



Ca' Foscari
University
of Venice

Master's Degree in Management

Double Degree Programme
in Management in
cooperation with the
University of Hohenheim and
Ca' Foscari University of
Venice

Final Thesis

Financial Institutions in a Period of Transition:

A comparative analysis
of the Landesbank
Baden-Württemberg
(LBBW) and UniCredit
Italia

Supervisor

Prof. Stefano Micelli

Graduand

Franziska Elisabeth Mast

Matriculation Number 899165

Academic Year

2023 / 2024

Table of Content

List of Figures.....	V
List of Tables.....	V
List of Abbreviations.....	VI
1 Introduction	1
1.1 Challenges for Traditional Banks in the Age of Digitalization and Sustainability.....	1
1.2 Objectives of the Thesis and Research Questions	2
1.3 Structure of the Thesis	2
1.4 Academic Approach	4
1.5 Scope and Limitations of the Thesis.....	5
2 The Banking Sector in Germany	7
2.1 Historical Development of the German Banking Sector	7
2.2 The Three Pillars of the German Banking Sector.....	8
2.2.1 Private Commercial Banks: Role and Evolution.....	9
2.2.2 Public Banks: Structure and Regional Importance.....	10
2.2.3 Cooperative Banks: Empowering Local Economies and Communities.....	12
2.3 Landesbanken: Role, Functions, and Key Challenges.....	13
2.4 Current Challenges in the German Banking Sector.....	15
2.4.1 Past Challenges and Responses	15
2.4.2 Present Challenges.....	17
2.5 Sustainability and ESG Factors in the German Banking Sector.....	23
2.6 Digitalization and Technological Transformation in the German Banking Sector ...	25
3 The Banking Sector in Italy.....	31
3.1 Historical Development of the Italian Banking Sector	31
3.2 Structure of the Italian Banking Sector.....	32
3.3 Challenges in the Italian Banking Sector.....	35
3.3.1 Retrospective of Past Challenges	35
3.3.2 Current Challenges	37
3.4 Comparison of the German and Italian Banking Sector: Structures and Challenges	41
4 Analysis of the Landesbank Baden-Württemberg.....	46
4.1 Overview and Development of LBBW.....	46
4.1.1 Historical Development of LBBW	46

4.1.2	Locations and Employee Structure.....	47
4.1.3	Economic Analysis and Key Figures of LBBW.....	50
4.2	Challenges Facing LBBW in a Dynamic Market Environment	52
4.3	Strategic Analysis of LBBW: Direction, Structure, Sustainability and Technology.....	55
4.3.1	Strategic Goals and Direction of LBBW.....	55
4.3.2	Organizational Structure and Business Areas of LBBW	62
4.3.3	Sustainability Strategies of LBBW.....	66
4.3.4	Digitalization and Technological Transformation at LBBW	70
4.4	Success Factors of LBBW	74
5	Benchmark Comparison of the Landesbank Baden-Württemberg with German Banks..	77
5.1	Comparison of LBBW with Leading Systemically Important Banks in Germany ...	77
5.1.1	Selection Criteria and Relevance.....	77
5.1.2	Deutsche Bank: A Global Player in Competition.....	78
5.1.3	Commerzbank: The Transformation from a Traditional to a Digital Bank.....	79
5.1.4	DZ Bank: The Strength of the Cooperative Network.....	80
5.1.5	BayernLB: Regional Focus with Global Challenges.....	80
5.1.6	Helaba: Sustainability and Digital Transformation as Key Factors	81
5.2	Comparison of the Economic Key Figures: LBBW's Position in the Market.....	82
5.3	Sustainability and ESG Comparison: Leading Institution's Role in Sustainable Banking.....	84
5.3.1	Deutsche Bank: Sustainability Strategies in an International Context.....	85
5.3.2	Commerzbank: Path to Ecological Responsibility	86
5.3.3	DZ Bank: Cooperative Principles and Sustainability	87
5.3.4	BayernLB: The Role of Regional Banks in Sustainability.....	87
5.3.5	Helaba: Integrating ESG Strategies into Regional Banks	88
5.4	Digital Transformation in the German Banking Sector: Leading Institutions in the Digital Shift	89
5.4.1	Deutsche Bank: Progress in Digital Infrastructure	89
5.4.2	Commerzbank: Digitalisation as Core Strategy	90
5.4.3	DZ Bank: The Role of Digitalisation in the Cooperative Model	91
5.4.4	BayernLB: Digital Change in Regional Banks.....	91
5.4.5	Helaba: Digitalisation as a Success Factor in Public Banking	92

5.5	Evaluating LBBW’s Competitive Landscape: Strengths, Weaknesses, and Strategic Insights	93
5.5.1	Explanation and Application of SWOT-Analysis in Evaluating LBBW’s Market Position	93
5.5.2	Sustainability in the SWOT comparison: LBBW’s Position in the Domain of Sustainability	94
5.5.3	Digital Transformation in the SWOT Comparison: LBBW’s Technological Standing	98
5.5.4	Strategic Recommendations Based on the SWOT-Analysis	101
6	In-Depth Analysis of UniCredit – Challenges and Success Strategies	104
6.1	Strategic Analysis of UniCredit: Adapting in a Dynamic Market Environment	104
6.2	UniCredit’s Path to Digital Transformation: Key Developments and Initiatives	108
6.3	Sustainability Strategies of UniCredit: Balancing Regulatory Pressure and Market Opportunities	110
6.4	Current and Future Challenges of UniCredit: Analysing Market and Corporate Risks	113
6.5	Success Factors of UniCredit: Strategies for Ensuring Future Competitiveness	115
7	Comparison of the Landesbank Baden-Württemberg and UniCredit	117
7.1	Assessing the Comparability of LBBW and UniCredit: Opportunities and Limitations	117
7.1.1	Justifications for Comparing LBBW and UniCredit: Strategic Similarities	117
7.1.2	Identifying Key Differences: Challenges in Comparing Two Distinct Institutions	118
7.2	In-Depth Comparison of Strategic Directions and Market Positions	119
7.2.1	Strategic Approaches and Market Presence: A Comparative Evaluation	119
7.2.2	Financial Performance Comparison: Key Figures and Growth Indicators	120
7.2.3	Sustainability and ESG Commitments: A Comparative Perspective	121
7.2.4	Digital Transformation Initiatives: Technological Progress in Both Banks	121
7.3	Developing Actionable Strategies for UniCredit Based on the Comparative Insights	122
7.3.1	General Strategic Recommendations for UniCredit	122
7.3.2	Enhancing Sustainability Initiatives at UniCredit	123
7.3.3	Improving Digital Transformation Efforts at UniCredit	124

8	Final considerations	126
8.1	Conclusion and Evaluation of Findings	126
8.2	Critical Reflection	129
	Literature	131
	Appendix	174

List of Figures

Figure 1: The three pillars of the German banking sector	8
Figure 2: Interest rate policy of the ECB.....	18
Figure 3: Inflation rate in Germany	19
Figure 4: Age structure in Germany	22
Figure 5: ESG Factors	24
Figure 6: Three pillars of the Italian banking sector	33
Figure 7: Age structure in Italy.....	39
Figure 8: LBBW locations worldwide	47
Figure 9: Number of employees at LBBW over the last ten years.....	49
Figure 10: Owners of LBBW	49
Figure 11: LBBW profit before tax over the last ten years	51
Figure 12: LBBW profit before tax by business area.....	66
Figure 13: SWOT analysis regarding sustainability.....	94
Figure 14: SWOT analysis regarding digital transformation	98
Figure 15: UniCredit sustainability strategy.....	111
Figure 16: Results SWOT analysis regarding sustainability	127
Figure 17: Results SWOT analysis regarding digital transformation	128

List of Tables

Table 1: A comparison of economic key figures - Germany and Italy	43
Table 2: Comparison of the economic key figures - German banks	82
Table 3: Comparison LBBW	83
Table 4: ESG-Rating German banks	84
Table 5: Improvement measures for UniCredit.....	129

List of Abbreviations

AI	Artificial Intelligence
BayernLB	Bayerische Landesbank
BW Bank	Baden-Württembergische Bank
CET1	Common Equity Tier 1
DDR	Deutsche Demokratische Republik
ECB	European Central Bank
ESG	Environment Social Governance
EU	European Union
FinTech	Financial Technology
FMS	Financial Market Stabilization
Helaba	Landesbank Hessen-Thüringen
IT	Information Technology
LBBW	Landesbank Baden-Württemberg
NPL	Non-Performing Loans
ROE	Return on Equity
SWOT	Strengths, Weaknesses, Opportunities and Threats
UK	United Kingdom
USA	United States of America
US	United States

1 Introduction

The introduction is divided into five sub-chapters. The initial section presents the topic that prompted the formulation of this master's thesis. The deriving objective, is then outlined in the form of four research questions. Subsequently, the structure of the thesis and the academic approach employed are discussed. The final section of the introduction defines the scope of the thesis, defining which topics are covered.

1.1 Challenges for Traditional Banks in the Age of Digitalization and Sustainability

The Landesbank Baden-Württemberg (LBBW) operates as a traditional universal bank, primarily within the state of Baden-Württemberg.¹ As with other banking institutions in Germany and Europe, the bank is confronted with a multitude of challenges to be addressed in order to establish its franchise in an increasingly dynamic market characterized by evolving customer expectations. These challenges include, inter alia, the effects of the global pandemic of 2019 (COVID-19), geopolitical uncertainties, demographic change, numerous sustainability aspects and digital transformation.² A significant number of new competitors, known as “financial technology” (FinTech) companies, are emerging in the traditional banking sector.³ In light of these developments, it is key to assess how traditional banking institutions, such as LBBW in Germany, can preserve their value. Recently, LBBW has achieved a profit before taxes of over 1.3 billion euros in 2023.⁴ Furthermore, the half-year result for 2024 also exceeded expectations as well as 1st half-year of 2023 by six percent.⁵ These results demonstrate that LBBW is effectively addressing the current challenges and sustaining, and even enhancing, its market value. UniCredit in Italy is confronted with comparable challenges. Still UniCredit was able to close the previous fiscal year with an exemplary outcome.⁶ Both banks are facing the similar challenges in analysing the obstacles they will encounter, strategies to be developed to overcome them, and the means of ensuring continued profitability and growth in the markets. Consequently, both banks are obliged to analyse how they have managed to achieve success despite

¹ LBBW Über uns, n.d.

² Research, n.d.

³ Geno Crowd GmbH, 2024

⁴ LBBW, n.d.

⁵ LBBW Halbjahresgewinn, n.d.

⁶ Handelsblatt, n.d.

the challenging circumstances, what challenges they will encounter in the future and, in particular regarding to UniCredit, what measures should be taken to ensure their continued success.

1.2 Objectives of the Thesis and Research Questions

Derived from the problem definition, this master thesis pursues multiple objectives and gathers a number of research questions.

The initial objective is to present an overview of the German banking sector and the challenges that banks in this market are facing. Similar considerations need to be applied to the Italian banking sector. Combining considerations should provide a theoretical foundation for the practice-oriented section. The initial practice-oriented section is primarily concerned with an analysis of LBBW. In addition to a general analysis, this study also focuses on the aspects of sustainability and digital transformation. Moreover, an analysis will be conducted to identify the key success factors of LBBW. In addition, the objective of this section is to conduct a comparative analysis of selected banks with LBBW, thereby determining LBBW's market positioning. In the second practice-oriented part, a detailed examination of UniCredit will be performed, also with a particular focus on its approach to sustainability and digital transformation. Subsequently, UniCredit and LBBW are subject to benchmarks, leading with recommendations for actions proposed to UniCredit regarding the potential for increased profitability and the maintenance of its market position. The research questions pertain to the two practice-oriented sections of the thesis. The underlying theory is intended to serve as a basis for further investigation. The objectives highlighted, lead to the following summarized research questions:

1. Which strategic directions is LBBW pursuing and what are its success factors?
2. How is LBBW positioned compared to other German banks?
3. What are the success factors of UniCredit?
4. Which improvement measures can be derived for UniCredit based on a comparison with LBBW?

These following four research questions highlighted will be addressed and answered in the course of this thesis.

1.3 Structure of the Thesis

The thesis' following structure was selected in order to respond to the research questions and achieve the objective outline above. The initial chapter mirrors the introductory section and presents the issue under examination, the objective of the study, the structure of the thesis, the scientific approach adopted and the limits of the investigation. The conclusion, presented in

chapter 8, offers a summary and critical appraisal of the thesis. The theoretical foundations are established in chapters 2 and 3 with the second chapter examining the banking sector in Germany, while the third chapter assesses the banking sector in Italy. Both chapters examine the historical evolution of the banking sector, its structural characteristics, and the challenges it has faced in the past and continues to encounter until the present day. It is notable that the section on German banking is considerably more detailed than the corresponding section on Italian banking. Furthermore, the second chapter addresses sustainability and Environment Social Governance (ESG) considerations, as well as the digital transformation in banking. This is centered Germany, but can also be applied with considerable relevance to Italy, given the pan-European nature of these issues. The section, which is oriented towards practical insights, includes Chapters 4, 5, 6 and 7. Chapter four presents an analysis of LBBW. This section provides a comprehensive overview of the subject matter, followed by a more detailed analysis. The general overview provides an account of the historical development, locations and employees of LBBW, as well as an analysis of the bank's key economic figures. Subsequently, the challenges that LBBW is currently facing are presented. The in-depth analysis primarily considers the strategic direction and, on this basis, focuses on the technological status and technological transformation, as well as sustainability. Furthermore, chapter four elaborates on the success factors of the LBBW. The fifth chapter presents a comparative analysis of LBBW with five other German banks. The primary focus of this section is a comparative analysis of economic key figures, sustainability aspects and digital transformation. This chapter concludes with a competitive analysis of LBBW. Two Strengths, Weaknesses, Opportunities and Threats (SWOT) analyses are conducted in this study. These relate to the topics of sustainability and digital transformation. Analysis is conducted to illustrate LBBW's market positioning. The second practice-oriented part of the thesis, is presented in chapters 6 and 7. The sixth chapter presents a case study of UniCredit. The analysis on UniCredit is less comprehensive than that of LBBW. Nevertheless, a fundamental analysis of UniCredit is conducted, as is a detailed examination of the topics of the banks' sustainability and digital transformation. Obstacles UniCredit is confronted with are reviewed, and the elements that have facilitated its achievements are assessed. The seventh chapter, the "results" chapter, presents a comparison between LBBW and UniCredit. In the chapter, the question of the comparability of the two banks is addressed. Subsequently, a comparison is conducted across four categories: strategic approaches and market presence, financial performance, sustainability and ESG, and digital transformation. This chapter concludes with the formulation of recommendations for potential improvements to UniCredit. The improvement measures were derived from the four comparison categories. The

recommendations cover a range of strategic considerations, alongside enhancements to sustainability and improvements to digital transformation. The concluding chapter presents a comprehensive summary of the work, accompanied by a critical analysis.

On initial examination of the thesis structure, it becomes evident that the practice-oriented sections, chapters 4 to 7, appear to encompass two distinct topics. However, this is not the case. The initial section establishes the rationale for utilising LBBW as a benchmark institution to inform the derivation of improvement measures for UniCredit. The second part of the thesis comprises an analysis of UniCredit, with a view to identifying potential for improvement, in comparison with LBBW. The objective is that the first part is a prerequisite for the second part, which it is built upon it.

1.4 Academic Approach

Based on the examination of the structure of the work, the scientific approach applied in this thesis is presented that provides an approach to achieve its objective and research questions. In the initial section of the study, a wide range of scientific literature was consulted, including books, academic papers, reports, and online sources. This analysis of the literature is intended to describe the current state of banking in Germany and Italy. To ensure a comprehensive and up to date analysis, a variety of sources is leveraged. Such an undertaking would be unfeasible if only one medium were employed. In the practice-oriented section, the analysis of individual banks and LBBW is conducted exclusively through online sources and reports issued by the banks themselves. A similar approach is applied to UniCredit. This source was selected in order to provide an insight into the banks that is both up-to-date and comprehensive. Moreover, to gain insight into LBBW, consultations with employees were performed, and knowledge drawn from several years of personal professional experience in this bank was leveraged. In order to facilitate a comprehensive evaluation of LBBW's performance within the German market, a SWOT analysis was conducted. This analytical approach enabled a systematic examination of the company's strengths, weaknesses, opportunities, and threats.

In contrast, a SWOT analysis was not employed for the assessment of improvement measures for UniCredit, as the focus was on a comparative analysis with the LBBW. A structured overview of the key elements is presented instead.

1.5 Scope and Limitations of the Thesis

The objective of this study is to provide insight into a topic that is both extensive and multifaceted. Given that it is not possible to consider all aspects in the same way. By design certain aspects have been intentionally excluded from this study.

The following section will provide a brief overview of some of these aspects. One of the objectives of this thesis is to provide an overview of the German and Italian banking sectors. The principal focus is on past and current challenges, with a particular emphasis on sustainability aspects and digital transformation. The topic of regulation is not addressed in details in this thesis. The impact of stringent regulatory stipulations on banking operations is examined, particularly in terms of their effect on operational efficiency. Nevertheless, as legal assessment on regulations referenced is not performed. This would exceed the scope of the thesis and would not contribute to the achievement of the objective. Regarding past and current challenges, the impact of the COVID-19 pandemic and its consequences for Germany have been excluded from this analysis. Although it is referenced, it is not elaborated upon in detail. The reason for the exclusion is that Germany and, consequently, the German banking sector have demonstrated their capacity to effectively address this crisis. In contrast the impact of the COVID-19 pandemic on the Italian banking sector is addressed, given that Italy was more severely affected by the pandemic than Germany and the consequences are still being observed. A significant portion of this thesis is dedicated to an assessment of sustainability with the topics: ESG factors, green finance and the sustainability strategies of the respective bank. Other topics in this area are excluded from this thesis on the grounds that they are relevant but not crucial for the conclusions. This thesis provides a more detailed examination of the current state of digitization and digital transformation. The according section will introduce some of the key technologies that will be discussed in more detail throughout this thesis. However, these are not discussed in technical details, since a detailed understanding of the technical functionalities of these technologies is not required for the assessment of their impacts on the banking sector.

