04	205,955.00
João Nuno de Oliveira Jorge Palma (Vice-Chairman of the Executive Committee)	520,000.04	0.00	520,000.04	226,094.00
Rui Manuel da Silva Teixeira (Member of the Executive Committee)	455,000.00	0.00	455,000.00	199,290.00
José Miguel Bensliman Schorcht da Silva Pessanha (Member of the Executive Committee)	417,715.85	37,284.15	455,000.00	182,954.00
Maria José Henriques Barreto Matos de Campos (Member of the Executive Committee)	455,000.00	0.00	455,000.00	91,000.00
Sub-Total	**2,953,756.57**	**101,243.49**	**3,055,000.06**	**1,172,500.00**
Total amounts of the Board of Directors of BCP	**4,784,678.18**	**126,780.34**	**4,911,458.52**	**1,868,804.00**

Source: Millennium BCP Annual Report 2022

Appendix 2

Real and forecasted Income Statement 2018-2029

(€ Thousands)

FSLI	2018	2019	2020	2021	2022	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	Terminal
Interest and similar income	1.889.739	1.991.445	1.805.760	1.709.124	2.737.235	2.947.774	3.174.506	3.418.678	3.681.631	3.964.810	4.269.769	4.598.185	4.951.862
Interest expense and similar changes	(466.108)	(442.917)	(274.095)	(120.523)	(587.463)	(615.289)	(644.433)	(674.958)	(706.929)	(740.414)	(775.485)	(812.217)	(850.689)
Net Interest Income	**1.423.631**	**1.548.528**	**1.531.665**	**1.588.601**	**2.149.772**	**2.332.484**	**2.530.073**	**2.743.720**	**2.974.702**	**3.224.396**	**3.494.284**	**3.785.968**	**4.101.173**
Dividends from equity instruments	636	798	4.775	938	10.086	3.447	3.447	3.447	3.447	3.447	3.447	3.447	3.447
Net fees and commissions income	684.019	703.497	676.556	727.723	771.908	1.036.680	1.116.418	1.202.289	1.294.764	1.394.353	1.501.602	1.617.100	1.741.482
Net gains / (losses) from financial operations at fair value through profit or loss	1.400	4.837	(17.336)	(247)	27.306	27.306	27.306	27.306	27.306	27.306	27.306	27.306	27.306
Net gains / (losses) from foreign exchange	75.355	69.391	88.319	17.494	19.390	19.390	19.390	19.390	19.390	19.390	19.390	19.390	19.390
Net gains / (losses) from hedge accounting operations	2.552	(5.682)	(2.322)	4.286	(2.233)	(2.233)	(2.233)	(2.233)	(2.233)	(2.233)	(2.233)	(2.233)	(2.233)
Net gains / (losses) from derecognition of financial assets and liabilities at amortised cost	(50.194)	(24.909)	(28.081)	(3.717)	18.883	(17.604)	(17.604)	(17.604)	(17.604)	(17.604)	(17.604)	(17.604)	(17.604)
Net gains / (losses) from derecognition of financial assets at fair value through other comprehensive income	49.435	99.676	100.063	68.722	(13.386)	(13.386)	(13.386)	(13.386)	(13.386)	(13.386)	(13.386)	(13.386)	(13.386)
Net gains / (losses) from insurance activity	8.477	11.752	0	0	0	0	0	0	0	0	0	0	0
Other operating income / (losses)	(135.878)	(144.400)	(158.261)	(128.905)	(193.112)	(193.112)	(193.112)	(193.112)	(193.112)	(193.112)	(193.112)	(193.112)	(193.112)
Total Operating Income	**2.059.433**	**2.263.488**	**2.195.378**	**2.274.895**	**2.788.614**	**3.192.972**	**3.470.298**	**3.769.817**	**4.093.275**	**4.442.557**	**4.819.694**	**5.226.876**	**5.666.462**
Staff costs	592.792	668.232	624.780	654.270	580.807	613.913	648.906	685.894	724.990	766.314	809.994	856.164	904.965
Other administrative costs	376.676	376.455	329.823	324.172	352.961	390.237	407.174	419.405	429.123	437.954	446.691	455.603	464.692
Amortisations and depreciations	57.745	124.785	135.800	137.156	139.250	139.250	139.250	139.250	139.250	139.250	139.250	139.250	139.250
Total Operating Expenses	**1.027.213**	**1.169.472**	**1.090.403**	**1.115.598**	**1.073.018**	**1.143.400**	**1.195.330**	**1.244.549**	**1.293.362**	**1.343.518**	**1.395.935**	**1.451.016**	**1.508.907**
Net Operating Income Before Provisions and Impairments	**1.032.220**	**1.094.016**	**1.104.975**	**1.159.297**	**1.715.596**	**2.049.572**	**2.274.969**	**2.525.268**	**2.799.913**	**3.099.039**	**3.423.759**	**3.775.860**	**4.157.556**
Results on modification	0	0	0	0	(309.865)	0	0	0	0	0	0	0	0
Impairment for financial assets at amortised cost	(465.468)	(390.308)	(513.406)	(352.833)	(300.829)	(482.840)	(500.630)	(519.079)	(538.211)	(558.052)	(578.627)	(599.964)	(622.091)
npairment for financial assets at fair value through other comprehensive income	1.092	2.180	(10.360)	(4.626)	5.023	(389)	(344)	(304)	(269)	(237)	(210)	(185)	(164)
Impairment for other assets	(79.037)	(96.034)	(79.290)	(60.882)	(192.059)	(78.811)	(78.811)	(78.811)	(78.811)	(78.811)	(78.811)	(78.811)	(78.811)
Other provisions	(57.689)	(57.484)	(238.292)	(642.726)	(568.297)	(312.898)	(312.898)	(312.898)	(312.898)	(312.898)	(312.898)	(312.898)	(312.898)
Net Operating Income	**431.118**	**552.370**	**263.627**	**98.230**	**349.569**	**1.174.635**	**1.382.286**	**1.614.176**	**1.869.724**	**2.149.042**	**2.453.214**	**2.784.003**	**3.143.593**
Share of profit of associates under the equity method	89.175	42.989	67.695	56.937	68.722	65.104	65.104	65.104	65.104	65.104	65.104	65.104	65.104
Gains / (losses) arising from sales of subsidiaries and other assets	37.916	31.907	(6.387)	2.570	10.167	15.235	15.235	15.235	15.235	15.235	15.235	15.235	15.235
Net Income Before Income Taxes	**558.209**	**627.266**	**324.935**	**157.737**	**428.458**	**1.254.973**	**1.462.624**	**1.694.514**	**1.950.062**	**2.229.380**	**2.533.553**	**2.864.341**	**3.223.931**
Income Taxes													
Current	(105.559)	(100.908)	(108.520)	(81.353)	(109.632)	(263.544)	(307.151)	(355.848)	(409.513)	(468.170)	(532.046)	(601.512)	(677.026)
Deferred	(32.458)	(138.370)	(23.570)	(122.273)	(194.688)	(253.829)	(330.935)	(431.464)	(562.531)	(733.412)	(956.202)	(1.246.670)	(1.625.374)
Net Income After Income Taxes From Continuing Operations	**420.192**	**387.988**	**192.845**	**(45.889)**	**124.138**	**737.600**	**824.538**	**907.202**	**978.019**	**1.027.798**	**1.045.304**	**1.016.159**	**921.532**
Income arising from discontinued or discontinuing operations	(1.318)	13.412	15.520	70.881	5.537	0	0	0	0	0	0	0	0
Net Income for the year	**418.874**	**401.400**	**208.365**	**24.992**	**129.675**	**737.600**	**824.538**	**907.202**	**978.019**	**1.027.798**	**1.045.304**	**1.016.159**	**921.532**
Earnings per share (in Euros)													
Basic	0,020	0,018	0,010	0,007	0,011								
Diluted	0,020	0,018	0,010	0,007	0,011								

Source: Author analysis and Millennium BCP Annual Reports 2018-2022

Appendix 3

Real and forecasted Balance Sheet 2018-2029

(€ Thousands)