Moreover, no comparison is made with other countries. The present study compares only the German and Italian banking sectors. Additionally, the analysis of UniCredit does not include a comparison with other Italian banking institutions. The selection of these two approaches was made with the intention of ensuring that the thesis stays focused on its objective. Additionally, the evaluation of LBBW employs a SWOT analysis rather than a SWOT matrix. This approach was selected because a SWOT analysis is sufficient to achieve the objective of the thesis.

To facilitate the analysis presented in this paper, it is essential to define the names of the companies that are integrated into the text. It should first be noted that, in the following text, the

term "UniCredit" is used primarily to refer to UniCredit Italia. Conversely, when the entire group is referenced, it is referred to as the "UniCredit Group." This differentiation is noted since the paper focuses on UniCredit Italia.

2 The Banking Sector in Germany

Germany holds one of the largest banking sectors in the world. In comparison with other countries, the German banking sector is notable for the relatively low market share of private banks in relation to public-sector and cooperative credit institutions.⁷

This chapter presents the historical development of banking in Germany up to the present day. After that, the three pillars of the banking sector will be examined and a deep dive into the topic of Landesbanken will follow.

2.1 Historical Development of the German Banking Sector

This subchapter examines the genesis of the German banking sector. Its origin is older than 500 year and the Fugger Bank is considered as the first bank in Germany.

Fugger Bank was first mentioned in 1486 by the Augsburg city council as “banck von Ulrichen Fugker”.⁸ The Fugger family were one of the most important banking and trading houses in Europe.⁹ The scope of their banking business encompassed a range of activities, including the provision of loans to members of the nobility and royal leaders, the management of assets for affluent clientele, and the facilitation of financing for trading enterprises. With banking houses in several cities, including Augsburg, Nuremberg and Cologne, they were seen as an important hub in the European trade network and were involved in a wide range of financial activities.¹⁰ In 1590, the first owner-managed private bank in Germany was established, the “Berenberg Bank”. It was founded in Hamburg by the brothers Hans and Paul Berenberg.¹¹ The first bank in Germany to issue means of payment was the Cologne-based “Banco di gyro d'affrancatione”, founded in 1705.¹² Approximately 70 years later, in 1770, the first mortgage bank, now a covered bond bank, was founded: “The Schlesische Landschaft”. It was a cooperative public-law credit institution.¹³ In the 18th century, the first savings banks were also established. They were founded to give the poorer sections of the population a secure way to deposit small capital sums at interest or risk provision.¹⁴ After a failed harvest in 1846, the first rural credit union was set up by Friedrich Wilhelm Raiffeisen.¹⁵ The first major bank was the “Commerz- und Disconto-

⁷ Jugend und Finanzen, n.d.

⁸ Fürst Fugger Privatbank, 2022

⁹ Cf. Häberlein & Burkhardt, 2014, p. 9

¹⁰ Cf. Breßgott 2023, p. 22

¹¹ Berenberg 2021

¹² Pick, 2021

¹³ Schlesische Landschaft – Kulturstiftung, n.d.

¹⁴ Handelszeitung, 2019b

¹⁵ Raiffeisen, n.d.

Bank”. It was established in February 1870 in Hamburg and is now known as “Commerzbank”. Other major banks such as “Deutsche Bank” and “Dresdner Bank” were founded shortly afterwards. Their establishment can be traced back to industrialization and the establishment of large-scale industry, as the latter could only be financed by large banks.¹⁶ In the post-war period, the development of the banking sector took a different course in the two German states. While in West Germany, the banks also continued growing during the reconstruction phase, in the German Democratic Republic (DDR), all private banks and insurance companies were closed and their assets confiscated. With the fall of the Berlin Wall, the DDR banking system was abolished and a unified banking system was established.¹⁷ German banks became more and more international, also in connection with the introduction of the euro. New regulatory changes came into force, particularly after the global financial crisis of 2008, when, for the first time, banks with liquidity issues were rescued by the state.¹⁸ Over the years, further European Union (EU) regulations were added. Moreover, technological innovations also proved advantageous for the German banking sector.¹⁹

These issues will be examined in greater depth in one of the following subchapters.

2.2 The Three Pillars of the German Banking Sector

From a historical perspective, the German banking sector can be divided into three distinct pillars: private commercial banks, public-sector banks and cooperative banks. These three pillars support the German financial system, as illustrated in Figure 1.²⁰

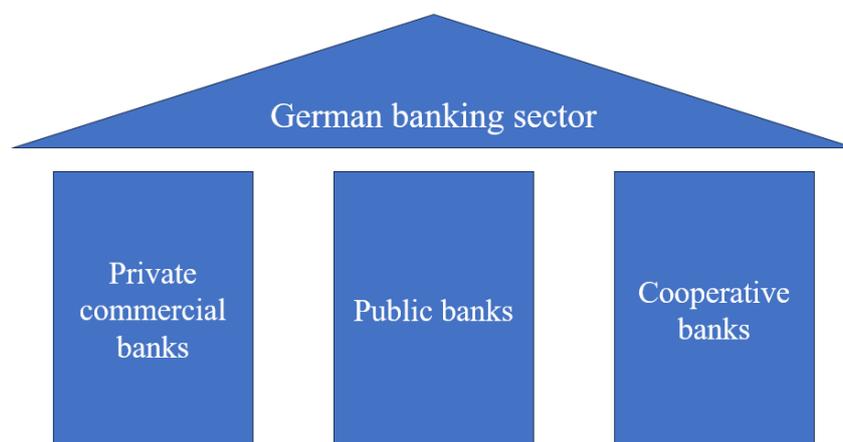


Figure 1: The three pillars of the German banking sector²¹

¹⁶ Cf. Krause, 2004, pp. 45 ff.

¹⁷ Brendel, 2022

¹⁸ Dohmen, 2024

¹⁹ European Central Bank, 2022a

²⁰ Cf. Fischer, 2012, p. 202

²¹ Extracted from: Cf. Fischer, 2012, p. 202

This structure was established with the objective of creating a stable, diversified and balanced banking sector that is responsive to the needs of consumers and the economy.²² Furthermore, this system also serves the following other aims.

Competition is encouraged. The existence of the three different pillars encourages competition within the banking sector. Such competition should result in enhanced service quality, more innovative products and competitive interest rates. Furthermore, it should guarantee stability and diversification, as the sectors' division prevents the collapse of a single bank or pillar from jeopardizing the entire banking sector.²³ Finally, the distribution can enable local presence and proximity to customers. The typical savings banks and cooperative banks are usually locally based which fosters a close relationship with their customers.²⁴ This distribution results in a decentralized structure, unlike in other countries.²⁵

The three pillar system differs from the banking system in many other countries.²⁶ For example, in France there is no clearly visible separation between private banks, savings banks and cooperative banks, as is the case in Germany. In the French banking sector, there are a large number of banks and financial institutions that have different roles and functions. They often operate in a competitive environment.²⁷ Also, the United State (US) system differs from the German one. The US system is characterized by larger banks and a universal banking model. This means that there is no clear distinction between different types of banks, and these banks offer a range of different financial services. Moreover, the market is characterized by a few very large banks.²⁸ How the German banking sector differs from the Italian one will be laid out in chapter 3.4. The following section will provide a more detailed examination of each of the three pillars.

2.2.1 Private Commercial Banks: Role and Evolution

Private commercial banks, also known as private banks, are defined as credit institutions under private ownership. The shareholders of these institutions are neither public authorities nor members of a cooperative.²⁹

²² Hassan, 2014

²³ Bundesbank, n.d

²⁴ Cf. Lebrun et al., 2021, p. 4

²⁵ Hassan, 2014

²⁶ Bundesbank, n.d.

²⁷ Cf. Goddard et al., 2007, pp. 1922 ff.

²⁸ Deos et al., 2013

²⁹ Private Geschaefstbanken, n.d.

The term is used to describe banks that are owner-managed in the legal form of a commercial partnership. In the majority of instances, private banks have a more exclusive customer base and demand high deposits. Additionally, the private banking sector foreign bank branches in Germany, specialized credit institutions and corporate banks. Moreover, private banks include banks that have a specific target customer base and can therefore provide specialized services.³⁰ These institutions are structured in a manner that allows them to generate profits for their shareholders. The specific products offered and the assets to be invested can vary considerably depending on the bank.³¹ The underlying assumption is that the greater the amount of capital available, the more valuable a private bank is likely to be.³² The services provided include the formulation of investment objectives and risk profiles, the selection of individual investment instruments, performance reviews, the creation of savings accounts and numerous other services. Two general service areas can be distinguished: asset management and investment advice. In addition, asset management involves optimizing assets with a view to tax measures.³³ However, it should be noted that private banks do not all offer the same services. For example, direct banks are also considered to be private banks. These institutions do not maintain a physical branch network, that conducts all business operations. The absence of physical branches allows for the reduction of operating costs for customers.³⁴

These types of banks play an important role in the economy as they provide capital and payment services to finance investments. Nevertheless, they are subject to rigorous regulatory requirements and supervision, as the stability of the financial system must be guaranteed customer deposit must be protected.³⁵ In contrast to the general downward trend in the number of banks, the number of private banks has remained constant at approximately 270 over the past decade and a half. In 2018, these mid-sized private banks managed assets exceeding \$280 billion on behalf of their clients.³⁶

2.2.2 Public Banks: Structure and Regional Importance

A public bank is a public-sector company that engages in banking activities. The scale of this business requires the implementation of a commercially organised operational structure. The public interest is to be safeguarded by the tasks of public-sector credit institutions. This term is

³⁰ FörderMarkt, n.d.

³¹ Handelszeitung, 2019a

³² Bank, n.d.

³³ Handelszeitung, 2019a

³⁴ FörderMarkt, n.d.

³⁵ Sparkasse, n.d.

³⁶ Jerzy, 2023

used to collectively refer to credit institutions in which the public sector holds a majority of shares or sole ownership position.³⁷

Consequently, they are therefore institutions subject to public law and as such are subject to the legal norms of the state and higher authorities. As a result, they often have a legal connection to public institutions such as municipalities. In Germany, public-law credit institutions include savings banks and Landesbanken.³⁸ A more detailed examination of Landesbanken can be found in Chapter 2.3. These types of banks are particularly concerned with the common good and their principal business activities are situated within the economic domain of their respective locations. This results in a regional focus through, which enables them to establish a close connection with the needs of the citizens and the regional economy.³⁹ The objective of public banks is to drive development. This means that they are obliged to support projects in the public interest, such as projects that advance environmental protection.⁴⁰

In consequence of their obligation to provide public services, they are subject to a distinctive form of liability for deposits, designed as institutional protection. The guarantors are liable not only for the deposits of customers, but also for the entire institution.⁴¹ This implies that in the case of savings banks, the relevant municipal authorities are obliged to provide liquidity in the event of an emergency.⁴²

The types of public-sector banks include:⁴³

- Public savings banks: Savings banks are public-law institutions. In contrast to Landesbanken, their owners of these institutions are typically districts, cities or municipalities. Their task is to strengthen the economy and to provide the population and medium-sized companies with financial services. These institutions are subject to supervision by the Federal Financial Supervisory Authority. In the state of Baden-Württemberg alone, there are currently 50 savings banks with almost 2,000 branches.⁴⁴ As of April 2024, there were 351 institutions with over 11,000 branches throughout Germany.⁴⁵
- Landesbanken / giro centres: A Landesbank is a public-sector credit institution that is responsible for conducting all banking transactions, including the granting of loans.⁴⁶ In the

³⁷ Schöning, 2018b

³⁸ Wirtschaftslexikon24.com, n.d.-b

³⁹ Cf. Lütke-Uhlenbrock, 2007, p. 8

⁴⁰ AlleAktien, 2024

⁴¹ Cf. Lütke-Uhlenbrock, 2007, p. 8

⁴² Manger, 2018

⁴³ Wirtschaftslexikon24.com, n.d.-b

⁴⁴ Ministerium des Inneren, n.d.

⁴⁵ Sparkassen DSGV, n.d.

⁴⁶ Bundeszentrale Für Politische Bildung, 2021

event of a merge with giro centres, they become simultaneously central institutions of the savings banks.⁴⁷

- Public-sector mortgage banks: These have the special responsibility of financing residential construction through the provision of mortgages.⁴⁸
- Public-sector building societies: These savings banks provide building loans and other financial products for real estate financing.⁴⁹
- Public-sector banks with special tasks: These fulfil the financing of special tasks in the public interest. One example of such a bank is the “Landwirtschaftliche Rentenbank” (Agricultural Pension Bank).⁵⁰

2.2.3 Cooperative Banks: Empowering Local Economies and Communities

The third and final pillar are the cooperative banks. As a cooperative, the institution is committed to the principle of promoting the economic well-being of its members by granting loans and conducting other banking business.⁵¹ A cooperative banks is a credit institution that is organized in the legal form of a registered cooperative.⁵² The origins of cooperative banks can be tracked back to the social hardship of the 19th century. At that time, artisans, farmers and smaller companies required loans and were dependent on private moneylenders. Consequently, they became indebted and were forced to relinquish their economic independence. The first cooperative banks were established with the objective of providing assistance to their members, in accordance with the principle that a collective effort can achieve more than individuals can on their own.⁵³ In other words, they operate on the principle of mutual assistance.⁵⁴ As with savings banks, they are typically organized on a regional basis. In contrast to savings banks, customers of cooperative banks are typically granted the opportunity to purchase shares in the cooperative. This gives them co-determination rights and thus also a direct share of the profits generated.⁵⁵ Upon acquiring shares in a cooperative bank, the individual becomes a member of that particular financial institution. Any individual of legal age with their main residence in Germany is eligible to become a member of a cooperative bank. The advancement of their members' economic interests is codified in the statutes of the cooperatives and in §1 of the Cooperatives

⁴⁷ Landesbanken DSGV, n.d.

⁴⁸ Wirtschaftslexikon24.com, n.d.-a

⁴⁹ LBS, n.d.

⁵⁰ Reinstädler, 2018b

⁵¹ Cf. Lütke-Uhlenbrock, 2007, p. 8

⁵² Sparkasse Genossenschaftsbank, n.d.

⁵³ VolksbankRaiffeisenbank Oberbayern Südost eG, n.d.

⁵⁴ Sörensen, 2023

⁵⁵ Sparkasse Genossenschaftsbank, n.d.

Act.⁵⁶ Consequently, cooperative banks are obliged to align their business policy with the wishes and concerns of their members.⁵⁷ As a community of values, this type of bank is always guided by the principles of cooperation. The specific values pursued by individual cooperative banks may vary. Nevertheless, the majority of these values are based on principles such as fairness, responsibility, transparency, trust, partnership and solidarity.⁵⁸

Similarly, as with the preceding two categories of banks, there are also a variety of distinct types of cooperative banks.⁵⁹

- “Volksbanken” and “Raiffeisenbanken”: These are the best-known cooperative banks in Germany. Since 1972, they have constituted a joint central organization. They are typically universal bank, offering a comprehensive range of banking services.⁶⁰
- Specialized cooperative banks: These are cooperative banks that concentrate their activities on specific customer groups or sectors, such as agriculture.⁶¹
- Cooperative central banks: In Germany, this definition applies to DZ Bank AG. It serves as the central bank for the affiliated credit cooperatives. This implies, for example, that the bank serves larger corporate customers, provides capital market products and also handles foreign business.⁶²

2.3 Landesbanken: Role, Functions, and Key Challenges

After considering the three pillars, this sub-chapter provides a more detailed analysis of the functions of a Landesbank. This particular type of bank is of particular interest as a focus is placed on the LBBW throughout the course of this work. It is therefore essential to demonstrate how a Landesbank operates. As previously stated, Landesbanken belong to the pillar of public banks.⁶³

At this time, there are five Landesbank groups in Germany.⁶⁴ These are the regional central institutions within the Sparkassen organization.⁶⁵ The LBBW, Landesbank Bayern (BayernLB), Landesbank Hessen-Thüringen (Helaba), Norddeutsche Landesbank and Landesbank

⁵⁶ Sörensen, 2023

⁵⁷ Sparkasse Genossenschaftsbank, n.d.

⁵⁸ VolksbankRaiffeisenbank Oberbayern Südost eG, n.d.

⁵⁹ Blikk, 2012

⁶⁰ Mändle, 2018

⁶¹ AlleAktien - Genossenschaftsbanken, 2024

⁶² Reinstädler, 2018a

⁶³ BPB Landesbanken, 2021

⁶⁴ Landesbanken DSGVO, n.d

⁶⁵ Schöning, 2018a

Saar serve as the primary banking institutions for their respective federal states. The Landesbank Berlin and the Berlin savings banks operate as regional universal banks with a public mandate.⁶⁶

A detailed examination of the activities of Landesbanks reveals a diverse range of responsibilities and services they provide. These banking transactions are intended to serve the respective federal states and their economic development. As they act as credit institutions, they are responsible for the banking transactions of one or more federal states. In other words, they are responsible for processing Giro transactions.⁶⁷ Additionally, they function as municipal banks, offering municipal loans. Moreover, their core responsibilities encompass the advancement of the federal state's economic interests and the facilitation of economic activity, in addition to the management of international business operations. In their capacity as giro centres, they serve as the principal credit institutions for the savings banks within the respective state.⁶⁸ Therefore, they are the central clearing house for cashless payments.⁶⁹ Furthermore, they handle securities commission, foreign exchange and foreign exchange transactions, manage the liquidity balances of the savings banks and also serve as their refinancing centres. The degree of collaboration between savings banks and Landesbanks is typically more pronounced in the case of smaller savings banks. It is common for “Landesbausparkassen” (regional building societies) to be affiliated with Landesbanken.⁷⁰ In addition to their other functions, they also process the securities business as a service bank.⁷¹

In order to raise funds, Landesbanken refinance themselves by issuing bearer bonds, including mortgage bonds. Furthermore, time deposits are used as a further refinancing component.⁷² In addition, it should be noted that there is usually close cooperation within their pillar of the Landesbanken.⁷³

The following section provides an overview of the functions and legal framework of a Landesbank, which differs significantly from that of private banks. A primary characteristic of Landesbanks is that they are public-law institutions. As they are supported or controlled by the respective federal states, they typically also operate in the legal form of a public-law institutions. This

⁶⁶ Landesbanken DSGVO, n.d

⁶⁷ Schöning, 2018a

⁶⁸ Staub-Ney, 2020

⁶⁹ Schöning, 2018a

⁷⁰ Staub-Ney, 2020

⁷¹ Schöning, 2018a

⁷² Staub-Ney, 2020

⁷³ Bundesbank, n.d.

also reflects the close connection between the Landesbank and the respective state government.⁷⁴

In consequence of their status as public-law institutions, Landesbanks are subject to stricter regulatory requirements than other types of banks. This also has implications on risk management and business activities.⁷⁵

By design the respective Landesbanks receive support from their owner. BayernLB is a publicly-owned financial institution that is supported by the Free State of Bavaria. LBBW receives support from the federal states of Baden-Württemberg, Rhineland-Palatinate and Saxony. The federal states of Hesse and Thuringia support Helaba. The Norddeutsche Landesbank receives coverage from the states of Lower Saxony and Saxony-Anhalt. The state of Saarland provides support to Landesbank Saar. Despite the support provided to Landesbanks by federal states, these institutions are not immune to the challenges currently facing the banking sector, as evidenced by the experiences of banks over the past few years.⁷⁶ The following sub-chapter will address these challenges in greater detail.