FSLI	2018	2019	2020	2021	2022	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	Terminal
Cash and deposits at Central Banks	2.753.839	5.166.551	5.303.864	7.796.299	6.022.001	6.055.690	8.515.265	10.983.186	13.458.574	15.930.529	18.376.291	20.758.327	23.020.134
Loans and advances to credit institutions repayable on demand	326.707	320.857	262.395	361.786	213.460	214.654	301.838	389.318	477.062	564.685	651.379	735.814	815.988
Financial assets at amortised cost													
Loans and advances to credit institutions	890.033	892.995	1.015.087	453.213	963.434	978.825	994.462	1.010.349	1.026.490	1.042.888	1.059.549	1.076.476	1.093.673
Loans and advances to customers	45.560.926	49.847.829	52.120.815	54.972.401	54.675.793	56.706.860	58.813.376	60.998.144	63.264.070	65.614.170	68.051.570	70.579.513	73.201.363
Debt securities	3.375.014	3.185.876	6.234.545	8.205.196	13.035.582	10.991.951	11.400.274	11.823.766	12.262.989	12.718.528	13.190.989	13.681.000	14.189.215
Financial assets at fair value through profit or loss													
Financial assets held for trading	870.454	878.334	1.031.201	931.485	766.597	747.363	728.611	710.330	692.507	675.132	658.192	641.678	625.578
Financial assets not held for trading mandatorily at fair value through profit or loss	1.404.684	1.405.513	1.315.467	990.938	552.679	458.619	380.567	315.798	262.053	217.454	180.446	149.736	124.252
Financial assets designated at fair value through profit or loss	33.034	31.496	0	0	0	0	0	0	0	0	0	0	0
Financial assets at fair value through other comprehensive income	13.845.625	13.216.701	12.140.392	12.890.988	7.461.553	6.593.751	5.826.878	5.149.194	4.550.326	4.021.109	3.553.442	3.140.166	2.774.955
Assets with repurchase agreement	58.252	0	0	0	0	0	0	0	0	0	0	0	0
Hedging derivatives	123.054	45.141	91.249	109.059	59.703	51.663	44.705	38.684	33.475	28.967	25.066	21.690	18.769
Investments in associated companies	405.082	400.391	434.959	462.338	298.717	298.717	298.717	298.717	298.717	298.717	298.717	298.717	298.717
Non-current assets held for sale	1.868.458	1.279.841	1.026.481	780.514	499.035	383.231	294.300	226.006	173.560	133.284	102.355	78.603	60.363
Investment property	11.058	13.291	7.909	2.870	15.217	15.217	15.217	15.217	15.217	15.217	15.217	15.217	15.217
Other tangible assets	461.276	729.442	640.825	600.721	574.697	574.697	574.697	574.697	574.697	574.697	574.697	574.697	574.697
Goodwill and intangible assets	174.395	242.630	245.954	256.213	182.687	182.687	182.687	182.687	182.687	182.687	182.687	182.687	182.687
Current tax assets	32.712	26.738	11.676	17.283	17.945	17.945	17.945	17.945	17.945	17.945	17.945	17.945	17.945
Deferred tax assets	2.916.630	2.720.648	2.633.790	2.688.216	2.938.986	2.938.986	2.938.986	2.938.986	2.938.986	2.938.986	2.938.986	2.938.986	2.938.986
Other assets	811.816	1.239.134	1.296.812	1.385.292	1.582.455	1.808.448	2.066.716	2.361.868	2.699.171	3.084.645	3.525.169	4.028.605	4.603.937
Total Assets	**75.923.049**	**81.643.408**	**85.813.421**	**92.904.812**	**89.860.541**	**89.019.304**	**93.395.241**	**98.034.891**	**102.928.525**	**108.059.639**	**113.402.695**	**118.919.855**	**124.556.474**
Financial liabilities at amortised cost													
Resources from credit institutions	7.752.796	6.366.958	8.898.759	8.896.074	1.468.360	1.468.360	1.468.360	1.468.360	1.468.360	1.468.360	1.468.360	1.468.360	1.468.360
Resources from customers	52.664.687	59.127.005	63.000.829	69.560.227	75.430.143	70.511.087	73.130.395	75.847.004	78.664.527	81.586.715	84.617.455	87.760.778	91.020.869
Non subordinated debt securities issued	1.686.087	1.594.724	1.388.849	2.188.363	1.482.086	1.640.137,48	1.821.833,94	2.003.530,39	2.185.226,85	2.366.923,30	2.548.619,76	2.730.316,21	2.912.012,67
Subordinated debt	1.072.105	1.577.706	1.405.172	1.394.780	1.333.056	1.475.214,74	1.638.640,85	1.802.066,96	1.965.493,07	2.128.919,18	2.292.345,29	2.455.771,40	2.619.197,51
Financial liabilities at fair value through profit or loss													
Financial liabilities held for trading	327.008	343.933	278.851	231.241	241.506	227.301,26	213.932,00	201.349,08	189.506,26	178.360,00	167.869,34	157.995,71	148.702,82
Financial liabilities at fair value through profit or loss	3.603.647	3.201.309	1.599.405	1.581.778	1.817.678	2.011.517,43	2.234.355,81	2.457.194,20	2.680.032,58	2.902.870,96	3.125.709,35	3.348.547,73	3.571.386,12
Hedging derivatives	177.900	229.923	285.766	377.206	178.000	150.666	130.375	112.817	97.624	84.476	73.100	63.255	54.736
Provisions	350.832	345.312	443.799	458.744	561.786	874.684	1.187.581	1.500.479	1.813.376	2.126.274	2.439.172	2.752.069	3.064.967
Current tax liabilities	18.547	21.990	14.827	20.427	23.680	51.811	60.384	69.958	80.508	92.039	104.597	118.253	133.099
Deferred tax liabilities	5.460	11.069	7.242	16.932	11.708	11.708	11.708	11.708	11.708	11.708	11.708	11.708	11.708
Other liabilities	1.300.074	1.442.225	1.103.652	1.116.983	1.391.973	3.938.653	4.101.910	4.427.061	4.901.199	5.504.429	6.207.597	6.969.037	7.730.073
Total Liabilities	**68.959.143**	**74.262.154**	**78.427.151**	**85.842.755**	**83.939.976**	**82.361.139**	**85.999.476**	**89.901.527**	**94.057.561**	**98.451.075**	**103.056.532**	**107.836.092**	**112.735.111**
Share capital	4.725.000	4.725.000	4.725.000	4.725.000	3.000.000	3.000.000	3.000.000	3.000.000	3.000.000	3.000.000	3.000.000	3.000.000	3.000.000
Share premium	16.471	16.471	16.471	16.471	16.471	16.471	16.471	16.471	16.471	16.471	16.471	16.471	16.471
Other equity instruments	2.922	400.000	400.000	400.000	400.000	400.000	400.000	400.000	400.000	400.000	400.000	400.000	400.000
Legal and statutory reserves	264.608	240.535	254.464	259.528	268.534	342.294	416.054	489.814	563.574	637.334	711.094	784.854	858.614
Treasury shares	(74)	(102)	(40)	0	0	0	0	0	0	0	0	0	0
Reserves and retained earnings	470.481	435.823	642.397	580.304	1.245.949	1.909.789	2.573.628	3.237.468	3.901.308	4.565.148	5.228.987	5.892.827	6.556.667
Net income for the year attributable to Bank's Shareholders	301.065	302.003	183.012	138.082	207.497	207.497	207.497	207.497	207.497	207.497	207.497	207.497	207.497
Total Equity Attributable To Bank's Shareholders	**5.780.473**	**6.119.730**	**6.221.304**	**6.119.385**	**5.138.451**	**5.876.051**	**6.613.650**	**7.351.250**	**8.088.850**	**8.826.450**	**9.564.049**	**10.301.649**	**11.039.249**
Non-controlling interests	1.183.433	1.261.524	1.164.966	942.672	782.114	782.114	782.114	782.114	782.114	782.114	782.114	782.114	782.114
Total Equity	**6.963.906**	**7.381.254**	**7.386.270**	**7.062.057**	**5.920.565**	**6.658.165**	**7.395.764**	**8.133.364**	**8.870.964**	**9.608.564**	**10.346.163**	**11.083.763**	**11.821.363**
Total Liabilities and Equity	**75.923.049**	**81.643.408**	**85.813.421**	**92.904.812**	**89.860.541**	**89.019.304**	**93.395.241**	**98.034.891**	**102.928.525**	**108.059.639**	**113.402.695**	**118.919.855**	**124.556.474**

Source: Author analysis and Millennium BCP Annual Reports 2018-2022

Appendix 4

Real and forecasted Cash Flow Statement 2018-2029

(€ Thousands)

FSLI	2018	2019	2020	2021	2022	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	Terminal
Net income for the year						737.600	824.538	907.202	978.019	1.027.798	1.045.304	1.016.159	921.532
Cash Flows arising from Operating Activities													
Interests received	1.652.260	1.743.234	1.541.781	1.610.633	2.297.720								
Comissions received	880.287	899.938	877.504	925.786	1.019.734								
Fees received from services rendered	48.866	100.315	70.625	110.095	101.771	0	0	0	0	0	0	0	0
Interests paid	(461.280)	(426.571)	(248.487)	(182.934)	(363.636)								
Commissions paid	(140.956)	(171.815)	(157.022)	(145.957)	(176.465)	0	0	0	0	0	0	0	0
Recoveries on loans previously written off	13.210	24.269	22.680	22.938	20.837	0	0	0	0	0	0	0	0
Net earned insurance premiums	17.698	17.418	16.386	20.975	0	0	0	0	0	0	0	0	0
Claims incurred of insurance activity	(5.393)	(6.591)	(6.053)	(7.827)	0	0	0	0	0	0	0	0	0
Payments (cash) to suppliers and employees	(1.158.346)	(1.248.720)	(1.229.338)	(1.250.979)	(1.220.319)								
Income taxed (paid) / received	(67.569)	(61.027)	(89.589)	(61.834)	(65.340)								
Total	**778.777**	**870.450**	**798.487**	**1.040.896**	**1.614.302**	**737.600**	**824.538**	**907.202**	**978.019**	**1.027.798**	**1.045.304**	**1.016.159**	**921.532**
Decrease / (increase) in operating assets:													
Receivables from / (Loans and advances to) credit institutions	121.768	(2.626)	169.528	204.997	(227.767)								
Deposits held with purpose of monetary control	50.114	0	(291.669)	190.049	(280.418)								
Loans and advances to customers receivable / (granted)	(1.254.603)	(1.901.159)	(4.080.970)	(4.192.195)	(656.569)								
Short term trading securities	(93.688)	165.922	(175.522)	45.161	136.605								
Depreciation and amortisation						139.250	139.250	139.250	139.250	139.250	139.250	139.250	139.250
Increase / (decrease) in operating liabilities:													
Loans and advances to credit institutions repayable on demand	111.842	(108.587)	(12.437)	(42.783)	(25.447)								
Deposits from credit institutions with agreed maturity date	175.304	(2.154.270)	2.560.161	94.089	(7.518.189)								
Loans and advances to customers repayable on demand	5.144.519	5.444.107	7.077.726	6.589.819	(274.554)								
Deposits from customers with agreed maturity date	(1.051.734)	(1.784.092)	(2.992.767)	481.649	6.652.456								
Total	**3.982.299**	**529.745**	**3.052.537**	**4.411.682**	**(579.581)**	**876.850**	**963.788**	**1.046.452**	**1.117.269**	**1.167.048**	**1.184.554**	**1.155.409**	**1.060.782**
Cash Flows arising from Investing Activities													
Sale of investments held in associated companies	98.000	13	20	0	0	0	0	0	0	0	0	0	0
Assignment of investments in subsidiaries and associates which results in loss of control	0	0	0	4.809	0	0	0	0	0	0	0	0	0
Acquisition of investments in subsidiaries	0	(348.997)	0	(2.252)	0	0	0	0	0	0	0	0	0
Dividends received	67.213	11.003	11.891	16.651	54.263	3.447	3.447	3.447	3.447	3.447	3.447	3.447	3.447
Interest income from financial assets and fair value through other comprehensive income and at amortised cost	311.001	291.339	183.763	199.303	342.405								
Sale of financial assets at fair value through other comprehensive income and at amortised cost	5.725.095	19.886.088	19.346.529	6.552.698	7.922.631								
Acquisition of financial assets at fair value through other comprehensive income and at amortised cost	(56.020.038)	(50.627.555)	(39.893.571)	(58.763.208)	(50.657.550)	-1.175.829	1.175.197	1.101.175	1.038.090	984.756	940.129	903.288	873.425
Maturity of financial assets at fair value through other comprehensive income and at amortised cost	46.049.277	32.096.533	17.992.857	49.315.510	42.276.068								
Acquisition of tangible and intangible assets	(88.560)	(105.715)	(78.739)	(80.464)	(126.189)	-139.250	-139.250	-139.250	-139.250	-139.250	-139.250	-139.250	-139.250
Sale of tangible and intangible assets	39.507	14.475	11.276	13.614	9.434	0	0	0	0	0	0	0	0
Decrease / (increase) in other sundry assets	703.905	(231.448)	348.594	44.657	(386.643)	0	0	0	0	0	0	0	0
Total	**(3.114.600)**	**985.736**	**(2.077.380)**	**(2.698.682)**	**(565.581)**	**(1.311.632)**	**1.039.393**	**965.372**	**902.287**	**848.953**	**804.325**	**767.485**	**737.622**
Cash Flows arising from Financing Activities													
Sale of shares in subsidiaries companies which does not results loss control	(1.400)	0	0	0	0	0	0	0	0	0	0	0	0
Issuance of subordinated debt	192	647.216	0	300.000	133.700	142.159	163.426	163.426	163.426	163.426	163.426	163.426	163.426
Reimbursement of subordinated debt	(96.181)	(129.536)	(165.017)	(305.368)	(133.700)	0	0	0	0	0	0	0	0
Issuance of debt securities	447.007	545.825	0	998.439	402.264	351.891	404.535	404.535	404.535	404.535	404.535	404.535	404.535
Reimbursement of debt securities	(640.376)	(310.448)	(271.849)	(246.018)	(1.156.473)	0	0	0	0	0	0	0	0
Issuance of commercial paper and other securities	23.204	238.839	22.694	105.708	34.505	0	0	0	0	0	0	0	0
Reimbursement of commercial paper and other securities	(108.930)	(171.641)	(239.116)	(26.074)	(12.374)	0	0	0	0	0	0	0	0
Issue of Perpetual Subordinated Bonds (Additional Tier 1)	0	396.325	0	0	0	0	0	0	0	0	0	0	0
Reimbursed of perpetual subordinated debt securities	0	(2.922)	0	0	0	0	0	0	0	0	0	0	0
Dividends paid to Bank's shareholders	0	(30.228)	0	0	(13.603)	0	0	0	0	0	0	0	0
Dividends paid of perpetual subordinated debt securities	(149)	(148)	0	0	0	0	0	0	0	0	0	0	0
Dividends paid to non-controlling interests	(9.088)	(15.502)	(22.974)	(17.516)	(59.572)	0	0	0	0	0	0	0	0
Interest paid of the issue of Perpetual Subordinated Bonds (Additional Tier 1)	0	(27.750)	(37.000)	(37.000)	(37.000)	(37.000)	(37.000)	(37.000)	(37.000)	(37.000)	(37.000)	(37.000)	(37.000)
Increase / (decrease) in other sundry liabilities and non-controlling interests	266.447	(224.200)	73.443	(2.914)	52.175	0	0	0	0	0	0	0	0
Total	**(119.274)**	**915.830**	**(639.819)**	**769.257**	**(790.078)**	**457.050**	**530.961**	**530.961**	**530.961**	**530.961**	**530.961**	**530.961**	**530.961**
Exchange differences effect on cash and equivalents	(131.345)	(24.449)	(256.487)	109.569	12.616	12.616	12.616	12.616	12.616	12.616	12.616	12.616	12.616
Net changes in cash and equivalents	**617.080**	**2.406.862**	**78.851**	**2.591.826**	**(1.922.624)**	**34.883**	**2.546.759**	**2.555.401**	**2.563.132**	**2.559.578**	**2.532.456**	**2.466.471**	**2.341.981**
Cash	540.608	566.202	636.048	579.997	601.772	459.952	462.525	650.384	838.880	1.027.947	1.027.947	1.027.947	1.027.947
Deposits at Central Banks	1.627.326	2.187.637	4.530.503	4.723.867	7.194.527	5.498.986	5.529.749	7.775.708	10.029.288	12.289.687	12.289.687	12.289.687	12.289.687
Loans and advances to credit institutions repayable on demand	295.532	326.707	320.857	262.395	361.786	276.524	278.070	391.011	504.336	618.003	618.003	618.003	618.003
Cash and equivalents at the beginning of the year	**2.463.466**	**3.080.546**	**5.487.408**	**5.566.259**	**8.158.085**	**6.235.461**	**6.270.344**	**8.817.103**	**11.372.504**	**13.935.636**	**16.495.214**	**19.027.670**	**21.494.141**
Cash	566.202	636.048	579.997	601.772	593.033	596.351	838.564	1.081.599	1.325.370	1.568.802	1.809.655	2.044.233	2.266.971
Deposits at Central Banks	2.187.637	4.530.503	4.723.867	7.194.527	5.428.968	5.459.339	7.676.701	9.901.587	12.133.204	14.361.727	16.566.636	18.714.094	20.753.163
Loans and advances to credit institutions repayable on demand	326.707	320.857	262.395	361.786	213.460	214.654	301.838	389.318	477.062	564.685	651.379	735.814	815.988
Cash and equivalents at the end of the year	**3.080.546**	**5.487.408**	**5.566.259**	**8.158.085**	**6.235.461**	**6.270.344**	**8.817.103**	**11.372.504**	**13.935.636**	**16.495.214**	**19.027.670**	**21.494.141**	**23.836.122**