2.4 Current Challenges in the German Banking Sector

Prior to an examination of the current challenges facing the German banking sector, it is first necessary to highlight the significant crises and challenges that have arisen over the past 15 years.

2.4.1 Past Challenges and Responses

This section presents an overview of the principal crises and challenges the German banking sector has been confronted with in recent years. This refers to challenges that have been triggered by external factors. The list commences with the global financial crisis of 2008.

In order to gain an understanding of the circumstances that led to the financial crisis, it is necessary to consider the preceding decade. The terrorist attacks of 11 September 2001 and the decline in the share prices of new internet companies had already precipitated an economic crisis in the US. To avert this outcome, the Federal Reserve undertook a policy of quantitative easing, which resulted in a decline in interest rates.⁷⁷ Subsequently, however, the US Federal Reserve proceeded to raise the key interest rate once more. This resulted in a mortgage crisis in the US, as real estate prices there experienced a significant decline and the value of high-risk

⁷⁴ Staub-Ney, 2020

⁷⁵ Deutscher Bundestag, 2009

⁷⁶ Moormann, 2023

⁷⁷ Engelbrecht, 2018

bonds fell drastically.⁷⁸ The financial crisis reached its zenith with the collapse of investment bank “Lehman Brothers” on 15 September 2008. The global financial crisis had a significant impact not only in the US, but also in other countries. In Germany, in 2009 the economy contracted for the first time since the Second World War.⁷⁹ To overcome this crisis, which developed from a liquidity crisis to a banking crisis, substantial financial assistance from the countries concerned was required. In Germany, the Financial Market Stabilization Fund (FMS) was established and economic stimulus packages were introduced to provide support.⁸⁰ The FMS was a German extra-budgetary fund to designed to provide support to illiquid banks. The rescue operation safeguarded the German banking sector and circumvented contagion to other financial institutions and the real economy.⁸¹ However, the financial crisis evolved into the European debt crisis, due to the fact that the eurozone countries had incurred significant budgetary deficits in order to provide financial assistance to the banking sector.⁸² This led to particular challenges in the eurozone countries where national debt levels were already considerable. Greece, in particular, was severely affected, and the full extent of the problem became apparent in the spring of 2010. The country was no longer able to pay its debts itself. Greece therefore had to apply for financial assistance on 23 April 2010 to avert national insolvency.⁸³ Similarly, other European countries including Ireland, Italy and Portugal were also experiencing severe financial difficulties and on the verge of bankruptcy.⁸⁴ A rescue package was set up to help these countries and to avoid such a crisis in the future. It permits indebted countries to obtain borrowed funds from other countries without any obligation of repayment. The largest contribution to the rescue package was provided by Germany.⁸⁵

The German banking sector was also confronted with the significant challenge presented by the United Kingdom's (UK) decision to withdraw from the EU, popularly known as "Brexit.". On 23 June 2016, the British voted in a referendum to leave the EU.⁸⁶ Following a transition period, the UK ceased to be a member of the EU on 31 January 2020 and will no longer be part of the EU's single market and customs union from 1 January 2021.⁸⁷ The UK's withdrawal from the EU has had and continues to have consequences for the German banking sector, as London is

⁷⁸ BPB Finanzmarktkrise, 2021

⁷⁹ Engelbrecht, 2018

⁸⁰ BPB Finanzmarktkrise, 2021

⁸¹ BRD Finanzagentur GmbH, n.d.

⁸² Engelbrecht, 2018

⁸³ LPB Euro-Krise, n.d.

⁸⁴ Hüttmann, 2021

⁸⁵ Schneider, 2023

⁸⁶ LPB Brexit, n.d.

⁸⁷ Bundesministerium des Innern, 2024b

Europe's financial centre and thus of central importance for the development of the European economic area.⁸⁸

Another crisis that occurred in recent years was the COVID-19 pandemic. By early 2020, the global spread of the coronavirus had resulted in the temporary closure of numerous businesses in Germany, a surge in demand on the healthcare system, and a significant decline in economic output.⁸⁹ Credit institutions were compelled to exert considerable effort to maintain operational continuity. In Germany, government measures were implemented to ensure the continuity of financial market operations. The banking sector made a substantial contribution to the provision of liquidity to companies, particularly during the initial stages of the pandemic. The manner in which the crisis was managed also demonstrates that the financial sector was better prepared than it was prior to the global financial crisis of 2008.⁹⁰

In light of these external crises and challenges of recent years, it can be asserted that the German banking system is adequately equipped to withstand such pressures. It is evident that these circumstances had an impact on the German banking sector.

2.4.2 Present Challenges

This section outlines the current challenges facing the German banking sector. These challenges are not solely global crises, as previously discussed, but also encompass country-specific issues. As in the preceding section, this is a representative sample of topics. It should be noted that this selection does not claim to cover all challenges.

Interest rate policy of the European Central Bank (ECB)

The ECB is responsible for maintaining price stability in the eurozone through the implementation of an interest rate policy. In this way, the ECB also guarantees the security of the currency and the stability and resilience of the European banking system. The ECB is responsible for the development and issuance of euro banknotes, the maintenance of financial market infrastructure, and the control of inflation.⁹¹

In order to fulfil these tasks, the ECB is able to set the general interest rate level. By adjusting this, the central bank seeks to exert influence over the demand for investment loans from

⁸⁸ Schulte-Holtey, n.d.

⁸⁹ Tagesschau, 2022

⁹⁰ Buch, 2021

⁹¹ European Central Bank, 2024

companies or consumer loans from households, as well as the credit demand of governments.⁹²

Figure 2 illustrates the interest rate applicable to the main refinancing operation.

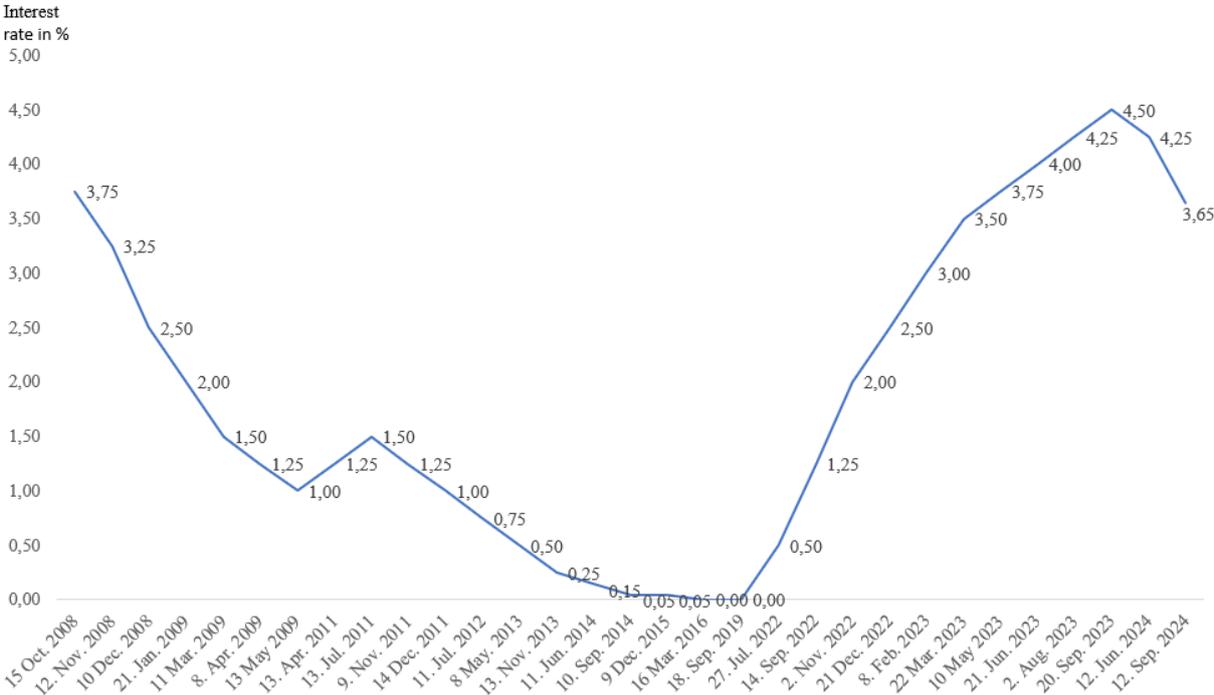


Figure 2: Interest rate policy of the ECB⁹³

As illustrated in the figure, the interest rate can fluctuate rapidly. Over the past few decades, there have been numerous periods of high and low interest rates. However, the last decade since the financial crisis has been largely characterized by a low interest rate phase. This has several effects on the economy as cheaper loans can be issued. The effect applies to companies and also to consumers.⁹⁴ In addition, it influences investment and consumer behaviour, since low interest rates provide less incentives to save money, while for example driving an increasing demand for real estate.⁹⁵ Nevertheless, a low interest rate policy can also have adverse effects on the economy. The exchange rate reduces the demand for the Euro which results in a falling exchange rate. It also leads to rising inflation.⁹⁶ As shown in Figure 2, the interest rate was raised for the first time in several years in 2022. Subsequently, the interest rate has increased to

⁹² BPB Zinspolitik, 2021
⁹³ Extracted from: European Central Bank Interest rates, 2024
⁹⁴ Mencin, 2024
⁹⁵ Raisin, n.d.
⁹⁶ Mencin, 2024

4.5%. The interest rate has remained at this level to the present day.⁹⁷ The increase was a consequence of the unprecedented inflation rate of 10.4% observed in October 2022. In the following months, inflation exhibited a decline, partially attributable to governmental assistance in the form of reduced prices for gas and district heating.⁹⁸ Nevertheless, an elevated interest rate can have a beneficial effect on those who save, as banks offer enhanced interest rates on deposits such as instant access savings accounts and fixed-term deposit accounts. It can be argued that both policies have both positive and negative implications.⁹⁹

Inflation

As previously discussed in the section on the ECB's interest rate policy, inflation has been having a significant impact on the German banking sector in recent years. The development of the inflation rate is illustrated in Figure 3. Since the beginning of 2021, the inflation rate in the eurozone and thus also in Germany has increased markedly, as evidence by Figure 3.¹⁰⁰

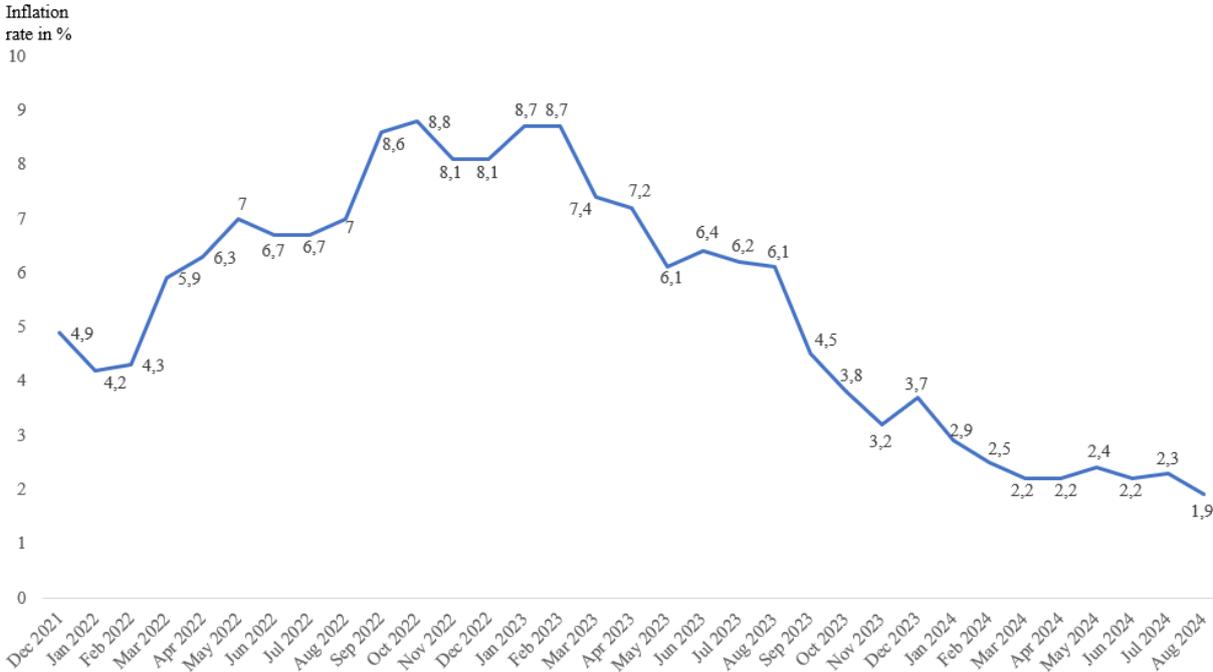


Figure 3: Inflation rate in Germany¹⁰¹

⁹⁷ Röse, 2024
⁹⁸ Zinnecker, 2023
⁹⁹ Mencin, 2024
¹⁰⁰ Cf. Sachverständigenrat, 2022, p. 86
¹⁰¹ Extracted from: Trading Economics, n.d.

Prior to the increase in 2021, Germany reported a relatively stable inflation rate of below 2%. Consequently, the rate has once again reached a stable level.¹⁰² The elevated inflation rate was the result of a combination of factors, some of which are discussed herein. One contributing factor was the disruption to supply chains caused by the global lockdowns in response to the pandemic, which created difficulties for businesses and led to price increases. Moreover, the global pandemic had ramifications for monetary and fiscal policies. These were introduced with the intention of providing economic support, but they also resulted in elevated inflation. Furthermore, the principal driver of inflation has been the surge in energy prices since 2021.¹⁰³ The effects of inflation on the banking sector are still discernible in the present day. As has been demonstrated, the ECB modified its interest rate policy in the following ways with respect to the German population and the banking sector.¹⁰⁴ Furthermore, the inflationary environment gave rise to heightened credit risk for banks, accompanied by more stringent credit conditions. This was due to the increased probability of credit defaults resulting from the rising costs. Furthermore, bonds and fixed-income securities, particularly government bonds, experienced a decline in value. This had a detrimental effect on the valuation of assets on the bank balance sheet. Moreover, there were alterations in customer behaviour and the demand for banking services. Consequently, alterations in the liquidity position were observed, which in turn gave rise to the potential for fluctuations in operating expenditure.¹⁰⁵ Meanwhile, the inflation rate has returned to a state of equilibrium. Nevertheless, the repercussions are still being felt by banks among their customer base.¹⁰⁶

Geopolitical uncertainties

In addition to the increased rate of inflation and high interest rates, there are currently numerous geopolitical uncertainties affecting banks in Germany. In addition to the already known conflicts, such as the US-China relationship, on 24 February 2022, Russia launched a war of aggression against Ukraine in violation of international law. Since that time, the war has not only claimed numerous lives, but has also had a substantial impact on the German economy and banking sector. The situation's inherent uncertainty was reflected in the fluctuating stock market. Germany's dependence on Russian gas, oil and coal supplies also had an impact.¹⁰⁷ The

¹⁰² Die Bundesregierung, 2024

¹⁰³ Cf. Sachverständigenrat, 2022, pp. 88 ff.

¹⁰⁴ Röse, 2024

¹⁰⁵ Engel-Müller, 2023

¹⁰⁶ Die Bundesregierung, 2024

¹⁰⁷ LPB Ukraine Krieg, n.d.

macroeconomic shock resulted in an increase in inflationary pressures at the time. In addition, risks to the banking sector have increased. The potential for revaluation on the financial markets and the threat of cyberattacks continue to increase.¹⁰⁸ In addition to the ongoing conflict between Russia and Ukraine, a terrorist attack by Hamas on Israel happened on 7 October 2023. Since then, a new Israel-Gaza war has been raging. The ongoing conflict is also having an impact on the financial markets, contributing to a climate of uncertainty within the German banking sector.¹⁰⁹

It can be stated that geopolitical uncertainties are having a detrimental impact on the German banking sector. Fluctuations in stock prices, increases in credit risks and a slowing of investment activity are among the consequences of heightened uncertainty. As previously stated, the ECB modified its interest rate policy, which has ramifications for the German population and the banking sector.¹¹⁰

Demographic change

In addition to these external influences, Germany, like most other industrialized countries, is experiencing a demographic change. The population is ageing as a consequence of increased life expectancy, while the number of births is simultaneously declining. The birth rate in Germany is currently 1.59 children per woman, and it is declining.¹¹¹ Figure 4 illustrates the projected age structure in Germany in 2024.

¹⁰⁸ European Central Bank, 2022b

¹⁰⁹ Hock et al., 2024

¹¹⁰ Cf. Sachverständigenrat, 2022, p. 86

¹¹¹ Germany Population, n.d.

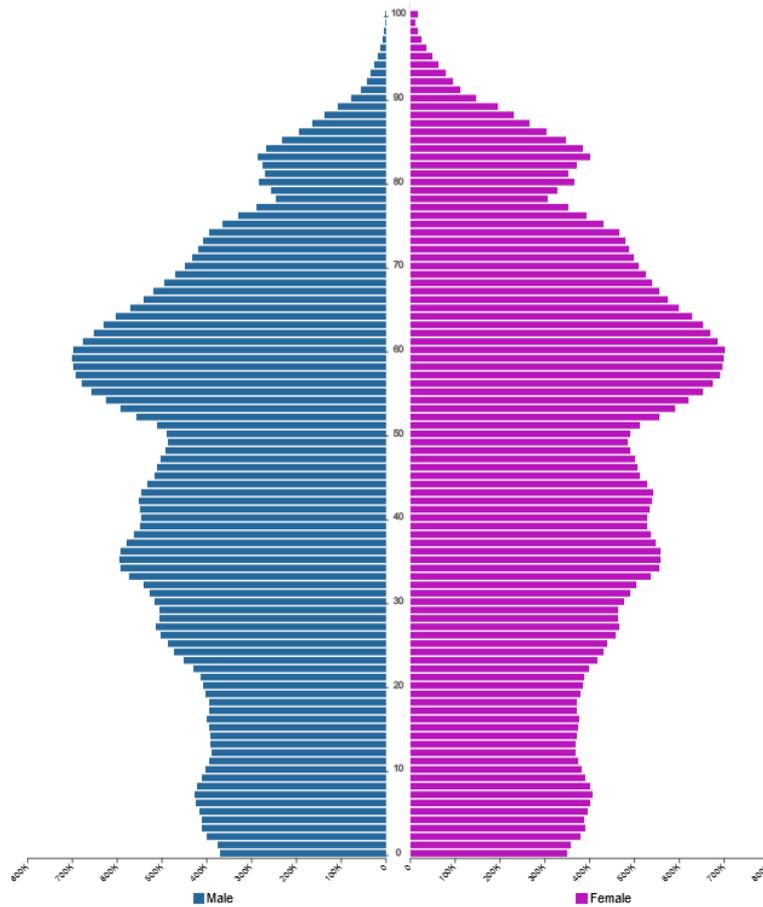


Figure 4: Age structure in Germany¹¹²

This figure illustrates the demographic shift currently occurring in Germany, which is accompanied by a significant number of retirements projected to occur within the next five to ten years. Furthermore, the repercussions will extend beyond the pension, care and health systems, affecting the economy and the labour market. The consequence of the lower birth rates of recent decades is that not all jobs can be filled.¹¹³ The latest studies indicate that there will be 3.5 million fewer workers available to companies in 2030.¹¹⁴ This will result in greater difficulty for companies and banks in finding suitably qualified employees. The German labour market has undergone a transition from an employer-driven market to one that is increasingly employee-centric. The demand for labour outstrips the supply of available workers.¹¹⁵

The aforementioned developments also have implications for the banking sector. Additionally, banks must adapt their human resource management strategies in response to the aging of their

¹¹² Taken from: Germany Population, n.d.

¹¹³ Bundesministerium des Innern, 2023

¹¹⁴ Raspels, 2016

¹¹⁵ Weller, 2024

workforce and the necessity of succession planning and job retention for older employees.¹¹⁶ Moreover, banks must adapt their services. It is possible that the savings behaviour of an ageing population may differ from that of a younger demographic. Older individuals are often observed to save more and to make fewer risky investments. Such behaviour may result in a reduction of banks' earnings from higher-risk investments, such as equities.¹¹⁷

The aforementioned points have shown that German banks are currently being confronted with a multitude of challenges. It should be noted that the list is not exhaustive; for instance, the impact of the pandemic and its ramifications have been intentionally excluded. In order to survive in the future, banks must make significant investments and implement strategic rescheduling.

The following two sub-chapters examine two pivotal subjects that offer both prospects and challenges for the German banking sector.

2.5 Sustainability and ESG Factors in the German Banking Sector

In light of the current challenges, it is imperative to consider the role of sustainability and ESG factors. In recent years, this topic has become increasingly significant across all industries, as well as within the financial sector.¹¹⁸ With the exception for a study from 2022, 73% of respondents indicated a positive valuation.¹¹⁹ Therefore, the topic of green finance will be considered first and the ESG factors will be explained.

Green finance

Green finance represents a pivotal area of focus, encompassing the investment and financing of environmentally sustainable projects. The term 'green financing' is used to describe environmentally friendly or sustainable financing that is designed to mitigate environmental risks or achieve positive environmental impacts.¹²⁰ The most prominent instrument within the domain of green financing is the green bond. The proceeds derived from green bonds are to be utilized exclusively for sustainable projects. These are fixed-interest securities that are used to raise capital to reduce or prevent environmental or climate damage.¹²¹ Moreover, there are green

¹¹⁶ Deller et al., 2008

¹¹⁷ Dpa, 2019

¹¹⁸ Hartmann & Sohn, 2022

¹¹⁹ Schmid, 2022

¹²⁰ Rees, 2017

¹²¹ Remer, 2020

loans. These are specifically granted for sustainable loans. In addition, state development banks have been providing special financing for some time now to those who want to finance sustainable projects.¹²² Additionally to offering such products as a bank, it is crucial to communicate information about these products to customers and to provide education in this area, as the subject remains relatively unknown.

ESG factors

Another crucial element is the consideration of ESG factors. Such criteria encompass the evaluation of sustainable business practices undertaken by companies. The environmental aspect encompasses the protection of the natural environment, while the social aspect deals with labour and health protection. The latter includes diversity and social engagement. Governance, on the other hand, relates to sustainable corporate management, corporate values and corporate governance.¹²³ Figure 5 provides a more detailed illustration of the content.

Environment	Social	Governance
<ul style="list-style-type: none"> • Climate protection strategies • Environmental protection • Emission reduction • Use of renewable energy • Efficient use of raw materials and energy 	<ul style="list-style-type: none"> • Fair working conditions • Job security • Health protection • Compliance with labour law • No child labour • No forced labour • Equal opportunities 	<ul style="list-style-type: none"> • Compliance • Ethical corporate governance • Prevention of corruption • Risk management • Independent supervisory board

Figure 5: ESG Factors¹²⁴

ESG factors have a significant and far-reaching impact on the financial industry. New ESG regulatory frameworks are being created by the EU authorities, which will require banks to comply with them.¹²⁵ It is incumbent upon banks to undertake a detailed examination of ESG factors and utilize this information to ascertain the full extent of the financial and non-financial risks they are exposed to. Furthermore, banks are obliged to integrate ESG considerations into their operational procedures, including the assessment of whether prospective borrowers adhere

¹²² DerTreasurer, 2024
¹²³ Euramco, 2024
¹²⁴ Extracted from: Hoffmann, 2023
¹²⁵ Bauer, 2024

to these standards. The implementation of these measures enables a bank to assume environmental and social responsibility, thereby ensuring long-term financial stability. Furthermore, the possibility of financing risks can be discerned at an earlier stage. Nevertheless, the initial implementation of these measures necessitates investment.¹²⁶

2.6 Digitalization and Technological Transformation in the German Banking Sector

The last decade has been characterized by the advent of numerous new technologies and a general digitalization of banking. This sub-chapter provides a more detailed examination of these topics.

The initial stage is to ascertain an existing and accepted technology that is already in widespread use. This is to demonstrate that the implementation of new technologies can have a beneficial impact on both customers and banks. This section will elucidate the advantages and challenges inherent to these technologies.

Online banking

The advent of smartphones and tablets in the 2000s constituted a revolutionary change in the banking sector, as customers were now able to manage their finances directly via electronic devices.¹²⁷ Online banking applications were introduced. These applications enabled to undertake a range of financial operations, including the verification of account balances and the initiation of transfers, as well as more sophisticated activities such as securities trading. All these activities can be carried out without the need for contact with an employee and even outside of opening hours.¹²⁸ In 2021, over 50% of users in Germany were reported to utilize online banking. In the from 16 to 29 age group, 97% of individuals utilize online banking, in comparison to 39% of those aged 65 and above.¹²⁹ In 2023, these figures exhibited a notable increase, partly due to the COVID-19 pandemic. The survey revealed that approximately 84% of respondents in Germany utilize online banking. The proportion of individuals aged 60 and above increased to 72%. These statistics demonstrates that online banking is utilized by individuals across all age groups. Furthermore, banks stive to gain from the utilization of this technology. Online banking saves both customers and banks time and money. The number of physical branches

¹²⁶ ESGVolution, 2023

¹²⁷ Data, 2024

¹²⁸ Brost-Steffens, 2020

¹²⁹ Statista, 2024

required can be reduced, thereby reducing operating costs. Furthermore, the quality of customer service can be enhanced.¹³⁰ Nevertheless, there are also negative aspects to online banking, including the use of phishing methods to obtain users' data.¹³¹ Overall, online banking provides an excellent illustration of how technological advancement in the banking sector can yield benefits for both customers and financial institutions, as evidenced by the statistical data presented. The remaining technologies are more contemporary. Each example illustrates the nature of the technology in question and the potential benefits and risks for banks utilizing the technology.

Blockchain

The Blockchain technology represents a more novel technology that is still employed in the banking sector. Blockchain is frequently linked with Bitcoin and cryptocurrency in general. In 1991, a similar software was programmed for the first time by Stuart Haber and W.Scott Stornetta. However, blockchain technology only became known in 2008 through Satoshi Nakamoto in connection with Bitcoin.¹³²

A blockchain is a large database that is initiated with an original block and to which subsequent data blocks are then appended in chronological order. Prior to appending, the data is subjected to verification and authentication. In this manner, they constitute a historical record of data, such as a financial transaction. The distinctive feature of this technology is that it is a distributed database. Consequently, a comprehensive replication of the data history is stored on each participating computer. This enhances the security against manipulation. To prevent the sequence of blocks from being altered at a later stage, the sequence of blocks is also secured by a checksum.¹³³ Blockchain technology renders data immutable and tamper-proof, distributes data storage without a central instance and ensures the transparency and traceability of transactions for all users.¹³⁴

Furthermore, the question of whether banks are still a necessary institution in the context of blockchain technology has been increasingly posed. It is anticipated that blockchain technology will render traditional banking institutions obsolete, superseded by a decentralized peer-to-peer network.¹³⁵ Although blockchain technology has the potential to replace the function of banks,

¹³⁰ Hufeland, 2023

¹³¹ Konto, n.d.

¹³² Horch, 2023

¹³³ ahd, 2022

¹³⁴ BSI Informationstechnik, n.d.

¹³⁵ Cf. Brandl, 2020, p. 1

in practice it is a different proposition. Moreover, blockchain cannot replace other traditional banking functions. For example, banks are still needed for risk transformation.¹³⁶

Banks may also leverage opportunities presented by blockchain technology through the utilization of its inherent properties, namely security, transparency and efficiency.¹³⁷ It is also important to acknowledge that banks were the first to develop these products and that the regulatory framework must be taken into account. The “Federal Financial Supervisory Authority” has addressed novel supervisory concerns and promulgated new regulations that must be adhered to.¹³⁸ Given that blockchain technology is now a more established phenomenon, a number of banks have incorporated it into their business operations. A number of illustrative examples are provided below.

- Santander with “Santander One Pay FX” (2015): This service allows customers to complete international transfers on the same day or, in the majority of cases, the next day. The distributed ledger technology is used as the technology for this fast and transparent processing, and focuses on blockchain.¹³⁹
- “We.trade” (2017): This is a blockchain platform that is utilized for the purpose of facilitating trade finance. It is a joint venture company operated by 12 banks, “IBM” and “CRIF”. The platform facilitates the reliable, straightforward and secure processing of global trade transactions in the field of trade finance and logistics.¹⁴⁰

Despite the potential benefits, it is important to consider the risks associated with the introduction of blockchain technology to banking institutions. One of these threats is the technological challenge of integrating the technology into the existing Information Technology (IT) architecture. Furthermore, the development of this technology requires the input of technical experts, a scarce resource at present. The regulatory and compliance issues have yet to be fully explored. Additionally, there are risks pertaining to data protection, which is challenging to secure through the use of blockchain technology. Furthermore, the cryptographic keys can now be decrypted by quantum computers. Despite the multitude of potential risks, it is imperative not to dismiss the significance of blockchain technology.¹⁴¹

The emerging of blockchain technology has also brought about a heightened focus on cryptocurrencies. These have become most widely known through Bitcoin. Cryptocurrencies have the

¹³⁶ ICS, 2019

¹³⁷ Scand, 2022

¹³⁸ BaFin, 2022

¹³⁹ Cf. Corporate Communications, 2018, p. 1 f.

¹⁴⁰ Cudden, 2021

¹⁴¹ Joos, 2024

potential to generate profits for their owners and can be passed on in a meaningful way. Nevertheless, there are certain risks for customers and banks with regard to cryptocurrencies. Frequently, they are not sufficiently liquid and highly risky. Moreover, the absence of established regulatory frameworks presents a significant challenge.¹⁴² Consequently, German banks are obliged to counsel their customers on this subject and to adapt their technological solutions to accommodate theoretical usage scenarios. This gives rise to new costs and uncertainties that must be borne by the relevant parties.¹⁴³

Artificial intelligence (AI)

AI is a crucial consideration in the context of digital transformation and emerging technologies in the banking sector. The application of AI in the banking sector has the potential to exert a beneficial or detrimental influence on the industry. AI as the potential to become a pivotal competitive factor for financial institutions.¹⁴⁴ There are plethora of potential applications for the use of AI in German banking. These range from optimizing business processes to improving the customer experience and making recommendations to support customer decision-making.¹⁴⁵ But compliance with laws and company guidelines and the development of new business models are also among the important areas of application. By using AI, German banks hope to create a better experience for their customers, optimize costs and increase efficiency.¹⁴⁶ Nevertheless, there are numerous opportunities, risks and challenges that banks must take into account. It is key for banks to determine which processes can be readily performed by AI. The demands on their IT organization and architecture are growing rapidly, which presents challenges and entails costs. Furthermore, numerous new regulatory processes and frameworks are emerging that must be adhered to, including those pertaining to data protection.¹⁴⁷ In addition to these factors, it is essential that employees are adequately trained and willing to accept this new technology. It is essential to develop the capabilities of AI and to address the lack of trust in its benefits.¹⁴⁸ In light of these considerations, it becomes evident that AI has profoundly impacted the German banking sector, and its influence will persist. Nevertheless, a number of factors must be taken into account during the implementation phase.¹⁴⁹

¹⁴² Wuermeling, 2018

¹⁴³ Hütten, 2022

¹⁴⁴ Berns, n.d.

¹⁴⁵ Tenner, 2024

¹⁴⁶ Berns, n.d.

¹⁴⁷ Tenner, 2024

¹⁴⁸ Berns, n.d.

¹⁴⁹ Tenner, 2024

Cloud

Cloud technology has become significant for German banks in recent years. By 2021, 78% of German banks had already adopted cloud services. This is due to the fact that cloud solutions are capable of digitizing IT architectures and analysing large amounts of data.¹⁵⁰ The utilization of cloud computing enables financial institutions to devise innovative business models and enhance operational efficacy. The time required for a product or service to reach the market can be reduced, thereby enabling the more expedient fulfilment of customer requirements.¹⁵¹ In addition, costs can be optimized by using the cloud. Furthermore, the utilization of cloud computing enables the optimization of expenditure¹⁵² A present there are three types of cloud that banks use: private, hybrid and public clouds. Presently, many banks rely on a public cloud. This drives the utilization of storage and computing capacities within the data centers of cloud service providers.¹⁵³ One of the most significant challenges in the context of cloud computing is ensuring compliance and maintain security. This is due to the fact that cyberattacks present a risk of data being stolen and published. It is therefore imperative that the security of company and customer data is maintained. However, this entails compliance with a multitude of regulatory requirements. Furthermore, a considerable input of effort is necessary for implementation.¹⁵⁴

FinTechs

While not a new technology in and of itself, FinTechs are playing an increasingly significant role in the digital transformation of financial services. These are frequently nascent enterprises that are focused on pioneering technologies and may engage in competitive or collaborative endeavours with banking institutions.¹⁵⁵ It is not uncommon for banks to form strategic partnerships with FinTechs. FinTechs are better positioned than banks to implement and drive innovation. Such flexibility is made possible by the fact that they are not subject to the same strict regulations that apply to traditional financial institutions. Such collaboration offers benefits to both parties. In addition, FinTechs are able to gain access to customers and markets. Banks derive benefit from access to new technologies and the capacity to innovate more rapidly.¹⁵⁶

¹⁵⁰ Wilop, n.d.

¹⁵¹ Zieglgruber, 2020

¹⁵² Bojen, 2020

¹⁵³ Zieglgruber, 2020

¹⁵⁴ Wilop, n.d.

¹⁵⁵ Dinter & Knörr, n.d.

¹⁵⁶ Lange, 2023

This analysis demonstrates that a substantial digital transformation has occurred over recent last few years and is still ongoing. It is crucial for banks to analyse the trends and then decide whether it is prudent to implement them. A number of potential opportunities for German banks may emerge. Nevertheless, it is important to acknowledge the potential challenges associated with the adoption of new technologies.

3 The Banking Sector in Italy

After having analysed the German banking sector, this chapter turns to an examination of the Italian banking sector. The following section presents an overview of the historical development of the Italian banking sector. The second subchapter gives an analysis of the structure of the Italian banking sector. Furthermore, it identifies potential challenges. The structure is based on the preceding chapter, which provided an overview of the German banking sector. Nevertheless, this chapter does not provide the same level of detail. The fourth subchapter presents a comparative analysis of the German and Italian banking sectors.