Source: Author analysis and Millennium BCP Annual Reports 2018-2022

Appendix 5

Income Statement forecast assumptions

Statement/FSLI	2018	2019	2020	2021	2022	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	Terminal	Note	Unit	Assumption
Income statement																
Interest and similar income	1.889.739	1.991.445	1.805.760	1.709.124	2.737.235	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	7,69%	Percentage	%	Historical CAGR (2018-2022)
Interest expense and similar changes	(466.108)	(442.917)	(274.095)	(120.523)	(587.463)	4,74%	4,74%	4,74%	4,74%	4,74%	4,74%	4,74%	4,74%	Percentage	%	Historical CAGR (2018-2022)
Dividends from equity instruments	636	798	4.775	938	10.086	3.447	3.447	3.447	3.447	3.447	3.447	3.447	3.447	Value	EUR	Historical average of dividends from equity instruments in the last five years
Net fees and commissions income	684.019	703.497	676.556	727.723	771.908	35,17%	35,17%	35,17%	35,17%	35,17%	35,17%	35,17%	35,17%	Rate	%	Historical average percentage rate of Interest and similar income
Net gains / (losses) from financial operations at fair value through profit or loss	1.400	4.837	-17.336	-247	27.306	27.306	27.306	27.306	27.306	27.306	27.306	27.306	27.306	Value	EUR	Held constant
Net gains / (losses) from foreign exchange	75.355	69.391	88.319	17.494	19.390	19.390	19.390	19.390	19.390	19.390	19.390	19.390	19.390	Value	EUR	Constant
Net gains / (losses) from hedge accounting operations	2.552	(5.682)	(2.322)	4.286	(2.233)	(2.233)	(2.233)	(2.233)	(2.233)	(2.233)	(2.233)	(2.233)	(2.233)	Value	EUR	Constant
Net gains / (losses) from derecognition of financial assets and liabilities at amortisec	(50.194)	(24.909)	(28.081)	(3.717)	18.883	(17.604)	(17.604)	(17.604)	(17.604)	(17.604)	(17.604)	(17.604)	(17.604)	Value	EUR	Historical average of Net gains / (losses) from derecognition of financial assets and liabilities at amortised cost in the last five years
Net gains / (losses) from derecognition of financial assets at fair value through other comprehensive income	49.435	99.676	100.063	68.722	(13.386)	(13.386)	(13.386)	(13.386)	(13.386)	(13.386)	(13.386)	(13.386)	(13.386)	Value	EUR	Constant
Net gains / (losses) from insurance activity	8.477	11.752	0	0	0	0	0	0	0	0	0	0	0	Value	EUR	Constant
Other operating income / (losses)	(135.878)	(144.400)	(158.261)	(128.905)	(193.112)	(193.112)	(193.112)	(193.112)	(193.112)	(193.112)	(193.112)	(193.112)	(193.112)	Value	EUR	Constant
Staff costs	592.792	668.232	624.780	654.270	580.807	613.913	648.906	685.894	724.990	766.314	809.994	856.164	904.965	Value	EUR	Annual 5.7% increase
Other administrative costs					10,56%	4,34%	3,00%	2,32%	2,06%	2,00%	2,00%	2,00%	2,00%	Rate	%	Inflation rate
Amortisations and depreciations	57.745	124.785	135.800	137.156	139.250	139.250	139.250	139.250	139.250	139.250	139.250	139.250	139.250	Value	EUR	Constant
Results on modification	0	0	0	0	(309.865)	0	0	0	0	0	0	0	0	Value	EUR	Zero
Impairment for financial assets at amortised cost	-0,93%	-0,72%	-0,86%	-0,55%	-0,44%	-0,70%	-0,70%	-0,70%	-0,70%	-0,70%	-0,70%	-0,70%	-0,70%	Percentage	%	Historical average
Impairment for financial assets at fair value through other comprehensive income	0,01%	0,02%	-0,09%	-0,04%	0,07%	-0,01%	-0,01%	-0,01%	-0,01%	-0,01%	-0,01%	-0,01%	-0,01%	Percentage	%	Historical average
Impairment for other assets	-79.037	-96.034	-79.290	-60.882	-192.059	-78.811	-78.811	-78.811	-78.811	-78.811	-78.811	-78.811	-78.811	Value	EUR	Historical average of Impairment for other assets from 2018 to 2021.
Other provisions	-57.689	-57.484	-238.292	-642.726	-568.297	-312.898	-312.898	-312.898	-312.898	-312.898	-312.898	-312.898	-312.898	Value	EUR	Historical average of Other provisions.
Share of profit of associates under the equity method	89.175	42.989	67.695	56.937	68.722	65.104	65.104	65.104	65.104	65.104	65.104	65.104	65.104	Value	EUR	Historical average
Gains / (losses) arising from sales of subsidiaries and other assets						15.235	15.235	15.235	15.235	15.235	15.235	15.235	15.235	Value	EUR	Historical average
Income Taxes - Current						21,00%	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%	Percentage	%	Portugal's corporate tax rate
Income Taxes - Deferred	(32.458)	(138.370)	(23.570)	(122.273)	(194.688)	30,38%	30,38%	30,38%	30,38%	30,38%	30,38%	30,38%	30,38%	Percentage	%	Historical CAGR (2018-2022)
Income arising from discontinued or discontinuing operations	(1.318)	13.412	15.520	70.881	5.537	0	0	0	0	0	0	0	0	Value	EUR	Zero

Source: Author analysis

Appendix 6

Income Statement forecast rationale

Statement/FSLI	Relevant Rationale
Income statement	
Interest and similar income	
Interest expense and similar changes	
Dividends from equity instruments	
Net fees and commissions income	
Net gains / (losses) from financial operations at fair value through profit or loss	This FSLI's balance is mainly composed by the valuations and devaluations of debt certificates issued by the Group (Annual Report 2022, Note 5, p. 236) - against BS FSLI of Financial liabilities at fair value through profit or loss. In 2022, the increase in EURIBOR rates caused the increase in BCP's debt instruments' yields, a resulting decrease in price and, therefore, a decrease in liabilities against higher net gains. Considering that the ECB expects MRO interest rates to remain around 2023's level (ECB, 2023), a conservative approach indicates that futures gains would be at least equal to 2022's.
Net gains / (losses) from foreign exchange	Tax assets assumed to be constant for simplification matters and high volatility according to year's operations.
Net gains / (losses) from hedge accounting operations	Tax assets assumed to be constant for simplification matters and high volatility according to year's operations.
Net gains / (losses) from derecognition of financial assets and liabilities at amortisec	Extraordinary increase in 2023, no indicators about future evolution
Net gains / (losses) from derecognition of financial assets at fair value through other comprehensive income	Constant considering 2022's negative amount - as interest rates increase, assets' value at OCI tend to decrease.
Net gains / (losses) from insurance activity	Constant since 2019.
Other operating income / (losses)	Internal future decisions without any current public information.
Staff costs	The EC concluded that the annual increase in labour costs in the Euro area was 5.7% in 2022 (Eurostat, 2023). Considering the increasing tendency of the nominal hourly labour costs for the whole Euro area economy since 2012, a 5.7% annual increase is assumed.
Other administrative costs	
Amortisations and depreciations	Constant since it is being assumed both other tangible assets and goodwill and intangible assets will remain constant in net value
Results on modification	Considered zero. The exceptional amount registered in 2022 results mainly from the amount associated to potential costs arising from the moratorium program in Poland (Annual Report 2022, Note 52, p. 360)
Impairment for financial assets at amortised cost	
Impairment for financial assets at fair value through other comprehensive income	
Impairment for other assets	BCP's Polish subsidiary bank, Bank Millennium, in subject to a recovery plan since 2022, which resulted in an extraordinary increase of the impairment of Bank Millennium's goodwill in 102,700 K€. Due to its exception character, it is not considered for future years' forecast.
Other provisions	The FX mortgage loans ongoing litigations for Bank Millennium (Poland) were responsible for the Group's increase in other provisions for liabilities and charge of 569 M€ in 2022 and 643M€ in 2021. Considering that the outstanding gross balance of the loan agreements under individual court cases and class action against Bank Millennium on 31 December 2022 was PLN 5,576 M (1,191.05 M€) and that the Group awaits the Court's decision, a conservative approach is followed.
Share of profit of associates under the equity method	
Gains / (losses) arising from sales of subsidiaries and other assets	
Income Taxes - Current	
Income Taxes - Deferred	
Income arising from discontinued or discontinuing operations	Considered zero for simplication purposes. Additionally, there is no public information about this FSLI's future evolution.