3.1 Historical Development of the Italian Banking Sector

Like the German banking sector, the Italian banking sector can trace its roots back to a long and distinguished history. Even the term "bank" derives from the Italian word "banchi". This term referred to the benches on which the money changers in Italy conducted their business in the Middle Ages.¹⁵⁷ In the early Middle Ages, merchants and money changers occupied a central position within the Italian city-states such as Florence, Genova and Venice. As bankers, they not only provided exchange services, but also developed forms of credit and current accounts.¹⁵⁸ was a significant contributor to this process. The "Medici Bank" was established in Florence in the 14th century and became one of the most powerful financial institutions in Europe. The Medici family ruled from the 15th century to the 18th century and gained their wealth mainly through involvement in the textile trade. The Medici family produced three popes and two queens of France. Partly because of this influence in politics, they played a key role in financing the European monarchies and the Vatican. Not only Florence played a central role, but also Venice as one of the most important commercial centers in Europe. The city's advantageous geographical position enabled it to establish and expand an extensive trade network.¹⁵⁹ Venice and the Venetian banks, such as the "Banco di Rialto", were essential for financing trade expeditions and transferring money.¹⁶⁰ The Banco di Rialto is regarded as one of the earliest public banks in Europe and was founded in 1587. Its purpose was twofold: firstly, to restore citizens' confidence in the banking system and, secondly, to provide a stable financial platform. At the time, it was considered particularly innovative because it did not grant loans in order to avoid speculation and to ensure stability. Banco di Rialto also introduced cashless payments. As a

¹⁵⁷ Peaks, 2020

¹⁵⁸ Nickels, 2024

¹⁵⁹ Gartner, 2017

¹⁶⁰ Fees, 2023

consequence of these and other initiatives, the bank contributed to the stability of the Venetian economy and facilitated trade growth. In 1637, it was dissolved and replaced by the “Banco del Giro”. This existed until the fall of the Republic of Venice in 1797.¹⁶¹ The heyday of the Italian banking sector was in the Renaissance as well as in modern times. One reason for this was the innovation of double-entry bookkeeping and the contribution of Italian accountants.¹⁶² In the 19th century, Risorgimento took place in Italy. During this period, from 1797 to 1870, the Kingdom of Italy emerged and the individual states were consolidated. This had a significant impact on the Italian banking sector.¹⁶³ In particular, the “National Bank of Sardinia” played a major role in the consolidation of the banking system. Subsequently, it became the Bank of Italy. The establishment of the Kingdom of Italy led to the introduction of a single currency, the lira.¹⁶⁴ The 20th century, was characterized by a series of significant challenges for the Italian banking sector, including the global economic crisis of the 1930s and the consequences of the Second World War. In the post-war period, the Bank of Italy played a major role in the economic recovery and the stabilization of the banking system.¹⁶⁵ The economic recovery and reconstruction were significantly influenced by the Marshall Plan aid from the United States of America (USA).¹⁶⁶ During the 1950s and 1960s, banks played a central role in the financing of the reconstruction and industrialization. From the 1980s onwards, the financial sector underwent a process of deregulation and liberalization. This development led to an increase in financial innovation and more complex financial products.¹⁶⁷ In the late 1990s and early 2000s, a further global financial crisis occurred. Italian banks were confronted with a high number of non-performing loans, with some banks teetering on the brink of collapse. This concise historical overview of the Italian banking sector demonstrates that it has a long and distinguished history. It has demonstrated resilience in the face of numerous crises over the centuries.

3.2 Structure of the Italian Banking Sector

This subchapter presents an overview on the structural characteristics of the Italian banking sector.

¹⁶¹ Venice Insider, 2024

¹⁶² Reichwein, 2018

¹⁶³ Cf. Gerhard & Schweikert, 2013, pp. 30 ff.

¹⁶⁴ Bosco, 2023

¹⁶⁵ Vercelli, 2022

¹⁶⁶ Kimmel, 2021

¹⁶⁷ Vieira, 2016

In essence, the system consists of different types of banks. These types serve different functions and include national and international banks. Furthermore, it is subject to numerous regulations and controlled by several supervisory authorities.

For the purpose of systemisation in this thesis, the Italian banking sector is divided into three pillars. Allowing for a more comprehensive and comparative analysis. This is to be compared in the approaches with the German three-pillar model. The Italian banking sector comprises the following categories of financial institution: commercial banks; cooperative and popular banks; specialized banks and financial institutions.¹⁶⁸ A more detailed examination of these three pillars will be provided below. For illustrative purposes, they are displayed in Figure 6.

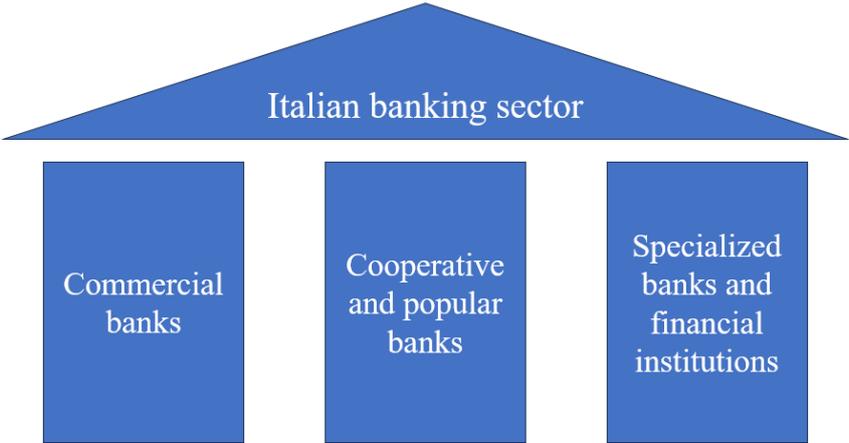


Figure 6: Three pillars of the Italian banking sector¹⁶⁹

Commercial banks

Commercial banks may be owned by the state, by private entities, or by cooperatives. Furthermore, they also vary in size, ranging from smaller regional players to large and international institutions.¹⁷⁰ Examples of larger banks include banks such as UniCredit and Intesa Sanpaolo. They have a substantial national and international presence and provide a comprehensive range of financial services.¹⁷¹ Their services are focused on retail and corporate banking, wealth management and investment banking.¹⁷² In contrast, regional banks, are headquartered at the regional level and concentrate on addressing the financial requirements of customers in particular geographical areas. Such institutions include, for example, “Banca Popolare di Milano” and

¹⁶⁸ Buswell, 2024
¹⁶⁹ Extracted from: Buswell, 2024
¹⁷⁰ Buswell, 2024
¹⁷¹ Italian Commercial Banks, n.d.
¹⁷² Buswell, 2024

Banco di Sardegna.¹⁷³ Moreover, a number of international banking institutions have established foreign branches in Italy with the objective of providing their customers with optimal support.¹⁷⁴

Cooperative and popular banks

These types of banks are analogous to the cooperative banks in the German banking sector. Such institutions play an indispensable role in local and regional economies. The cooperative banks, which are collectively known as the “Banche di Credito Cooperativo” or the “Banche Popolari”, are locally anchored and provide support to small to medium-sized companies and local communities. The objective of these institutions is not to generate a profit, but rather to provide social benefits. These institutions are distinguished by their mutualistic, altruistic, and local characteristics. This suggests that they principally offer loans to members of the cooperative, encourage mutual assistance between members, guarantee access to credit for economically disadvantaged sections of the population and operate within defined geographical boundaries.¹⁷⁵

Specialized banks and financial institutions

In Italy, there are a number of specialised financial institutions in addition to the traditional banks. They bear some resemblance to the public-sector banks that are found in Germany. However, the emphasis is on the provision of specific services, rather than on the status of the public-sector body. This category encompasses, for instance, leasing and factoring companies, investment companies, and credit unions.¹⁷⁶

A more detailed examination of the distinctions between the Italian and German banking systems can be found in Chapter 3.4. In examining the structure of the Italian banking system, it is essential to address the role of the country's central bank, the “Banca d'Italia”. Frequently designated as the Bank of Italy, it has played a central role in the supervision and regulation of the Italian banking system.¹⁷⁷ Furthermore, it constitutes an integral component of the Euro system. The objectives of the Banca d'Italia price stability, the stability and efficiency of the financial

¹⁷³ Italian Commercial Banks, n.d.

¹⁷⁴ Buswell, 2024

¹⁷⁵ Banco BPM, n.d.

¹⁷⁶ Buswell, 2024

¹⁷⁷ Banca d'Italia, n.d.-b

system, and other duties conferred on it by Italian law.¹⁷⁸ It participates in the formulation of the single monetary policy for the euro area, engages in foreign exchange operations, management of foreign exchange reserves, fulfils supervisory responsibilities, and conducts analytical and research activities.¹⁷⁹ Therefore it is essential that the Banca d'Italia acts autonomously, a status that is protected by Italian and European law. As a consequence of the mentioned guaranteed autonomy, the institution is subject to rigorous transparency and disclosure requirements.¹⁸⁰

3.3 Challenges in the Italian Banking Sector

This subchapter examines the difficulties encountered by Italian banking in recent years. The subchapter also highlights current challenges. In order to be able to incorporate a better comparison with Germany in the course of the thesis, the same challenges are highlighted for the most part as in chapter 2.4. However, some topics have been excluded or included.

3.3.1 Retrospective of Past Challenges

Similar to Germany, Italy has addressed a number of substantial challenges in recent decades, including the banking crisis of the 1990s, the financial crisis of 2008, the European debt crisis and the COVID-19 pandemic. The final two points, namely their impact and the manner in which they are being managed, will be subject to closer examination in the following paragraphs.

European debt crisis

The European debt crisis had a significant impact on Italy. As a consequence of the crisis, interest rates on government bonds rose, increasing the cost of servicing the debt.¹⁸¹ As a result, by August 2011, interest rates on Italian government bonds had risen to over 6% and Italy's national debt accounted for approximately 120% of gross domestic product.¹⁸² This had a profound impact on the Italian banking sector. Firstly, there was a notable decline in confidence in Italian banks. This resulted in a capital flight, whereby investors withdrew their funds from Italian assets. That resulted in a reduction in the banks' liquidity.¹⁸³ The balance sheets of the banks were subjected to considerable strain, resulting in losses as a consequence of the rise

¹⁷⁸ Banca d'Italia, n.d.-a

¹⁷⁹ Banca d'Italia, n.d.-b

¹⁸⁰ Banca d'Italia, n.d.-a

¹⁸¹ Piller, 2010

¹⁸² Busch, 2019

¹⁸³ McBride, 2018

in financing costs, which in turn was attributable to the increase in interest rates on Italian government bonds.¹⁸⁴ Moreover, a considerable number of Italian banks were in need of recapitalization in order to guarantee their solvency. The ECB and the European Stability Mechanism provided support by providing cheap loans and aid programmes.¹⁸⁵ In addition to the European support, several measures were taken to overcome this crisis. One key measure was the implementation of extensive austerity measures and structural reforms in Italy, that had the objective of regaining investor confidence. Moreover, Italian banks were compelled to rectify their balance sheets and curtail the volume of non-performing loans (NPLs). In part this was achieved through the sale of NPL portfolios to investors.¹⁸⁶ The crisis had a profound and lasting impact on the Italian banking sector. Those reforms and the European support enabled the country to survive the crisis. Nevertheless, structural deficiencies persist.¹⁸⁷

COVID-19 pandemic

Italy was severely affected by the initial phase of the COVID-19 pandemic. The implementation of stringent lockdown measures resulted in a significant decline in economic activity. In 2020, Italy experienced a contraction of approximately 9% in its gross domestic product. This decline came with a significant impact on the banking sector. As a consequence of the economic downturn, an increased number of companies were forced to file for bankruptcy. Small and medium-sized companies in sectors such as retail, construction and hospitality/tourism were particularly affected.¹⁸⁸ Despite the implementation of state support measures, the number of NPLs continued to increase. Leading to a significant burden for the banking sector. In order to help banks with additional time to address problematic loans without being compelled to immediately set aside substantial provisions, modifications were implemented in the categorization of NPLs. Furthermore, the ECB has been facilitating the provision of inexpensive credit to ensure the liquidity of banking institutions. In parallel, the Italian banking sector was able to utilize the period to accelerate the digitization of the sector.¹⁸⁹ Despite the considerable challenges posed by the pandemic, the system demonstrated resilience and made progress.

¹⁸⁴ Piller, 2010

¹⁸⁵ McBride, 2018

¹⁸⁶ Ray, 2011

¹⁸⁷ Busch, 2019

¹⁸⁸ Wijffelaars, 2020

¹⁸⁹ Buehler et al., 2020

3.3.2 Current Challenges

Similarly, Italy is confronted with a number of challenges in the current period, comparable to those currently experienced by Germany. Such developments are also affecting the banking sector. The following section will examine these challenges and their impact on the banking sector.

Interest rate policy of the ECB

Consequently, the determination of interest rate policy is the responsibility of the ECB, rather than that of Italy. In recent years, the ECB has pursued an expansionary monetary policy with the objective of stabilizing the economy in the wake of the 2008 financial crisis and the euro crisis.¹⁹⁰ The exact course of interest rate policy is illustrated in Figure 2. From the perspective of the interest rate policy, the preceding decade can be divided into three distinct phases. The initial phase, which commenced in 2014 and concluded in 2019, was characterized by a low interest rate policy. During this period, the ECB reduced its key interest rate to a record low of zero percent. For banking institutions in Italy, this resulted in a reduction in interest margins, as the discrepancy between interest income generated from loans and interest expenses incurred on deposits diminished.¹⁹¹ Consequently, Italian banks were required to seek alternative sources of revenue, such as the imposition of higher fees for services rendered. The reduction in interest rates prompted an increase in lending. Still, the risk of loan defaults also increased. The impact of these circumstances on Italian banks is exemplified by the case of UniCredit. A notable reduction in interest income was observed during this period. Consequently, an increase in fees for account maintenance and transaction costs was implemented. Furthermore, cost-cutting measures were introduced, including the closure of branches and redundancies among staff.¹⁹² From 2015 to 2018, the interest rate policy was characterized by quantitative easing. In order to enhance liquidity and stimulate inflation, the ECB initiated a bond purchase programme, otherwise known as quantitative easing. This measure resulted in an increase in the liquidity of banks and a corresponding rise in the prices of securities.¹⁹³ “Intesa Sanpaolo”, along with other Italian banks, was able to leverage this measure to its advantage. The company sold a portion of its bonds to the ECB, thereby obtaining additional liquidity. This enabled it to grant loans to small and medium-sized companies. These loans contributed the economic recovery in Italy.¹⁹⁴

¹⁹⁰ BPB Zinspolitik, 2021

¹⁹¹ European Central Bank Interest rates, 2024

¹⁹² Rottwilm, 2019

¹⁹³ Deutsche Bundesbank Eurosystem, 2015

¹⁹⁴ Vielhaber & Stadler, 2015

In 2022, the ECB commenced an increase interest rate in response to rising inflation. Italian banks were compelled to modify their interest rate strategies thereby enabling them to augment their interest rate margins.¹⁹⁵ Among other things, this interest rate adjustment had a significant impact on the Italian bank “Banca Monte dei Paschi di Siena”. This resulted in an increase in the cost of borrowing for customers, leading to a reduction in demand for new loans and an increased burden on existing borrowers. The enhanced interest rate margin reinforced the profitability of the institution.¹⁹⁶

With regard to German banks, the ECB's interest rate policy has had a significant and far-reaching impact on Italian banks in recent years.

Demographic change

Italy is experiencing the consequences of demographic transformation. The population is undergoing a process of decline.¹⁹⁷ The number of births has declined to a level below 400,000 for the first time since records began. The birth rate is 1.2 children per woman. The mean age of Italian population is 46.6 years, with an increase over time.¹⁹⁸ Furthermore, the total number of Italians is currently below 59 million. Should the current rate of decline in the population persist, the number of Italians is projected to reach 54.2 million in 2050 and 47.7 million in 2070.¹⁹⁹ An examination of Italy's age pyramid, as illustrated in Figure 7, reveals that it exhibits a shape comparable to that of an urn.²⁰⁰

¹⁹⁵ Scherer, 2022

¹⁹⁶ Schubert, 2024

¹⁹⁷ dpa, 2024

¹⁹⁸ Beise, 2023

¹⁹⁹ TGR, 2022

²⁰⁰ World Population Review, n.d.

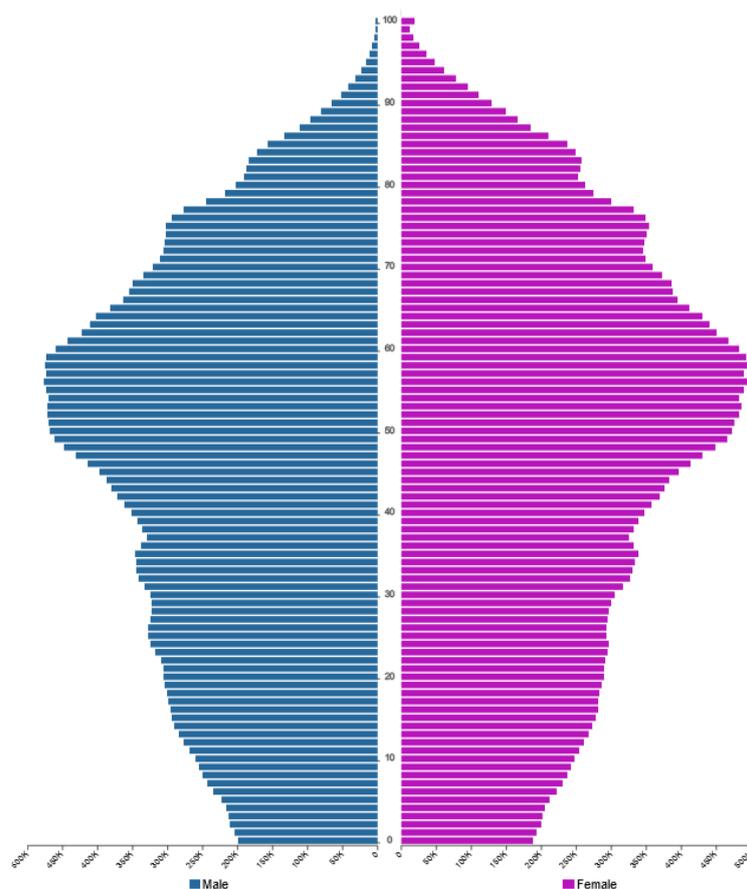


Figure 7: Age structure in Italy²⁰¹

This age structure has an impact on the number of employees. It is anticipated that the number of employees in Italy will decline by approximately three million over the course of the next decade. This equates to an approximate a decline of around 8%. The number of Italians of working age, defined as those between the ages of 15 and 64, is currently estimated at just under 37.5 million. It is anticipated that this will decline to under 34.5 million by 2034.²⁰² The reduction in the number of workers will have an impact on the Italian banking sector. First and foremost, it will become increasingly challenging for financial institutions, like all employers, to identify and retain highly qualified personnel. Similarly, a shortage of skilled workers is anticipated, as has been observed in Germany.²⁰³ In addition, the savings rate will decline as older population groups tend to consume their savings rather than save new capital. This may result in a reduction in deposits with banks, which could impact the liquidity and the capacity to extend loans. Furthermore, the demand for financial products is subject to change. The demand for mortgages and long-term loans will decline as a consequence of the reduction in the number

²⁰¹ Taken from: World Population Review, n.d.

²⁰² Stol.it, 2024

²⁰³ Barabino, 2023

of younger people purchasing houses. By contrast, demand for financial products such as pension and long-term care insurance will increase. Financial products designed for the elderly often entail an elevated level of risk.²⁰⁴ Italian banks are required to set aside greater provisions for pension liabilities. This has an impact on profitability.²⁰⁵ The phenomenon of deflation can emerge as a consequence of an ageing population, given that individuals of advanced age tend to exhibit a reduced propensity to consume and an increased inclination to save. Such circumstances may result in the imposition of low interest rates, which could ultimately exert pressure on the margins of banking institutions. This phenomenon has already been observed in Japan and may also occur in Italy.²⁰⁶

In light of the aforementioned points, it can be assumed that demographic change presents a significant challenge for Italian banks, affecting both strategic planning and operational activities.

Digitalization and technological transformation

The processes of digitalization and technological transformation are presenting the Italian banking sector, in a manner analogous to that observed in Germany, with a duality of challenges and opportunities. In order to maintain competitiveness, Italian banks must make substantial investments in new technologies. Such investments include encompass the implementation of novel IT infrastructures, cloud computing, AI and machine learning. The utilization of these technologies enables Italian banks to operate in a more efficient manner, reduce expenditure and maintain competitiveness in the market. The financial implications of these investments will be considerable for Italian banks. Additionally, they can facilitate enhanced digital interactions with customers and develop more comprehensive and personalized services.²⁰⁷ Moreover, Italian banks, like their German counterparts, must contend with the challenge of ensuring compliance with the evolving regulatory landscape. These primarily encompass data protection and security regulations, which are founded upon the European General Data Protection Regulation and the stipulations set forth by Banca d'Italia.²⁰⁸ It is therefore imperative that these measures are implemented, given the intensifying cybersecurity threat that is a consequence of the increasing digitalization of the banking sector and the necessity to protect customer data.²⁰⁹

²⁰⁴ Azzali et al., 2023

²⁰⁵ Imam, 2013

²⁰⁶ Bloom, 2020

²⁰⁷ Cf. Hastenteufel & Ganster, 2021, pp. 3 ff.

²⁰⁸ Cf. Fend & Hofmann, 2018, pp. 367 ff.

²⁰⁹ Cf. Hellenkamp, 2023, pp. 7 ff.

Another challenge is the intensifying competitive pressure facing traditional Italian banks. The expansion of new technological possibilities has given rise to the establishment of over 300 FinTechs in Italy.²¹⁰ Such solutions are often more innovative, cost-effective and user-friendly.²¹¹ Consequently, banks are confronted with elevated customer expectations and more challenging customer retention, given the proliferation of alternative options available to customers compared to a few years ago.²¹²

In addition to the mentioned challenges, Italian banks are confronted with a multitude of other difficulties. These challenges are, for the most part, analogous to those currently faced by German banks. However, there are some discrepancies in the proposed solutions and the methodology employed.

3.4 Comparison of the German and Italian Banking Sector: Structures and Challenges

In the preceding two chapters, a comprehensive examination of the German and Italian banking sectors was performed. This subchapter presents a brief comparative analysis with the objective of facilitating a more comprehensive understanding of the subject.

The historical development and structure of the banking sectors

Both banking sectors have a long historical development. The origins of these institutions can be traced back several centuries, during which time they have exerted a profound influence on the socio-economic landscape of the according era. Both banking sectors developed into their modern forms during the nineteenth century. In Germany, the establishment of prominent banking institutions such as Deutsche Bank and Commerzbank constituted a significant milestone in the country's financial history.²¹³ The unification of Italy and the establishment of the Banca d'Italia led to a parallel development in Italy.²¹⁴

As demonstrated, the banking sectors of Germany and Italy can be classified into analogous categories, namely private commercial banks, public banks, and cooperatives.²¹⁵

²¹⁰ Statista Research Department, 2024

²¹¹ Cf. Harwardt, 2022, pp. 1 ff.

²¹² Bedford et al., 2018

²¹³ Deutsche Bank, 2020

²¹⁴ Banca d'Italia, 2007

²¹⁵ Nagel, 2023

Private commercial banks, such as Deutsche Bank in Germany and UniCredit or Intesa Sanpaolo in Italy, hold a central position in the field of international finance and provide a comprehensive range of services. Nevertheless, the specific types of banks present in Germany and Italy do differ. In Germany, there is a clear difference between internationally active commercial banks and regional and cooperative banks.²¹⁶ The level of market concentration among commercial banks is higher in Italy. This leads to a strong market dominance of UniCredit and Intesa Sanpaolo.²¹⁷ Upon consideration of regional banks, it becomes evident that both countries exhibit a robust presence of such institution. These institutions focus on local markets and the provision of financial services to small and medium-sized enterprises. In recent decades, there has been a notable shift towards privatization and restructuring of public banks in Italy. In Germany, this has not been the case.²¹⁸ Furthermore, the German banking sector includes a special form of institution, the Landesbank.²¹⁹ The remaining category, cooperative banks, has a large network in both countries. However, in Italy these banks are often smaller and more focused on local communities, while in Germany they interact on a nationwide level. As a result, they tend to be characterized by greater financial strength and stability in Germany.²²⁰

Market shares and concentration

The respective market share of the different types of banks is contingent on the structure of the banking system. In comparison to other European countries, the German banking sector can be characterized as being relatively fragmented. This is evidenced by the observation that the five largest banks hold less than 50% of the total assets in the banking sector. The high degree of fragmentation results is caused by the strong presence of savings banks and cooperative banks. This is also shown by the Herfindahl-Hirschman Index, which is a measure of market concentration. In Germany, this is moderate, indicating a balanced distribution.²²¹ In contrast, the Italian banking sector is characterized by a higher degree of concentration. In this case, the five largest banks collectively hold approximately 60% of the total assets in the banking sector. This concentration is further intensified by the dominance of UniCredit and Intesa Sanpaolo. The Herfindahl-Hirschman index in Italy is higher than that observed in Germany, thereby indicating a greater degree of market concentration.²²²

²¹⁶ BPB Grossbanken, 2021

²¹⁷ Banken Auskunft, n.d.

²¹⁸ Schöning, 2018c

²¹⁹ Schöning, 2018a

²²⁰ Volksbank Raiffeisenbank, 2023

²²¹ Effenberger et al., 2020

²²² Helgi Library, 2022

Regulatory environment

Assessing the regulatory environment in which both countries operate, it can be stated that there is a considerable degree of similarity. It is due to the fact that they are both European countries that adhere to the same regulatory standards. One result is the harmonization of capital and liquidity requirements. Additionally, both countries have implemented a capital buffer with the objective of enhancing the resilience of the banking sector.²²³ Moreover, cooperation with the ECB and the supervisory authorities guarantees that the supervisory standards and practices in both countries are comparable.²²⁴ Still, there are some areas in which the countries diverge. In Germany, the Federal Financial Supervisory Authority assumes a more comprehensive supervisory role. This encompasses banks, insurance companies and the securities market.²²⁵ In Italy, the supervision of the securities market is the responsibility of the independent regulatory authority “CONSOB”.²²⁶ In comparison to the Italian national central bank, the Deutsche Bundesbank assumes a more active role in the supervision of the banking sector. This results in the provision of an additional level of oversight and stability.²²⁷

Economic key figures

Table 1 presents a series of economic key figures, which are presented in order to facilitate an objective comparison. Such data may be employed to ascertain the economic significance of the banking sector in a given country.

	Germany	Italy
Number of banks	1,348	436
Total Assets	€8.966 trillion	€3.050 trillion

Table 1: A comparison of economic key figures - Germany and Italy²²⁸

The relatively high number of banks in Germany is reflective of the country's decentralized banking sector and the strong regional roots.²²⁹ The relatively low number of banks in Italy indicates that a small number of large institutions, such as UniCredit, have a significant market presence.²³⁰

²²³ Europäischer Rat, 2024

²²⁴ European Banking Authority, n.d.

²²⁵ BaFin, n.d.

²²⁶ CONSOB, n.d.

²²⁷ Bankenaufsicht, n.d.

²²⁸ Extracted from: TheBanks, n.d.

²²⁹ Effenberger et al., 2020

²³⁰ Helgi Library, 2022

The aggregate total assets of German banks are estimated at approximately €8.966 trillion, which is more than double the value of those of Italian banks. In any case, the Italian banking sector is a significant contributor to the European market.²³¹

The current challenges facing the Italian banking system are reflected in the low Return on Equity (ROE). The ROE suggests a lower level of profitability in comparison to that observed in Germany.²³² On the other side, there is minimal discrepancy between the Common Equity Tier 1 (CET1) ratios of the two countries. Both CET1 ratios indicate a robust capital base, indicating financial stability.²³³

In conclusion, the presented facts show that both banking sectors hold a central role within their respective economies, offering financing options, supporting economic activity and contributing to financial stability in general. Furthermore, the data indicates that the German banking sector, and consequently the German economy, is more robust than its Italian counterpart.

Common challenges

The German and Italian banking sectors are confronted with a number of challenges, as outlined in the previous chapters. Both are confronted with the ECB's low interest rate policy and its consequences.²³⁴ This has the effect of reducing interest margins and, consequently, the profitability of banks. In response, both countries are implementing cost-cutting measures, pursuing mergers, and diversifying their revenue streams into non-interest-related business areas. Furthermore, both countries are need to comply with same challenges posed by the ECB's stricter regulatory requirements.²³⁵ Both countries are required to augment their capital base, enhance risk management and implement comprehensive compliance programme. The Italian and German banking sectors also face the same challenges posed by digitalization and technological innovation, including the necessity for significant investment in IT infrastructure, digital services and cyber security. The banking sector in both countries need to invest further in the digitalization of its services, to collaborate with FinTech companies and to rely on innovative technologies such as artificial intelligence.²³⁶ The precise manner of implementation of these measures varies by banking institution to another. As is the case with the majority of European countries, both Italy and Germany are confronted with economic and political uncertainties that

²³¹ TheBanks, n.d.

²³² Cf. Gieseler, 2022, p. 3

²³³ Matthes, 2022

²³⁴ European Central Bank Interest rates, 2024

²³⁵ European Central Bank, 2024

²³⁶ European Central Bank, 2022a

also have an impact on the banking sector. In Italy, the level of risk is typically higher than in Germany. Nevertheless, they face similar challenges. For example, the issue of customer satisfaction and trust is also pertinent in this context. As a consequence of the advent of new technologies and intensifying competitive pressure, these two issues have emerged as a significant challenge in recent years, exerting a profound influence on the actions of banks.²³⁷

In addition to these challenges that are common to both banking sectors, there are also some that are more specific to each country. An illustrative case in point is that of NPLs. The issue of NPLs is of greater consequence in Italy than in Germany, due to the significantly higher volume of such loans that exist in Italy. The higher volume has an impact on the balance sheet, thereby constraining the availability of credit.²³⁸ In contrast the German banking sector is confronted with the challenge of a highly fragmented banking sector. This results in markedly heightened competition and reduced profit margins. In Italy, the banking sector is more concentrated, and thus the mentioned challenge is not as prevalent.²³⁹

The preceding two chapters offered insights into the German and Italian banking sectors, respectively. Numerous topics were addressed. The current challenges facing banks in both countries were examined in detail. The following chapter will use the Landesbank Baden-Württemberg as a case study to illustrate the manner in which a successful German bank addresses these challenges

²³⁷ Hellenkamp, 2023

²³⁸ European Central Bank, 2022b

²³⁹ TheBanks, n.d.

4 Analysis of the Landesbank Baden-Württemberg

This chapter presents an analysis of the Landesbank Baden-Württemberg.

4.1 Overview and Development of LBBW

This subchapter presents an overview of the LBBW in several sections.

4.1.1 Historical Development of LBBW

The predecessor to LBBW was established in 1818 by Queen Katharina of Württemberg as a savings bank designed to benefit the economically disadvantaged.²⁴⁰ Katharina of Württemberg was married to Crown Prince Wilhelm of Württemberg. She was dedicated to the welfare of the population, as the region was experiencing crop failures and famine at the time.²⁴¹ From its foundation to the present day, LBBW is able to look back on a long history and numerous preceding institutions. It is notable that the foundation of LBBW was not an isolated occurrence, but rather part of a broader trend that saw the establishment of numerous other banks in the German southwest. These include the “Badische Bank”, the “Württembergische Notenbank”, and the municipal savings bank of Stuttgart. These were all predecessors of LBBW. In 1975, the “Städtische Sparkasse” und “Girokasse Stuttgart” merged with “Württembergische Landessparkasse”, resulting in the formation of the “Landesgirokasse”.²⁴² In 1999, “Landesgirokasse” merged with “Südwestdeutsche Landesbank” and the commercial banking arm of “Landeskreditbank Baden-Württemberg” thereby forming the LBBW. Subsequently, in 2005, the “Landesbank Rheinland-Pfalz” and “Baden-Württembergische Bank AG” (BW Bank) were fully incorporated into the LBBW Group. The full integration of Landesbank Rheinland-Pfalz and the acquisition of its operations were completed in 2008.²⁴³ In the context of the 2009 global financial crisis, LBBW received a capital injection of €5 billion from its owners. In the subsequent period, LBBW implemented a comprehensive restructuring programme.²⁴⁴ Presently, LBBW is a medium-sized universal bank that provides advisory services to both private and corporate clients. The advisory services and service catalogue encompass a comprehensive range of products, thereby ensuring satisfaction among all customer groups.²⁴⁵

²⁴⁰ Braun, 2018

²⁴¹ Van Rijn, 2018

²⁴² Braun, 2018

²⁴³ Braun, 2018

²⁴⁴ Manager, 2009

²⁴⁵ LBBW Über uns, n.d.

4.1.2 Locations and Employee Structure

Over time, LBBW has established a significant presence in Germany, with a considerable number of locations across the country. These more than 100 locations provide advice and support to corporate and private customers. The locations are not solely limited to Baden-Württemberg; rather, they are distributed throughout Germany, including Dresden, Dortmund and Berlin.²⁴⁶ Furthermore, LBBW operates 16 locations in 15 countries. The international network comprises five branches, ten representative offices and a finance company in Mexico City. The LBBW's international network enables it to provide a comprehensive range of services to companies seeking to expand into foreign markets. These include support in navigating foreign markets, financing major projects abroad, risk management for export operations and the management of global business operations. LBBW perceives it as its obligation to cultivate, establish and sustain advantageous business relationships with Germany and German enterprises on behalf of organizations across the globe.²⁴⁷ Figure 8 illustrates the distribution of the LBBW's international locations.



Figure 8: LBBW locations worldwide²⁴⁸

²⁴⁶ LBBW Standorte, n.d.

²⁴⁷ LBBW International Business, n.d.

²⁴⁸ Taken from: LBBW International Business, n.d.

The “AMERICAS” region is structured from the regional hub in New York, thereby encompassing the entirety of the LBBW, BW-Bank, and savings banks' operations in the Americas. It is the LBBW's largest location on the American continent and its activities are concentrated in the areas of real estate and project financing.²⁴⁹ The locations in this region include New York, Toronto, Mexico City and São Paulo.²⁵⁰ The “ASIA/PACIFIC” region is coordinated from the Singapore headquarter. It serves as the primary point of contact for corporate and institutional clients in the region.²⁵¹ In addition to Singapore, the region encompasses Seoul, Hanoi, Jakarta, Mumbai, Beijing and Shanghai. London serves as the regional hub for the “EMEA” region. Furthermore, business with the Arab states is also coordinated and managed from this location. The other offices are situated in Dubai, Istanbul, Tashkent and Vienna.²⁵² Furthermore, German Centres are situated in Singapore, Beijing, Mexico City and Vietnam. These offices serve as a point of departure for German companies seeking to establish a presence in these markets.²⁵³ In Germany, LBBW is represented as a savings bank, BW Bank, particularly in Stuttgart and throughout Baden-Württemberg.²⁵⁴ It is a legally dependent public institution of LBBW. The bank's principal activities encompass the provision of financial services to both private and corporate clients. In addition to its physical branches, which are predominantly located in Stuttgart, LBBW also provides a comprehensive range of banking and financial services via its online platform.²⁵⁵ Moreover, LBBW has a considerable number of subsidiaries in Germany that address specific areas of expertise, including as leasing and factoring, asset management and real estate financing.²⁵⁶ As of 31 December 2023, the LBBW Group employed a total of 10,434 individuals. This represents an increase of 50 employees compared to the figure recorded on 31 December 2022. Based on this number of employees, LBBW can be considered one of the largest banks in Germany and an important employer, particularly in the Stuttgart region.²⁵⁷ Figure 9 illustrates the number of employees at the end of each year over the past decade.

²⁴⁹ LBBW New York, n.d.

²⁵⁰ LBBW International Business, n.d.

²⁵¹ LBBW Singapore, n.d.

²⁵² LBBW International Business, n.d.