Source: Author analysis

Appendix 7

Balance Sheet forecast assumptions

Statement/FSLI	2018	2019	2020	2021	2022	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	Terminal	Note	Unit	Assumption
Balance sheet																
Assets																
Cash and deposits at Central Banks														n.a.	n.a.	Directly through the CF Statement
Loans and advances to credit institutions repayable on demand														n.a.	n.a.	Directly through the CF Statement
Financial assets at amortised cost																
Loans and advances to credit institutions	890.033	892.995	1.015.087	453.213	963.434	1,60%	1,60%	1,60%	1,60%	1,60%	1,60%	1,60%	1,60%	Percentage	%	Historical CAGR (2018-2022)
Loans and advances to customers	45.560.926	49.847.829	52.120.815	54.972.401	54.675.793	3,71%	3,71%	3,71%	3,71%	3,71%	3,71%	3,71%	3,71%	Percentage	%	Historical CAGR (2018-2022)
Debt securities	3.375.014	3.185.876	6.234.545	8.205.196	13.035.582	19,38%	19,38%	19,38%	19,38%	19,38%	19,38%	19,38%	19,38%	Percentage	%	Historical average
Financial assets at fair value through profit or loss																
Financial assets held for trading	870.454	878.334	1.031.201	931.485	766.597	-2,51%	-2,51%	-2,51%	-2,51%	-2,51%	-2,51%	-2,51%	-2,51%	Percentage	%	Historical CAGR (2018-2022)
Financial assets not held for trading mandatorily at fair value through profit or los	1.404.684	1.405.513	1.315.467	990.938	552.679	-17,02%	-17,02%	-17,02%	-17,02%	-17,02%	-17,02%	-17,02%	-17,02%	Percentage	%	Historical CAGR (2018-2022)
Financial assets designated at fair value through profit or loss	33.034	31.496	0	0	0	0	0	0	0	0	0	0	0	Value	EUR	Constant
Financial assets at fair value through other comprehensive income	13.845.625	13.216.701	12.140.392	12.890.988	7.461.553	-11,63%	-11,63%	-11,63%	-11,63%	-11,63%	-11,63%	-11,63%	-11,63%	Percentage	%	Historical CAGR (2018-2022)
Assets with repurchase agreement	58.252	0	0	0	0	0	0	0	0	0	0	0	0	Value	EUR	Constant
Hedging derivatives	123.054	45.141	91.249	109.059	59.703	-13,47%	-13,47%	-13,47%	-13,47%	-13,47%	-13,47%	-13,47%	-13,47%	Percentage	%	Historical CAGR (2018-2022)
Investments in associated companies	405.082	400.391	434.959	462.338	298.717	298.717	298.717	298.717	298.717	298.717	298.717	298.717	298.717	Value	EUR	Constant
Non-current assets held for sale	1.868.458	1.279.841	1.026.481	780.514	499.035	-23,21%	-23,21%	-23,21%	-23,21%	-23,21%	-23,21%	-23,21%	-23,21%	Percentage	%	Historical CAGR (2018-2022)
Investment property	11.058	13.291	7.909	2.870	15.217	15.217	15.217	15.217	15.217	15.217	15.217	15.217	15.217	Value	EUR	Constant
Other tangible assets	461.276	729.442	640.825	600.721	574.697	574.697	574.697	574.697	574.697	574.697	574.697	574.697	574.697	Value	EUR	Constant
Goodwill and intangible assets	174.395	242.630	245.954	256.213	182.687	182.687	182.687	182.687	182.687	182.687	182.687	182.687	182.687	Value	EUR	Constant
Current tax assets	32.712	26.738	11.676	17.283	17.945	17.945	17.945	17.945	17.945	17.945	17.945	17.945	17.945	Value	EUR	Constant
Deferred tax assets	2.916.630	2.720.648	2.633.790	2.688.216	2.938.986	2.938.986	2.938.986	2.938.986	2.938.986	2.938.986	2.938.986	2.938.986	2.938.986	Value	EUR	Constant
Other assets	811.816	1.239.134	1.296.812	1.385.292	1.582.455	14,28%	14,28%	14,28%	14,28%	14,28%	14,28%	14,28%	14,28%	Percentage	%	Historical CAGR (2018-2022)
Liabilities																
Financial liabilities at amortised cost																
Resources from credit institutions	7.752.796	6.366.958	8.898.759	8.896.074	1.468.360	1.468.360	1.468.360	1.468.360	1.468.360	1.468.360	1.468.360	1.468.360	1.468.360	Value	EUR	Constant
Resources from customers	52.664.687	59.127.005	63.000.829	69.560.227	75.430.143	124%	124%	124%	124%	124%	124%	124%	124%	Percentage	%	Average percentage of average total deposits on total average loans
Non subordinated debt securities issued	1.686.087	1.594.724	1.388.849	2.188.363	1.482.086	1.640.137	1.821.834	2.003.530	2.185.227	2.366.923	2.548.620	2.730.316	2.912.013	Percentage	%	Constant proportion of total debt for each projected year
Subordinated debt	1.072.105	1.577.706	1.405.172	1.394.780	1.333.056	1.475.215	1.638.641	1.802.067	1.965.493	2.128.919	2.292.345	2.455.771	2.619.198	Percentage	%	Constant proportion of total debt for each projected year
Financial liabilities at fair value through profit or loss																
Financial liabilities held for trading	327.008	343.933	278.851	231.241	241.506	-5,88%	-5,88%	-5,88%	-5,88%	-5,88%	-5,88%	-5,88%	-5,88%	Percentage	%	Historical CAGR (2018-2022)
Financial liabilities at fair value through profit or loss	3.603.647	3.201.309	1.599.405	1.581.778	1.817.678	2.011.517	2.234.356	2.457.194	2.680.033	2.902.871	3.125.709	3.348.548	3.571.386	Percentage	%	Constant proportion of total debt for each projected year
Hedging derivatives	177.900	229.923	285.766	377.206	178.000	292%	292%	292%	292%	292%	292%	292%	292%	Percentage	%	Percentage of the average hedging derivatives as Liabilities over average hedging derivatives as Assets
Provisions														n.a.	n.a.	Directly through the Income Statement
Current tax liabilities														n.a.	n.a.	Directly through the Income Statement
Deferred tax liabilities	5.460	11.069	7.242	16.932	11.708									Value	EUR	Constant
Other liabilities	1.300.074	1.442.225	1.103.652	1.116.983	1.391.973	3.938.653	4.058.984	4.269.985	4.515.281	4.708.901	4.708.901	4.708.901	4.708.901	Value	EUR	Final reconciliation item for the Balance Sheet
Equity																
Share capital	4.725.000,00	4.725.000,00	4.725.000,00	4.725.000,00	3.000.000,00	3.000.000,00	3.000.000,00	3.000.000,00	3.000.000,00	3.000.000,00	3.000.000,00	3.000.000,00	3.000.000,00			
Share premium	16.471,00	16.471,00	16.471,00	16.471,00	16.471,00	16.471,00	16.471,00	16.471,00	16.471,00	16.471,00	16.471,00	16.471,00	16.471,00			
Other equity instruments	2.922,00	400.000,00	400.000,00	400.000,00	400.000,00	400.000,00	400.000,00	400.000,00	400.000,00	400.000,00	400.000,00	400.000,00	400.000,00			
Legal and statutory reserves	264.608,00	240.535,00	254.464,00	259.528,00	268.534,00	342.293,97	416.053,94	489.813,91	563.573,88	637.333,85	711.093,82	784.853,79	858.613,76			
Treasury shares	-74,00	-102,00	-40,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00			
Reserves and retained earnings	470.481,00	435.823,00	642.397,00	580.304,00	1.245.949,00	1.909.789	2.573.628	3.237.468	3.901.308	4.565.148	5.228.987	5.892.827	6.556.667			
Net income for the year attributable to Bank's Shareholders	301.065,00	302.003,00	183.012,00	138.082,00	207.497,00	207.497,00	207.497,00	207.497,00	207.497,00	207.497,00	207.497,00	207.497,00	207.497,00			
Non-controlling interests	1.183.433,00	1.261.524,00	1.164.966,00	942.672,00	782.114,00	782.114,00	782.114,00	782.114,00	782.114,00	782.114,00	782.114,00	782.114,00	782.114,00			

Source: Author analysis

Appendix 8

Balance Sheet forecast rationale

Statement/FSLI	Relevant Rationale
Balance sheet	
Assets	
Cash and deposits at Central Banks	-
Loans and advances to credit institutions repayable on demand	-
Financial assets at amortised cost	
Loans and advances to credit institutions	-
Loans and advances to customers	-
Debt securities	This historical average considers the years of 2021-2022, since they reflect higher investment levels in the Structured Finance segment.
Financial assets at fair value through profit or loss	
Financial assets held for trading	
Financial assets not held for trading mandatorily at fair value through profit or loss	
Financial assets designated at fair value through profit or loss	Constant since 2019.
Financial assets at fair value through other comprehensive income	
Assets with repurchase agreement	Constant since 2018.
Hedging derivatives	
Investments in associated companies	Internal future decisions without any currenty public information.
Non-current assets held for sale	
Investment property	Internal future decisions without any current public information.
Other tangible assets	Internal future decisions without any current public information.
Goodwill and intangible assets	Already affected in 2022 by an increase in Goodwill Impairment due to the update of the sensitivity analysis related to Bank Millennium, S.A. (Poland) Goodwill's recoverable amount (Annual Report 2022, Note 30, pp. 293-295) and therefore assumed constant from 2022 onwards
Current tax assets	Tax assets assumed to be constant for simplification matters and relatively constant amounts 2018-2022.
Deferred tax assets	
Other assets	
Liabilities	
Financial liabilities at amortised cost	
Resources from credit institutions	As at December 2022, Millennium BCP repaid in advance approximately 7B€ associated with the TLTRO III programe (Annual Report 2022, Note 33, pp. 304-305). Considering that this refinancing operation constituted this FSLI's main event, amounts are assumed constante from 2022 onwards.
Resources from customers	-
Non subordinated debt securities issued	31,99%
Subordinated debt	28,77%
Financial liabilities at fair value through profit or loss	
Financial liabilities held for trading	-
Financial liabilities at fair value through profit or loss	39,23%
Hedging derivatives	
Provisions	
Current tax liabilities	-19,66%
Deferred tax liabilities	Deferred tax liabilities assumed to be constant for simplification matters.
Other liabilities	
Equity	
Share capital	
Share premium	
Other equity instruments	
Legal and statutory reserves	10% of Net income until it makes up for 20% of total Share capital (DL n.º 201/2002, 26 de setembro)
Treasury shares	
Reserves and retained earnings	Considering 90% of Net income of the previous year, due to the legal reserves requirements
Net income for the year attributable to Bank's Shareholders	
Non-controlling interests	

Source: Author analysis

Appendix 9

Cash Flow Statement forecast assumptions

Statement/FSLI	Note	Unit	Assumption
Cash Flow Statement			
The forecasted Cash Flow Statement and the corresponding cash flows from operating, financing and investing activities were obtained according to the indirect method.			
Commissions paid	Value	EUR	Values already included in *commissions received*
Interest income from financial assets and fair value through other comprehensive inc	Value	EUR	Values already included in *interest received*
Acquisition of tangible and intangible assets	Value	EUR	Depreciation and amortisation value, considering the assumption that both other tangible assets and goodwill and intangible assets will remain constant in net value.

Source: Author analysis

Appendix 10

Capital structure, Equity and Capital ratios forecast assumptions

Statement/FSLI	2018	2019	2020	2021	2022	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	Terminal	Note	Unit	Assumption
Capital structure																
D/(D+E)	47,74%	46,34%	37,30%	42,24%	43,90%	43,50%	43,50%	43,50%	43,50%	43,50%	43,50%	43,50%	43,50%	Percentage	%	Historical average
E/(D+E)	52,26%	53,66%	62,70%	57,76%	56,10%	56,50%	56,50%	56,50%	56,50%	56,50%	56,50%	56,50%	56,50%	Percentage	%	Historical average
Equity	6.963.906	7.381.254	7.386.270	7.062.057	5.920.565	6.658.165	7.395.764	8.133.364	8.870.964	9.608.564	10.346.163	11.083.763	11.821.363			Check
Debt	6.361.839	6.373.739	4.393.426	5.164.921	4.632.820	5.126.870	5.694.831	6.262.792	6.830.752	7.398.713	7.966.674	8.534.635	9.102.596			Check
Equity																
Payout ratio	0%	7%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	Percentage	%	
Capital ratios																
RWA	41883000	45.031.000	46.413.000	45.933.000	43.103.000	46.705.452	47.723.382	48.861.385	50.113.862	51.476.260	52.944.959	54.517.158	56.190.787			Computed by multiplying the Average percentage of Millennium BCP's RWA on Financial assets at amortised cost, FVPL and FVOCI (2018-2022) with the sum of Financial assets at amortised cost, FVPL and FVOCI from 2023 to 2029
Financial assets at amortised cost, FVPL and FVOCI	65.979.770	69.458.744	73.857.507	78.444.221	77.455.638	76.477.369	78.144.168	80.007.580	82.058.435	84.289.281	86.694.187	89.268.568	92.009.035			
Percentage of RWA on Financial assets at amortised cost, FVPL and FVOCI	63,48%	64,83%	62,84%	58,55%	55,65%	61,07%	61,07%	61,07%	61,07%	61,07%	61,07%	61,07%	61,07%			Average percentage of Millennium BCP's RWA on Financial assets at amortised cost, FVPL and FVOCI (2018-2022)
Equity	6.963.906	7.381.254	7.386.270	7.062.057	5.920.565	6.658.165	7.395.764	8.133.364	8.870.964	9.608.564	10.346.163	11.083.763	11.821.363			
CET1	5.047.000	5.508.000	5.657.000	5.373.000	5.442.000	5.168.083	5.740.610	6.313.136	6.885.663	7.458.189	8.030.716	8.603.243	9.175.769			Computed by multiplying the Average percentage of Millennium BCP's CET1 on Total Equity (2018-2022) with Equity from 2023 to 2029
AT1	5.121.000	6.012.000	6.194.000	5.882.000	5.939.000	5.573.659	6.191.116	6.808.573	7.426.029	8.043.486	8.660.943	9.278.400	9.895.857			Computed by multiplying the Average percentage of Millennium BCP's AT1 on Total Equity (2018-2022) with Equity from 2023 to 2029
Total phased-in capital	5.688.000	7.036.000	7.212.000	7.213.000	7.279.000	6.583.297	7.312.602	8.041.908	8.771.214	9.500.520	10.229.825	10.959.131	11.688.437			Computed by multiplying the Average percentage of Millennium BCP's Total phased-in capital on Total Equity (2018-2022) with Equity from 2023 to 2029
Percentage of CET 1 on Total Equity	72,47%	79,09%	81,23%	77,15%	78,15%	77,62%	77,62%	77,62%	77,62%	77,62%	77,62%	77,62%	77,62%			Average percentage of Millennium BCP's CET1 on Total Equity (2018-2022)
Percentage of AT1 on Total Equity	73,54%	86,33%	88,94%	84,46%	85,28%	83,71%	83,71%	83,71%	83,71%	83,71%	83,71%	83,71%	83,71%			Average percentage of Millennium BCP's AT1 on Total Equity (2018-2022)
Percentage of Total phased-in capital on Total Equity	81,68%	101,04%	103,56%	103,58%	104,52%	98,88%	98,88%	98,88%	98,88%	98,88%	98,88%	98,88%	98,88%			Average percentage of Millennium BCP's Total phased-in capital on Total Equity (2018-2022)

Source: Author analysis

Appendix 11

Ratios

	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	2028F	2029F	Terminal	
Liquidity ratios														**Notes**
Cash ratio	2,09	3,53	4,74	6,85	4,25	1,52	2,05	2,44	2,70	2,85	2,91	2,93	2,93	Not suitable to a Financial Service Firms
Current ratio	3,02	4,61	6,15	8,41	5,54	2,03	2,62	3,06	3,34	3,50	3,58	3,60	3,62	Not suitable to a Financial Service Firms
Loan-to-deposit ratio	0,77	0,77	0,74	0,71	0,72	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80	Relevant
Loan-to-asset ratio	0,61	0,62	0,62	0,60	0,62	0,65	0,64	0,63	0,62	0,62	0,61	0,60	0,60	Relevant
Efficiency ratios														
Cost-to-income ratio	0,68	0,64	0,66	0,57	0,42	0,44	0,43	0,41	0,40	0,38	0,37	0,35	0,34	
Asset utilization ratio	0,04	0,04	0,03	0,03	0,04	0,04	0,04	0,05	0,05	0,05	0,05	0,05	0,06	Instead of using total assets, it was used the value of Financial assets at amortised cost
Cash turnover ratio	0,93	0,52	0,47	0,31	0,58	0,66	0,50	0,42	0,37	0,34	0,31	0,30	0,29	
Loan loss provision ratio	0,25	0,19	0,29	0,21	0,11	0,16	0,16	0,15	0,15	0,14	0,14	0,13	0,13	
Operating expense ratio	0,54	0,59	0,60	0,65	0,39	0,39	0,38	0,36	0,35	0,34	0,33	0,32	0,30	
Profitability ratios														
Return on Risk-Weighted assets	1,00%	0,89%	0,45%	0,05%	0,30%	1,58%	1,73%	1,86%	1,95%	2,00%	1,97%	1,86%	1,64%	
Net interest margin	2,86%	2,87%	2,58%	2,50%	3,13%	3,40%	3,55%	3,72%	3,89%	4,06%	4,25%	4,44%	4,63%	
Net profit margin	22,17%	20,16%	11,54%	1,46%	4,74%	25,02%	25,97%	26,54%	26,56%	25,92%	24,48%	22,10%	18,61%	
ROA	0,55%	0,49%	0,24%	0,03%	0,14%	0,83%	0,88%	0,93%	0,95%	0,95%	0,92%	0,85%	0,74%	
ROE	6,01%	5,44%	2,82%	0,35%	2,19%	11,08%	11,15%	11,15%	11,02%	10,70%	10,10%	9,17%	7,80%	
EPS	0,02	0,018	0,01	0,007	0,011	0,05	0,05	0,06	0,06	0,07	0,07	0,07	0,06	
Capital ratios														
RWA	41.883.000	45.031.000	46.413.000	45.933.000	43.103.000	46.705.452	47.723.382	48.861.385	50.113.862	51.476.260	52.944.959	54.517.158	56.190.787	Values (€ thousands) from 2018 and 2022 taken from Millennium BCP's R&C 2022, 2020 and 2019
Common Equity Tier 1 (CET1)	5.047.000	5.508.000	5.657.000	5.373.000	5.442.000	5.168.083	5.740.610	6.313.136	6.885.663	7.458.189	8.030.716	8.603.243	9.175.769	Values (€ thousands) from 2018 and 2022 taken from Millennium BCP's R&C 2022, 2020 and 2019
Common Equity Tier 1 ratio	12,1%	12,2%	12,2%	11,7%	12,6%	11,1%	12,0%	12,9%	13,7%	14,5%	15,2%	15,8%	16,3%	
Tier 1 capital (CET1 + AT1)	5121000	6.012.000	6.194.000	5.882.000	5.939.000	5.573.659	6.191.116	6.808.573	7.426.029	8.043.486	8.660.943	9.278.400	9.895.857	Values (€ thousands) from 2018 and 2022 taken from Millennium BCP's R&C 2022, 2020 and 2019
Tier 1 capital ratio	12,2%	13,4%	13,3%	12,8%	13,8%	11,9%	13,0%	13,9%	14,8%	15,6%	16,4%	17,0%	17,6%	
Total phased-in capital	5.688.000	7.036.000	7.212.000	7.213.000	7.279.000	6.583.297	7.312.602	8.041.908	8.771.214	9.500.520	10.229.825	10.959.131	11.688.437	Values (€ thousands) from 2018 and 2022 taken from Millennium BCP's R&C 2022, 2020 and 2019
Total capital ratio	13,6%	15,6%	15,5%	15,7%	16,9%	14,1%	15,3%	16,5%	17,5%	18,5%	19,3%	20,1%	20,8%	

Source: Author analysis and Millennium BCP Annual Reports 2018-2022

Appendix 12

Risk free rate estimate

Risk free rate estimate			
Bond	Yield	Source	Comments/rationale
Portuguese government 5y bond yield	2,852%	Bloomberg (20th june 2023)	
Portuguese government 10y bond yield	3,029%	Bloomberg (20th june 2023)	
Portuguese government 30y bond yield	3,519%	Bloomberg (20th june 2023)	

Appendix 13

Equity risk premium estimate

Equity risk premium estimate			
	2023	Source	Comments/rationale
Financial agencies	8,371%	Bloomberg (20th june 2023)	

Appendix 14

Beta estimate

Beta estimate			
	2023	Source	Comments/rationale
Historical			
Raw beta	2,133	Bloomberg (20th june 2023)	
Adjusted beta	1,755	Bloomberg (20th june 2023)	
Pure play method			
Unlevered beta corrected for cash	0,37	Damoadaran, 2023	Industry name: Bank (Money center)
Tax rate	21%		Portugal's corporate tax rate
D/(D+E)	44%		Historical average
E/(D+E)	56%		Historical average
D/E	0,77		
Levered beta	0,60		