²⁵³ German Centres, 2023

²⁵⁴ BW-Bank Sparkassen, n.d.

²⁵⁵ BW-Bank Unternehmensprofil, n.d.

²⁵⁶ LBBW subsidiaries, n.d.

²⁵⁷ LBBW Investor Relations, n.d.

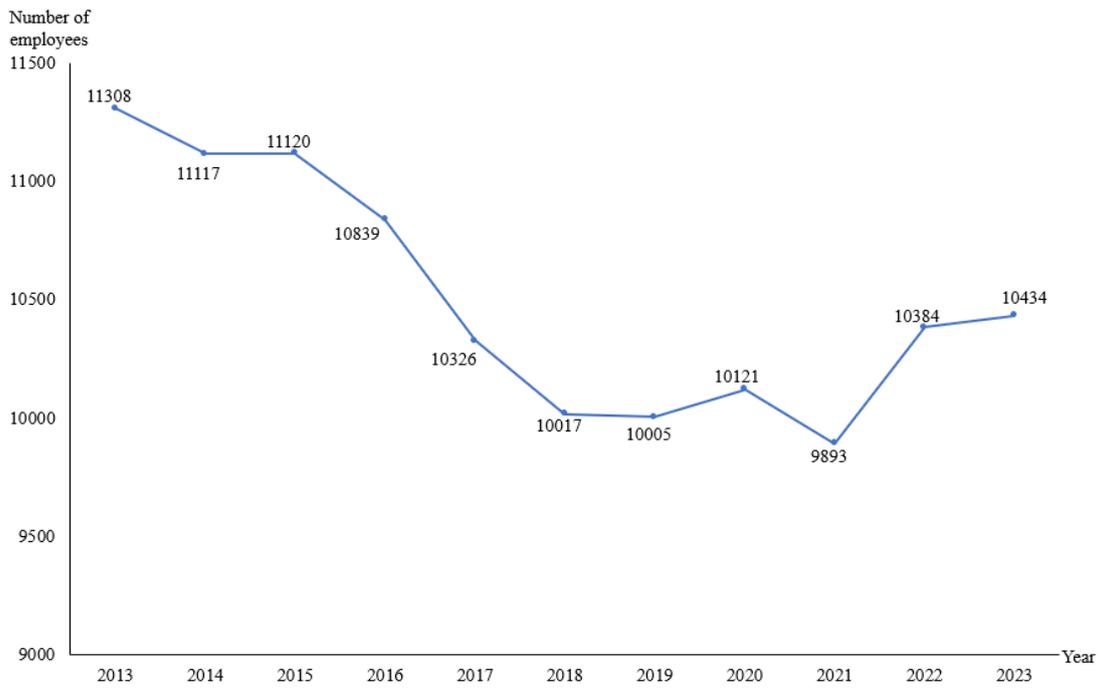


Figure 9: Number of employees at LBBW over the last ten years²⁵⁸

As LBBW is a legal entity under public law, its share capital is split among four owners: “Sparkassenverband Baden-Württemberg” (40.534%), the State of Baden-Württemberg (24.988%), the state capital Stuttgart (18.932%), and “Landesbeteiligungen Baden-Württemberg GmbH” (15.546%). This is illustrated in Figure 10. The State of Baden-Württemberg has a direct holding of 24.988% and an indirect holding of 15.546% via “Landesbeteiligungen Baden-Württemberg GmbH”.²⁵⁹

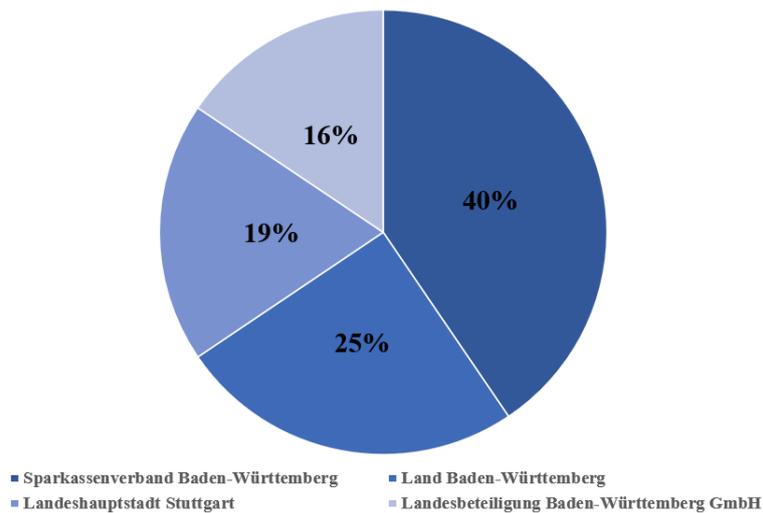


Figure 10: Owners of LBBW²⁶⁰

²⁵⁸ Extracted from: LBBW Investor Relations, n.d.

²⁵⁹ LBBW Über uns, n.d.

²⁶⁰ Extracted from: LBBW Über uns, n.d.

4.1.3 Economic Analysis and Key Figures of LBBW

Prior to undertaking a detailed examination of LBBW, it is first necessary to present the economic key figures. Notwithstanding the challenging market conditions delineated in the preceding chapters, LBBW has demonstrated its resilience by attaining a robust annual outcome in 2023.²⁶¹

In order to provide insight into the financial performance of the institution, the following figures are considered: profit before tax, income and expenses, risk management and capital adequacy. The figures refer to the year 2023, as no figures have yet been published for the whole year 2024. The profit before tax is 1.3 billion euros. In the initial six-month period of 2023, profit before tax reached a sum of 691 million euros. This represents a 45% increase compared to the first half of 2022.²⁶² This increase in comparison to previous years is indicative of the bank's capacity to navigate a challenging economic landscape characterized by a multitude of crises.²⁶³ Figure 11 illustrates the profit before tax in millions of euros over the past decade. It is noteworthy that there was a decline in 2020 and 2016. The decline in 2020 can be attributed to the COVID-19 pandemic and its consequences.²⁶⁴ In 2016, LBBW, like other German banks, was confronted with a considerable reduction in profits within its corporate customer and capital market operations.²⁶⁵ Nevertheless, Figure 11 demonstrates that LBBW consistently demonstrates resilience in the face of adversity, exhibiting a pattern of sustained growth in the majority of years.

²⁶¹ Breustedt, 2024

²⁶² LBBW Investor Relations, n.d.

²⁶³ Veitinger, 2024

²⁶⁴ World Economic Forum, 2020

²⁶⁵ Habdank, 2021

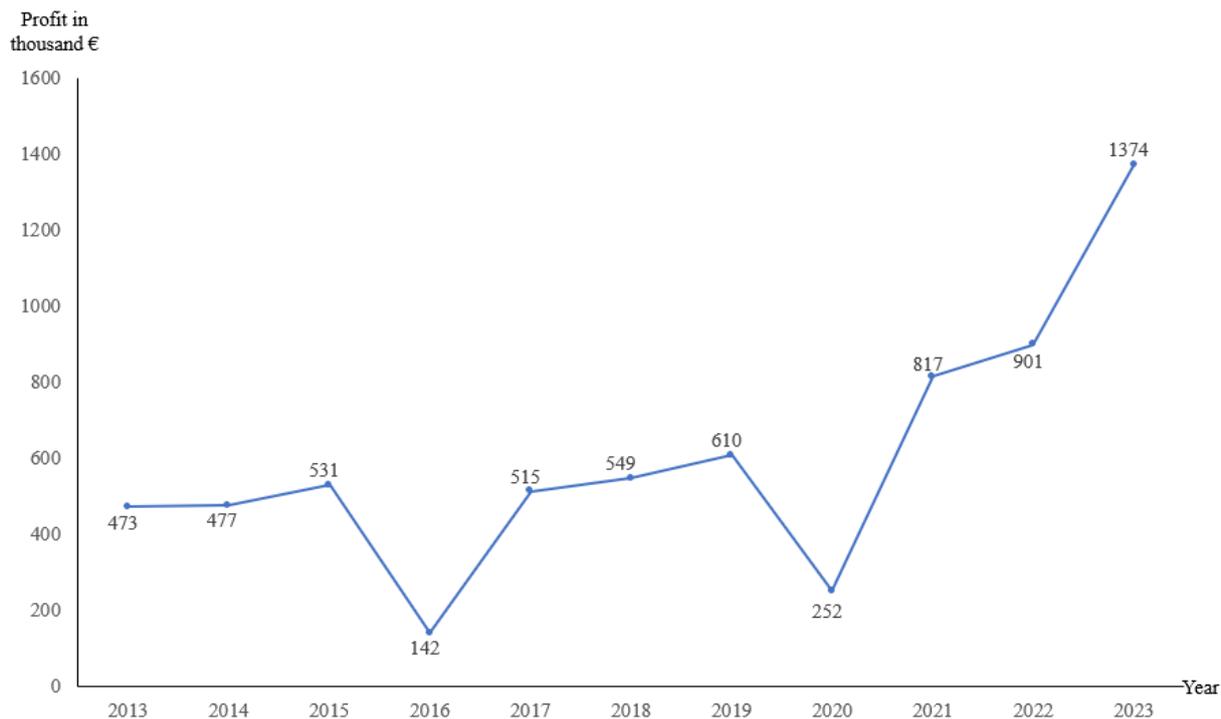


Figure 11: LBBW profit before tax over the last ten years²⁶⁶

A review of LBBW's earnings indicates that the initial six-month period exhibited an increase of approximately 22%, reaching a total of approximately 2 billion euros. This trend continued into the second half of 2023, which can be attributed to robust customer business and elevated interest rates.²⁶⁷ In the current economic climate, effective risk management is of paramount importance. Consequently, LBBW has a risk-weighted asset of €92.1 billion, with a corresponding risk provision. Furthermore, the capital base remains robust, with a CET1 ratio of 14.6%. This figure exceeds the regulatory requirements, thereby demonstrating LBBW's financial stability. By the end of August 2024, the results for the initial six-month period had been published. The data indicates that the favourable performance observed in the previous year will be sustained. A profit before tax of €731 million was recorded at the half-year mark, representing a six per cent increase on the previous year's result. The CET1 ratio remained unchanged at 14.6%, while all operating segments generated profits in the three-digit million range.²⁶⁸

²⁶⁶ Extracted from: LBBW Investor Relations, n.d.

²⁶⁷ LBBW Financial Reports, n.d.

²⁶⁸ LBBW Halbjahresgewinn, n.d.

4.2 Challenges Facing LBBW in a Dynamic Market Environment

This section presents the challenges that LBBW must overcome in order to maintain or increase its growth. In order to gain insight into the challenges, the annual reports from 2023 and 2022 are primarily considered.

Geopolitical developments

One of the most significant geopolitical developments has been, and continues to be, the repercussions of the war in Ukraine. The Supervisory Board and the Board of Managing Directors of LBBW have been addressing with this issue since the outbreak of the war. Furthermore, the Risk Committee is assessing the prevailing circumstances and their ramifications for business performance on an ongoing basis.²⁶⁹ As a consequence of the war, LBBW has observed an increase in energy prices, a reduction in energy availability and disruption to supply chains, particularly among its customer base.²⁷⁰ In response to these and other uncertainties, loan loss provisions were increased by a net amount of €206 million.²⁷¹ As outlined in the 2022 annual report, the ongoing war also presents a geopolitical risk for the 2023 financial year.²⁷² Nonetheless, it is anticipated that risk provisions will normalise in 2023, following an increase in 2022.²⁷³ Notwithstanding this favourable development, LBBW continues to regard the war in Ukraine as a risk in 2024, with the potential for further unforeseen economic consequences.²⁷⁴ In addition to the ongoing conflict between Russia and Ukraine, the renewed flare-up of the Middle East conflict in 2023 also posed a geopolitical risk.²⁷⁵

Market and customer needs

In addition, LBBW has observed significant shifts in market and customer needs in recent years, particularly with regard to digitalization and sustainability. The subjects of digitalization and sustainability have therefore been addressed in the company's annual reports for the past years. These two topics constituted the strategic priorities from 2017 to 2022. This should encompass the market and customer needs pertaining to these areas.²⁷⁶ In order to meet the challenge of digitalization, it is necessary to seek support from the field of IT. This will be reinforced in the

²⁶⁹ Cf. LBBW Annual Report 2022, 2023, pp. 7 ff.

²⁷⁰ Cf. LBBW Annual Report 2022, 2023, p. 27 f.

²⁷¹ Cf. LBBW Annual Report 2022, 2023, p. 32 f.

²⁷² Cf. LBBW Annual Report 2022, 2023, p. 80

²⁷³ Cf. LBBW Annual Report 2023, 2024, p. 35

²⁷⁴ Cf. LBBW Annual Report 2023, 2024, p. 80

²⁷⁵ Cf. LBBW Annual Report 2023, 2024, p. 53

²⁷⁶ Cf. LBBW Annual Report 2022, 2023, p. 25

future and transformed into cloud services. Nevertheless, the requisite alterations to successfully navigate the digital transformation will inevitably give rise to an increase in IT risks.²⁷⁷ In 2023, the issue of digitalization remains a significant concern.²⁷⁸ But progress has been made on certain issues addressed in the 2022 annual report, including the digitalization strategy for the retail banking business.²⁷⁹ Nevertheless, the process of digitalization continues to present LBBW with a number of challenges.²⁸⁰

In addition to the ongoing digitalization of business processes, the topic of sustainability is becoming increasingly important for companies, customers and thus also banks. In order to address this challenge, a focus on sustainability must be established.²⁸¹ A sustainability policy has already been formulated with the objective of acting in the interest of customers and stakeholders.²⁸² This is documented in the 2021 sustainability report on pages 13 ff. It provides the framework for implementing the sustainability goals and thus all sustainability activities within LBBW Group.²⁸³ A more detailed examination of this topic can be found in the following sub-chapter 4.3.3. The 2023 annual report indicates that the topic must be increasingly incorporated into customer products this year.²⁸⁴

Macroeconomic uncertainties

From a macroeconomic standpoint, LBBW encountered considerable difficulties in 2022 and 2023, predominantly due to the prevailing inflationary pressures and the subsequent interest rate hikes. As indicated in the 2022 annual report, the cost of living exhibited a notable increase. In Germany, inflation (as measured by the national consumer price index with a base year of 2020) reached 6.9%. In the eurozone, the year-on-year inflation rate was 8.4% (harmonized index of consumer prices). This represented the highest figure since the introduction of the euro and was driven by increases in energy prices for household energy and fuels, as well as food.²⁸⁵ According to the 2023 annual report, the rate of inflation for household living standards has decreased. Nevertheless, the value remained significantly above the norm.²⁸⁶

²⁷⁷ Cf. LBBW Annual Report 2023, 2024, p. 73

²⁷⁸ Cf. LBBW Annual Report 2022, 2023, p. 5

²⁷⁹ Cf. LBBW Annual Report 2023, 2024, p. 30

²⁸⁰ Cf. LBBW Annual Report 2023, 2024, p. 83

²⁸¹ Cf. LBBW Annual Report 2022, 2023, p. 5

²⁸² Cf. LBBW Annual Report 2022, 2023, p. 41

²⁸³ Cf. LBBW Annual Report 2022, 2023, p. 90

²⁸⁴ Cf. LBBW Annual Report 2023, 2024, p. 29

²⁸⁵ Cf. LBBW Annual Report 2022, 2023, p. 27

²⁸⁶ Cf. LBBW Annual Report 2023, 2024, p. 27

In response to this inflationary pressure, the ECB implemented adjustments to its monetary policy in the reporting year 2022. The asset purchase programme, which had been initiated in order to mitigate the economic consequences of the COVID-19 pandemic, was terminated on 1 July. Towards the end of July, the Euro system key interest rates were increased by 50 basis points, marking the initial interest rate adjustment. By the conclusion of the year, three further increases in the key interest rate, amounting to a total of 200 basis points, had been implemented. Consequently, the deposit rate was 2% at the conclusion of 2022.²⁸⁷ These circumstances, in conjunction with the government's fiscal policy measures and other factors, presented significant challenges for LBBW.²⁸⁸ In the 2023 reporting year, the adjustments to the interest rate affected LBBW's business. The ECB raised its deposit rate by a total of 200 basis points to 4.00% and its main refinancing rate by 200 basis points to 4.50%. The ECB thus proceeded with the interest rate hikes initiated in mid-2022, which had an impact on LBBW's business.²⁸⁹

Further challenges

In addition to these challenges, which are regularly addressed in the annual reports, there are numerous others. A selection of these is presented herewith. It should be noted, however, that the list is not exhaustive. As a consequence of demographic shifts and the resulting scarcity of qualified personnel, LBBW is encountering mounting difficulties in attracting and retaining employees over the long term.²⁹⁰

Furthermore, the bank is subject to an increasing number of regulatory requirements, which have a corresponding impact on its operations.²⁹¹ In 2022 and 2023, the already unstable real estate market was further destabilized by the prevailing economic instability.²⁹² It is possible that the situation in this sector may deteriorate further in 2024, resulting in a negative impact on earnings due to investor reluctance.²⁹³

A review of the annual reports from recent years, as well as an examination of the current challenges facing banks in chapter 3.3, reveals that LBBW is confronted with a multitude of challenges. Nevertheless, it has demonstrated remarkable success in recent years.

²⁸⁷ Cf. LBBW Annual Report 2022, 2023, p. 27

²⁸⁸ Cf. LBBW Annual Report 2022, 2023, p. 28 f.

²⁸⁹ Cf. LBBW Annual Report 2023, 2024, p. 27 f.

²⁹⁰ Cf. LBBW Annual Report 2023, 2024, p. 29

²⁹¹ Cf. LBBW Annual Report 2023, 2024, p. 8

²⁹² Cf. LBBW Annual Report 2023, 2024, p. 5

²⁹³ Cf. LBBW Annual Report 2023, 2024, p. 83

4.3 Strategic Analysis of LBBW: Direction, Structure, Sustainability and Technology

“In a volatile political and economic environment, the Group achieved its best operating result since the financial market crisis; in addition, it further developed its strategic orientation in response to changing conditions.”²⁹⁴.