Appendix 15

Cost of equity estimate

Cost of equity estimate	
	2023
CAPM	
Risk free rate	3,029%
Beta	1,755
EQRP	8,371%
Cost of equity	**0,17720105**

Appendix 16

ER Valuation

	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	Terminal
Beginning BV of Equity	6.658.165	7.395.764	8.133.364	8.870.964	9.608.564	10.346.163	11.083.763	11.821.363
Cost of Equity	0,17720105	0,17720105	0,17720105	0,17720105	0,17720105	0,17720105	0,17720105	0,17720105
Equity Cost	1.179.833,78	1.310.537,22	1.441.240,66	1.571.944,10	1.702.647,55	1.833.350,99	1.964.054,43	2.094.757,87

	1	2	3	4	5	6
Net income	907.202,50	978.018,58	1.027.798,02	1.045.304,32	1.016.159,22	2.019.480,72
Equity Cost	1.441.240,66	1.571.944,10	1.702.647,55	1.833.350,99	1.964.054,43	2.094.757,87
Excess equity return	-534.038,17	-593.925,52	-674.849,52	-788.046,66	-947.895,21	-75.277,16
Cummulated cost of equity	1,18	1,39	1,63	1,92	2,26	
Present value	-453.650,77	-428.578,82	-413.670,95	-410.345,21	-419.282,87	-187.907,32

Equity Invested	**7.395.764**
PV of Equity Excess Return	**-2.313.435,95**
Value of Equity	**5.082.328,46**
Number of shares	**15.114.000**
Value Per Share	**0,34**

Source: Author analysis

Appendix 17

FCFE Valuation

	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	Terminal
Net income	737.600	824.538	907.202	978.019	1.027.798	1.045.304	1.016.159	921.532
Cost of Equity	0,17720105	0,17720105	0,17720105	0,17720105	0,17720105	0,17720105	0,17720105	0,17720105

	1	2	3	4	5	6
Net income	907.202,50	978.018,58	1.027.798,02	1.045.304,32	1.016.159,22	921.531,67
Investment in regulatory capital	0,00	0,00	0,00	0,00	0,00	0,00
FCFE	907.202,50	978.018,58	1.027.798,02	1.045.304,32	1.016.159,22	921.531,67
Expected growth in earnings						0,08
Cummulated cost of equity	1,18	1,39	1,63	1,92	2,26	
Present value	770.643,63	705.741,77	630.022,20	544.302,32	449.478,12	4.107.171,60

Value of Equity	**7.207.360**
Number of shares	**15.114.000**
Value Per Share	**0,48**

Source: Author analysis

Appendix 18

Multiples Valuation

(€ Millions)

										Price multiples		
Bank	**Main banking segment**	**Market Cap (31-12-2022)**	**EPS growth**	**ROE**	**Total deposits**	**Total loans**	**Total assets**	**Total loans/Total assets**	**Selected**	**P/E**	**P/B**	**Source**
Millennium BCP		2.212,70	1120,2%	3,69%	75.430	56.178	89.870	62,51%				
Bankinter		5.634,10	39,8%	11,48%	72.902	72.605	107.507	67,54%	Y	10,06	1,15	
Sabadell		4.297,10	59,2%	6,56%	164.076	161.750	251.380	64,34%	Y	6,78	0,37	
Powszechna		8.091,60	-33,9%	9,08%	72.740	51.866	92.205	56,25%	Y	11,34	1,06	
Danske Bank		15.849,10	-41,7%	-2,82%	151.202	240.363	509.742	47,15%		7,69	0,74	
Caixa Bank		27.519,60	310,8%	9,06%	391.003	360.242	598.850	60,16%		8,80	0,82	
CGD			44,7%	9,73%	84.310	65.020	102.503	63,43%	Y	11,21	1,00	* R&C CGD 2022
Novo Banco			15000,0%	14,40%	38.983	32.768	45.995	71,24%		5,63	1,00	* R&C Novo Banco 2022
BPI			19,0%	9,44%	31.820	26.286	38.905	67,56%	Y	10,59	1,00	* R&C BPI 2022 e R&C BPI 2021
Banco Santander Totta			100,0%	8,30%	45.990	39.649	55.778	71,08%		6,19	1,00	* R&C Banco Santander Totta 2022
										10,00	**0,92**	

P/E	
Peers' average	9,99583675
Net income	824.538
Equity value	8.241.949,53
Number of shares	15.114.000,00
Price	0,55

P/B	
Peers' average	0,92
Book value of equity	7.395.764
Equity value	6.774.520,20
Number of shares	15.114.000,00
Price	0,45

Source: Author analysis

Appendix 19

Common Size Balance Sheet

FSLI	2018	2019	2020	2021	2022	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	Terminal
Cash and deposits at Central Banks	3,63%	6,33%	6,18%	8,39%	6,70%	6,80%	9,12%	11,20%	13,08%	14,74%	16,20%	17,46%	18,48%
Loans and advances to credit institutions repayable on demand	0,43%	0,39%	0,31%	0,39%	0,24%	0,24%	0,32%	0,40%	0,46%	0,52%	0,57%	0,62%	0,66%
Financial assets at amortised cost	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Loans and advances to credit institutions	1,17%	1,09%	1,18%	0,49%	1,07%	1,10%	1,06%	1,03%	1,00%	0,97%	0,93%	0,91%	0,88%
Loans and advances to customers	60,01%	61,06%	60,74%	59,17%	60,85%	63,70%	62,97%	62,22%	61,46%	60,72%	60,01%	59,35%	58,77%
Debt securities	4,45%	3,90%	7,27%	8,83%	14,51%	12,35%	12,21%	12,06%	11,91%	11,77%	11,63%	11,50%	11,39%
Financial assets at fair value through profit or loss	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Financial assets held for trading	1,15%	1,08%	1,20%	1,00%	0,85%	0,84%	0,78%	0,72%	0,67%	0,62%	0,58%	0,54%	0,50%
Financial assets not held for trading mandatorily at fair value through profit or loss	1,85%	1,72%	1,53%	1,07%	0,62%	0,52%	0,41%	0,32%	0,25%	0,20%	0,16%	0,13%	0,10%
Financial assets designated at fair value through profit or loss	0,04%	0,04%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Financial assets at fair value through other comprehensive income	18,24%	16,19%	14,15%	13,88%	8,30%	7,41%	6,24%	5,25%	4,42%	3,72%	3,13%	2,64%	2,23%
Assets with repurchase agreement	0,08%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Hedging derivatives	0,16%	0,06%	0,11%	0,12%	0,07%	0,06%	0,05%	0,04%	0,03%	0,03%	0,02%	0,02%	0,02%
Investments in associated companies	0,53%	0,49%	0,51%	0,50%	0,33%	0,34%	0,32%	0,30%	0,29%	0,28%	0,26%	0,25%	0,24%
Non-current assets held for sale	2,46%	1,57%	1,20%	0,84%	0,56%	0,43%	0,32%	0,23%	0,17%	0,12%	0,09%	0,07%	0,05%
Investment property	0,01%	0,02%	0,01%	0,00%	0,02%	0,02%	0,02%	0,02%	0,01%	0,01%	0,01%	0,01%	0,01%
Other tangible assets	0,61%	0,89%	0,75%	0,65%	0,64%	0,65%	0,62%	0,59%	0,56%	0,53%	0,51%	0,48%	0,46%
Goodwill and intangible assets	0,23%	0,30%	0,29%	0,28%	0,20%	0,21%	0,20%	0,19%	0,18%	0,17%	0,16%	0,15%	0,15%
Current tax assets	0,04%	0,03%	0,01%	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%	0,01%
Deferred tax assets	3,84%	3,33%	3,07%	2,89%	3,27%	3,30%	3,15%	3,00%	2,86%	2,72%	2,59%	2,47%	2,36%
Other assets	1,07%	1,52%	1,51%	1,49%	1,76%	2,03%	2,21%	2,41%	2,62%	2,85%	3,11%	3,39%	3,70%
Total Assets	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**
Financial liabilities at amortised cost	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Resources from credit institutions	10,21%	7,80%	10,37%	9,58%	1,63%	1,65%	1,57%	1,50%	1,43%	1,36%	1,29%	1,23%	1,18%
Resources from customers	69,37%	72,42%	73,42%	74,87%	83,94%	79,21%	78,30%	77,37%	76,43%	75,50%	74,62%	73,80%	73,08%
Non subordinated debt securities issued	2,22%	1,95%	1,62%	2,36%	1,65%	1,84%	1,95%	2,04%	2,12%	2,19%	2,25%	2,30%	2,34%
Subordinated debt	1,41%	1,93%	1,64%	1,50%	1,48%	1,66%	1,75%	1,84%	1,91%	1,97%	2,02%	2,07%	2,10%
Financial liabilities at fair value through profit or loss	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Financial liabilities held for trading	0,43%	0,42%	0,32%	0,25%	0,27%	0,26%	0,23%	0,21%	0,18%	0,17%	0,15%	0,13%	0,12%
Financial liabilities at fair value through profit or loss	4,75%	3,92%	1,86%	1,70%	2,02%	2,26%	2,39%	2,51%	2,60%	2,69%	2,76%	2,82%	2,87%
Hedging derivatives	0,23%	0,28%	0,33%	0,41%	0,20%	0,17%	0,14%	0,12%	0,09%	0,08%	0,06%	0,05%	0,04%
Provisions	0,46%	0,42%	0,52%	0,49%	0,63%	0,98%	1,27%	1,53%	1,76%	1,97%	2,15%	2,31%	2,46%
Current tax liabilities	0,02%	0,03%	0,02%	0,02%	0,03%	0,06%	0,06%	0,07%	0,08%	0,09%	0,09%	0,10%	0,11%
Deferred tax liabilities	0,01%	0,01%	0,01%	0,02%	0,01%	0,01%	0,01%	0,01%	0,01%	0,01%	0,01%	0,01%	0,01%
Other liabilities	1,71%	1,77%	1,29%	1,20%	1,55%	4,42%	4,39%	4,52%	4,76%	5,09%	5,47%	5,86%	6,21%
Total Liabilities	**90,83%**	**90,96%**	**91,39%**	**92,40%**	**93,41%**	**92,52%**	**92,08%**	**91,70%**	**91,38%**	**91,11%**	**90,88%**	**90,68%**	**90,51%**
Share capital	6,22%	5,79%	5,51%	5,09%	3,34%	3,37%	3,21%	3,06%	2,91%	2,78%	2,65%	2,52%	2,41%
Share premium	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%	0,02%	0,01%	0,01%	0,01%
Other equity instruments	0,00%	0,49%	0,47%	0,43%	0,45%	0,45%	0,43%	0,41%	0,39%	0,37%	0,35%	0,34%	0,32%
Legal and statutory reserves	0,35%	0,29%	0,30%	0,28%	0,30%	0,38%	0,45%	0,50%	0,55%	0,59%	0,63%	0,66%	0,69%
Treasury shares	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Reserves and retained earnings	0,62%	0,53%	0,75%	0,62%	1,39%	2,15%	2,76%	3,30%	3,79%	4,22%	4,61%	4,96%	5,26%
Net income for the year attributable to Bank's Shareholders	0,40%	0,37%	0,21%	0,15%	0,23%	0,23%	0,22%	0,21%	0,20%	0,19%	0,18%	0,17%	0,17%
Total Equity Attributable To Bank's Shareholders	**7,61%**	**7,50%**	**7,25%**	**6,59%**	**5,72%**	**6,60%**	**7,08%**	**7,50%**	**7,86%**	**8,17%**	**8,43%**	**8,66%**	**8,86%**
Non-controlling interests	1,56%	1,55%	1,36%	1,01%	0,87%	0,88%	0,84%	0,80%	0,76%	0,72%	0,69%	0,66%	0,63%
Total Equity	**9,17%**	**9,04%**	**8,61%**	**7,60%**	**6,59%**	**7,48%**	**7,92%**	**8,30%**	**8,62%**	**8,89%**	**9,12%**	**9,32%**	**9,49%**
Total Liabilities and Equity	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**	**100,00%**

Appendix 20

Common Size Income Statement

FSLI	2018	2019	2020	2021	2022	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	Terminal
Interest and similar income	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
Interest expense and similar changes	-24,67%	-22,24%	-15,18%	-7,05%	-21,46%	-20,87%	-20,30%	-19,74%	-19,20%	-18,67%	-18,16%	-17,66%	-17,18%
Net Interest Income	**75,33%**	**77,76%**	**84,82%**	**92,95%**	**78,54%**	**79,13%**	**79,70%**	**80,26%**	**80,80%**	**81,33%**	**81,84%**	**82,34%**	**82,82%**
Dividends from equity instruments	0,03%	0,04%	0,26%	0,05%	0,37%	0,12%	0,11%	0,10%	0,09%	0,09%	0,08%	0,07%	0,07%
Net fees and commissions income	36,20%	35,33%	37,47%	42,58%	28,20%	35,17%	35,17%	35,17%	35,17%	35,17%	35,17%	35,17%	35,17%
Net gains / (losses) from financial operations at fair value through profit or loss	0,07%	0,24%	-0,96%	-0,01%	1,00%	0,93%	0,86%	0,80%	0,74%	0,69%	0,64%	0,59%	0,55%
Net gains / (losses) from foreign exchange	3,99%	3,48%	4,89%	1,02%	0,71%	0,66%	0,61%	0,57%	0,53%	0,49%	0,45%	0,42%	0,39%
Net gains / (losses) from hedge accounting operations	0,14%	-0,29%	-0,13%	0,25%	-0,08%	-0,08%	-0,07%	-0,07%	-0,06%	-0,06%	-0,05%	-0,05%	-0,05%
Net gains / (losses) from derecognition of financial assets and liabilities at amortised cost	-2,66%	-1,25%	-1,56%	-0,22%	0,69%	-0,60%	-0,55%	-0,51%	-0,48%	-0,44%	-0,41%	-0,38%	-0,36%
Net gains / (losses) from derecognition of financial assets at fair value through other comprehensive income	2,62%	5,01%	5,54%	4,02%	-0,49%	-0,45%	-0,42%	-0,39%	-0,36%	-0,34%	-0,31%	-0,29%	-0,27%
Net gains / (losses) from insurance activity	0,45%	0,59%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Other operating income / (losses)	-7,19%	-7,25%	-8,76%	-7,54%	-7,06%	-6,55%	-6,08%	-5,65%	-5,25%	-4,87%	-4,52%	-4,20%	-3,90%
Total Operating Income	**108,98%**	**113,66%**	**121,58%**	**133,10%**	**101,88%**	**108,32%**	**109,32%**	**110,27%**	**111,18%**	**112,05%**	**112,88%**	**113,67%**	**114,43%**
Staff costs	31,37%	33,56%	34,60%	38,28%	21,22%	20,83%	20,44%	20,06%	19,69%	19,33%	18,97%	18,62%	18,28%
Other administrative costs	19,93%	18,90%	18,27%	18,97%	12,89%	13,24%	12,83%	12,27%	11,66%	11,05%	10,46%	9,91%	9,38%
Amortisations and depreciations	3,06%	6,27%	7,52%	8,02%	5,09%	4,72%	4,39%	4,07%	3,78%	3,51%	3,26%	3,03%	2,81%
Total Operating Expenses	**54,36%**	**58,72%**	**60,38%**	**65,27%**	**39,20%**	**38,79%**	**37,65%**	**36,40%**	**35,13%**	**33,89%**	**32,69%**	**31,56%**	**30,47%**
Net Operating Income Before Provisions and Impairments	**54,62%**	**54,94%**	**61,19%**	**67,83%**	**62,68%**	**69,53%**	**71,66%**	**73,87%**	**76,05%**	**78,16%**	**80,19%**	**82,12%**	**83,96%**
Results on modification	0,00%	0,00%	0,00%	0,00%	-11,32%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Impairment for financial assets at amortised cost	-24,63%	-19,60%	-28,43%	-20,64%	-10,99%	-16,38%	-15,77%	-15,18%	-14,62%	-14,08%	-13,55%	-13,05%	-12,56%
Impairment for financial assets at fair value through other comprehensive income	0,06%	0,11%	-0,57%	-0,27%	0,18%	-0,01%	-0,01%	-0,01%	-0,01%	-0,01%	0,00%	0,00%	0,00%
Impairment for other assets	-4,18%	-4,82%	-4,39%	-3,56%	-7,02%	-2,67%	-2,48%	-2,31%	-2,14%	-1,99%	-1,85%	-1,71%	-1,59%
Other provisions	-3,05%	-2,89%	-13,20%	-37,61%	-20,76%	-10,61%	-9,86%	-9,15%	-8,50%	-7,89%	-7,33%	-6,80%	-6,32%
Net Operating Income	**22,81%**	**27,74%**	**14,60%**	**5,75%**	**12,77%**	**39,85%**	**43,54%**	**47,22%**	**50,79%**	**54,20%**	**57,46%**	**60,55%**	**63,48%**
Share of profit of associates under the equity method	4,72%	2,16%	3,75%	3,33%	2,51%	2,21%	2,05%	1,90%	1,77%	1,64%	1,52%	1,42%	1,31%
Gains / (losses) arising from sales of subsidiaries and other assets	2,01%	1,60%	-0,35%	0,15%	0,37%	0,52%	0,48%	0,45%	0,41%	0,38%	0,36%	0,33%	0,31%
Net Income Before Income Taxes	**29,54%**	**31,50%**	**17,99%**	**9,23%**	**15,65%**	**42,57%**	**46,07%**	**49,57%**	**52,97%**	**56,23%**	**59,34%**	**62,29%**	**65,11%**
Income Taxes	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Current	-5,59%	-5,07%	-6,01%	-4,76%	-4,01%	-8,94%	-9,68%	-10,41%	-11,12%	-11,81%	-12,46%	-13,08%	-13,67%
Deferred	-1,72%	-6,95%	-1,31%	-7,15%	-7,11%	-8,61%	-10,42%	-12,62%	-15,28%	-18,50%	-22,39%	-27,11%	-32,82%
Net Income After Income Taxes From Continuing Operations	**22,24%**	**19,48%**	**10,68%**	**-2,68%**	**4,54%**	**25,02%**	**25,97%**	**26,54%**	**26,56%**	**25,92%**	**24,48%**	**22,10%**	**18,61%**
Income arising from discontinued or discontinuing operations	**-0,07%**	**0,67%**	**0,86%**	**4,15%**	**0,20%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**	**0,00%**
Net Income for the year	**22,17%**	**20,16%**	**11,54%**	**1,46%**	**4,74%**	**25,02%**	**25,97%**	**26,54%**	**26,56%**	**25,92%**	**24,48%**	**22,10%**	**18,61%**

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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%