“LBBW ended 2023 with a further improvement in its operating result. All four operating segments generated a result in the three-digit million range.”²⁹⁵. Headlines such as “Profit in the billions and record dividends: LBBW defies Signa debacle and real estate crisis”²⁹⁶ and the Zeit “LBBW with billions in profits in the crisis year 2022”²⁹⁷ show that LBBW is managing to cope the challenges and crises of today. This can also be seen from the development of the profit before taxes from Figure 11. Other banks of this size and type struggle. Therefore, one of the research questions of this thesis is which strategic directions LBBW is pursuing and what its success factors are. The following sections provide an answer this research question.

4.3.1 Strategic Goals and Direction of LBBW

The initial step is to examine the strategic directions adopted by LBBW. These form the basis for the success or failure of a company.

Strategic directions from 2017 to 2022

To gain a more comprehensive understanding, the strategic directions from 2017 to 2022 are presented and the new group strategy that commenced on 1 January 2023 is subjected to closer examination. These years are of particular interest as, as shown by Figure 11, profit before taxes has grown significantly from 2017 onwards, with the exception of the COVID-19-year 2020. In 2017, the LBBW introduced the motto ‘Ready for something new’ (translated as ‘Bereit für Neues’) to mark its 200th anniversary.²⁹⁸ In order to reinforce this motto in the years 2017 to 2022, four strategic directions were defined with the objective of meeting the challenges presented by economic developments, customer requirements, market trends, society and the environment.²⁹⁹

²⁹⁴ Cf. LBBW Annual Report 2022, 2023, p. 29

²⁹⁵ Cf. LBBW Annual Report 2023, 2024, p. 28

²⁹⁶ Breustedt, 2024

²⁹⁷ DPA, 2023

²⁹⁸ Cf. LBBW Annual Report 2017, 2018, p. 5 f.

²⁹⁹ Cf. LBBW Annual Report 2017, 2018, p. 33

- Business focus: LBBW is pursuing growth through the expansion of its existing customer base. In the future, the integration of specialized product expertise with customer segments is to be a key objective. The objective is to enhance efficiency and optimize the performance of the operating model.³⁰⁰
- Digitalization: This strategic thrust is designed to facilitate the transfer of competitive advantages into the digital age. The central customer business processes are to be digitalized and innovative products and solutions are to be offered. The implementation of digital processes and the modernization of information technology are essential for the creation of more efficient and streamlined internal workflows.³⁰¹
- Sustainability: LBBW's objective is to gradually extend its range of sustainable products and services and to assist its customers in addressing the challenges in the context of developing sustainable business models. A crucial element of this process is the modification of the lending policy in accordance with sustainability and risk criteria. Furthermore, the objective is to establish a talent management system that is aligned with LBBW's strategic objectives, with the aim of facilitating the internal development of suitable candidates to fill positions at all levels.³⁰²
- Agility: The objective of establishing agility is to facilitate rapid and unencumbered decision-making processes, a heightened customer and solution orientation, and accountable cross-departmental action.³⁰³

Strategic directions starting in 2023

LBBW has had a new strategy in place since 1 January 2023. The central tenets of the strategy are the corporate objectives of growth and relevance. The strategy is oriented towards growth, with a particular emphasis on constant earnings growth, consistent risk management and active cost control. Furthermore, LBBW is committed to serving as a relevant and valuable partner for both the business community and society at large.³⁰⁴ The following strategic levers were identified as means of implementing the strategy and operationalizing it in the individual segments.

- Sustainable transformation: These present a variety of challenges for the German economic system. The focus of this lever is on the intricate transformation requirements that LBBW's

³⁰⁰ Cf. LBBW Annual Report 2017, 2018, p. 33

³⁰¹ Cf. LBBW Annual Report 2017, 2018, p. 33

³⁰² Cf. LBBW Annual Report 2017, 2018, p. 33

³⁰³ Cf. LBBW Annual Report 2017, 2018, p. 33

³⁰⁴ Cf. LBBW Annual Report 2023, 2024, p. 25

customers are confronted with. LBBW is taking this into account as a designer and partner of sustainable transformation and is developing suitable solutions to meet the needs of its customers. Therefore, LBBW is cognizant of these considerations and is engaged in the development of appropriate solutions to meet the needs of its customers as a designer and partner in sustainable transformation. Consequently, LBBW not only provides financial support for pertinent transformation projects such as wind farms and photovoltaic systems, but also offers a sustainable array of products and services. The range of services offered by LBBW includes, inter alia, individual advisory services on sustainable business models, digital transformation and the optimization of existing value chains. LBBW is pursuing a long-term reduction in the CO₂ emissions of its loan portfolio, employing targeted reduction strategies for specific sectors. Furthermore, LBBW identifies and addresses its own ESG risks proactively.³⁰⁵

- Innovative solution: LBBW is leveraging this opportunity to drive the group-wide development of new services, products, and production processes. The objective is to facilitate cross-segment collaboration in order to meet the diverse needs of its customer base with a comprehensive range of services. LBBW's objective is to provide its clientele with a comprehensive range of banking services through the provision of integrated solutions.³⁰⁶
- Enhanced resilience: The necessity for resilience and flexibility in LBBW's business policy is highlighted by the challenging conditions currently being faced. In addition to the strategic further development and diversification of the business model, the focus of the lever is on the implementation of rigorous resource discipline through effective capital management and cost management, as well as on the enhancement of operational resilience.³⁰⁷
- Inspire employees: The most significant asset for a successful banking institution is a dedicated and committed workforce. The attraction and retention of highly qualified top performers is of significant relevance in light of demographic change and the associated shortage of skilled workers and managers. LBBW is implementing a comprehensive cultural transformation with the objective of enhancing its reputation as an employer over the long term. A significant factor influencing employee satisfaction, particularly among younger employees, is the aspiration for meaningful work. In addition, the "Inspire Employees" lever encompasses initiatives aimed at fostering the professional growth and advancement of employees, alongside the introduction of novel working and career frameworks. The

³⁰⁵ Cf. LBBW Annual Report 2023, 2024, p. 26

³⁰⁶ Cf. LBBW Annual Report 2023, 2024, p. 26

³⁰⁷ Cf. LBBW Annual Report 2023, 2024, p. 26

aforementioned factors are intended to foster long-term employee identification with LBBW.³⁰⁸

- Social contribution: LBBW attaches great importance to its social and economic responsibilities. Consequently, LBBW offers a comprehensive range of support for charitable initiatives undertaken by its employees. Furthermore, LBBW endeavours to assume an active role in social discourse, utilizing its economic and financial resources.³⁰⁹

In addition to the five new strategic priorities, LBBW implemented a new branding campaign. The slogan ‘Ready for something new’ (translated as ‘Bereit für Neues’) from 2017 was replaced by ‘Create new things’ (translated as ‘#NeuesSchaffen’).³¹⁰

A comparison of the strategic direction presented for the years 2017 to 2022 and that proposed for 2023 reveals both similarities and differences. Both strategic directions are primarily oriented towards customer focus, sustainability, employee development, innovation and digitalization. However, there is a discrepancy in the level of detail.³¹¹ The new strategic levers from 2023 onwards are more specific, with detailed examples and concrete measures for implementation. In contrast, those up to 2023 offer more of a general overview of the strategic measures and objectives.³¹² It can thus be inferred that the strategic levers are mutually reinforcing. Following the establishment of the strategic levers between 2017 and 2022, which resulted in a discernible increase in profitability as evidenced by the profit before taxes illustrated in Figure 11, the new strategic directions build upon these foundations. While agility constituted a pivotal element during the period spanning 2017 to 2022, it is notable that this lever is no longer explicitly delineated in the strategic directions that commenced in 2023.³¹³ Conversely, the social contribution has been identified as a novel lever in the 2023 strategic directions.³¹⁴ The concept of resilience has also evolved over time.³¹⁵ From 2023 onwards, the concept of resilience will be linked to specific measures designed to enhance its effectiveness, such as cybersecurity.³¹⁶

Implementation of the strategic directions

The definition of strategic directions is a fundamental responsibility of any company. However, the implementation of these directions represents a significant challenge in itself. The following

³⁰⁸ Cf. LBBW Annual Report 2023, 2024, p. 26

³⁰⁹ Cf. LBBW Annual Report 2023, 2024, p. 26

³¹⁰ Reichert, 2023

³¹¹ Cf. LBBW Annual Report 2017, 2018, p. 33

³¹² Cf. LBBW Annual Report 2023, 2024, p. 25

³¹³ Cf. LBBW Annual Report 2017, 2018, p. 33; Cf. LBBW Annual Report 2023, 2024, p. 26

³¹⁴ Cf. LBBW Annual Report 2023, 2024, p. 25

³¹⁵ Cf. LBBW Annual Report 2017, 2018, p. 33

³¹⁶ Cf. LBBW Annual Report 2023, 2024, p. 25

section illustrates the manner in which these have been or are to be implemented, together with the plan for implementation. The strategic levers associated with new technologies and sustainability are not included in this analysis, as these areas will be addressed in subsequent sections. The initial stage of the process contains an examination of the two strategic levers, namely 'agility' and 'business focus', which were in place from 2017 to 2022. A variety of agile methodologies were deployed during this period with the objective of enhancing efficiency and adaptability.³¹⁷ From 2017 onwards, Scrum and Kanban were introduced in LBBW's IT division. Those agile methodologies have facilitated the streamlining of IT projects, software development, and product creation, enabling the expedited delivery of products to market. The implementation of tools such as "MeisterTask" has resulted in enhanced productivity.³¹⁸ From 2018 onwards, credit risk management also increasingly employed on agile methods. This resulted in a notable acceleration of decision-making processes and enhanced responsiveness to market changes.³¹⁹ In 2019, design thinking and lean startup methods were employed in the context of innovation projects. The emphasis was placed on a customer-centric methodology and the utilization of rapid prototyping. Furthermore, this approach facilitated the formulation of innovative solutions to intricate challenges and the investigation of prospective commercial prospects.³²⁰ The Corporate Finance and Asset Management division adopted an agile methodology from 2020 onwards. The objective was to enhance efficiency, develop customer-oriented financial solutions, improve services and facilitate more flexible customer treatment. The implementation of continuous improvement was made possible by the introduction of retrospectives from 2021 onwards. Such processes afford teams the opportunity to question and optimise their procedures. This results in enhanced outcomes and augmented collaboration within and between teams.³²¹

In order to implement the 'business focus' approach, LBBW is also concentrating on certain growth sectors, including utilities and energy, healthcare and pharmaceuticals, as well as telecommunications, media and technology. This strategic focus has enabled LBBW to achieve a successful increase in its earnings.³²² Moreover, further investment was made in customer relationships. This enabled LBBW to maintain and reinforce its market position and augment

³¹⁷ Cf. LBBW Annual Report 2017, 2018, p. 33

³¹⁸ Mang & Pilwarsch, 2022

³¹⁹ Cf. LBBW Annual Report 2018, 2019, p. 112

³²⁰ Cf. LBBW Annual Report 2019, 2020, p. 96

³²¹ Cf. LBBW Annual Report 2021, 2022, p. 35

³²² Wagner, 2019

earnings from customer business. This is evidenced by the substantial growth in the corporate finance sector, which has led to a notable increase in both the financing volume and earnings.³²³ The concept of 'social contribution' has been a fundamental tenet of LBBW's strategic direction since 2023. To date, LBBW has provided support for a number of projects in the fields of education and social affairs. These initiatives are designed to foster engagement with political, economic, social and cultural life among children and young people.³²⁴ Furthermore, LBBW is a member of the “Knowledge Factory” (translated as “Wissensfabrik”), where it fosters an entrepreneurial spirit and provides children with insights into the digital world through experiential learning.³²⁵

Furthermore, LBBW is dedicated to the principles of sustainability and environmental protection. A more detailed examination of this topic can be found in a subsequent sub-chapter. LBBW attributes great importance to equal opportunities and integration. It is imperative that successful coexistence and cooperation are achieved. Consequently, the integration of individuals from disadvantaged and marginalized backgrounds is actively encouraged.³²⁶ LBBW endorses an initiative that provides a venue for children and young people with and without disabilities to interact and engage in physical activity.³²⁷ LBBW also encourages its employees to engage in voluntary activities.³²⁸ Furthermore, LBBW fosters a diverse and integrative working environment, characterized by the presence of 74 different nationalities, which collectively contribute a multitude of perspectives and ideas.³²⁹ In addition, the LGBTTIQ* network at LBBW and participation in Christopher Street Day in Stuttgart reflect the diversity of the organization.³³⁰ In terms of financial commitment, the following figures can be cited: €650,000 in donations for social and cultural causes; €20,000 for two projects for disabled and seriously ill children; €266,000 from “PS Lossparen”, which is a combination of donation, savings and lottery; €10,000 annually for school projects and initiatives for education and career choice; and 1,500 employees donate the decimal places of their salary (donation amount: approx. €8,500).³³¹ Those figures and points illustrate that LBBW has already made a significant investment in this area. Nevertheless, LBBW would like to elaborate further on these points further. The objective is to cultivate long-term collaborative relationships with social educational

³²³ Marten, 2022

³²⁴ Ingelfinger, n.d.

³²⁵ Wissensfabrik, n.d.

³²⁶ Ingelfinger, n.d.

³²⁷ Anpiffinsleben, 2020

³²⁸ Ingelfinger, n.d.

³²⁹ Weidinger & Diesch, n.d.

³³⁰ Drews et al., 2023

³³¹ Ingelfinger, n.d.

institutions and to initiate new initiatives with the aim of making a sustainable contribution to society. Moreover, this commitment is to be made even more targeted and transparent, with interest groups being involved on a regular basis through reporting and feedback loops. Furthermore, LBBW is engaged in numerous sustainable projects. These will be addressed subsequently.³³²

The strategic lever ‘Inspire employees’ with the objective of enhancing the appeal of the organisation as an employer and to reinforce the dedication of its personnel.³³³ Some measures to achieve this have already been implemented in the past. In October 2023, LBBW launched a digital employer branding campaign. The campaign will be conducted under the motto ‘#Create new things’ (translated as ‘#NeuesSchaffen’) and will utilize Katharina von Württemberg as a virtual brand ambassador. The objective is to utilise the campaign and the figure of Katharina von Württemberg as a virtual brand ambassador to convey the bank's narrative in a contemporary manner and to appeal to prospective employees.³³⁴ LBBW adheres to a sustainable human resources policy and offers sustainable support to employees, with the objective of successfully shaping the future in collaboration with a healthy, motivated and qualified team. In order to ensure the optimal support for its employees, including for their dependents, LBBW offers 114 apprenticeships, thereby providing scope for its employees. This, in conjunction with the option of working from home, serves to enhance the work-life balance for employees.³³⁵ Furthermore, in addition to the mentioned support, LBBW offers financial incentives, in addition to the provision of job bikes and the organization of memorable employee parties, as was the case in 2018 and 2023.³³⁶ In addition to their salary, employees are entitled to receive performance-related bonus payments, participate in employee share programmes, undergo training and development, benefit from discounts, and contribute to a company pension scheme. Moreover, employees are eligible to receive a bonus through an active idea management system. To this end, employees are required to submit proposals for innovative and feasible ideas. In the event of the implementation of an idea, the employee in question is entitled to receive up to 50% of the annual net benefit derived from the implementation of the idea, with a maximum total of €50,000. This encourages the implementation of employee-driven initiatives and fosters active

³³² Weidinger, n.d.

³³³ Cf. LBBW Annual Report 2023, 2024, p. 25

³³⁴ Reichert, 2023

³³⁵ Weidinger, n.d.

³³⁶ 0711, 2023

involvement.³³⁷ In response to the prevailing inflationary pressures, LBBW is offering an inflation premium of up to €2,000 per employee in 2022. The objective of this bonus is to stabilize employees' purchasing power and to demonstrate appreciation for their performance and commitment.³³⁸ These and other benefits contribute to LBBW's status as an attractive employer for both existing and prospective employees. Nevertheless, there are additional factors that LBBW would like to address in order to attract new employees and retain existing ones.³³⁹ As an illustration, an enhanced procedure is to be implemented, whereby employees can offer feedback, which is to be integrated in a prompt manner. The digital work environment is to be expanded, with a particular focus on sustainable and meaningful work.³⁴⁰

The final point to be addressed is the recently adopted strategic direction of 'Enhanced resilience'. In order to demonstrate greater resilience in the current economic climate, LBBW is pursuing a strategy of diversification, capital strengthening, risk provisioning, investment in cybersecurity and IT, and support for sustainable transformation. The final two points will be examined in greater detail at a later stage in this thesis. It is therefore not within the scope of this thesis to provide further discussion of this strategic direction.

The analysis of the strategic directions, both past and new, has demonstrated that LBBW has made farsighted strategic decisions. The implementation of these measures will contribute to the success of the bank and provide sustainable support to society. While numerous elements have already been initiated, several key areas remain unaddressed, particularly those pertaining to the recently introduced five strategic directions. To maintain competitiveness, LBBW must ensure the successful implementation of these strategic directions in the future.

4.3.2 Organizational Structure and Business Areas of LBBW

After having outlined the strategic orientations of LBBW in the preceding sections, this part proceeds to delineate the governance and business areas of the institution.

Governance

As previously demonstrated in chapter 4.1, LBBW is characterised by an ownership structure comprising the state of Baden-Württemberg, the city of Stuttgart and the Sparkassenverband

³³⁷ Haumann, 2023

³³⁸ Kahl, 2024b

³³⁹ Pachtl, 2023

³⁴⁰ Weidinger, n.d.

Baden-Württemberg as primary stakeholders. This is characteristic of a Landesbank and confers upon it greater stability than that observed in commercial banks.³⁴¹ In considering the governance structure, it is essential to ensure the effective and transparent management of LBBW, with due consideration given to the interests of the owners and the regulatory requirements.³⁴² In addition to the “Board of Managing Directors”, LBBW also has a “Supervisory Board” and a “General Meeting”, which constitute the corporate bodies of the bank.³⁴³ Furthermore, other committees exist to provide support to the Board of Managing Directors and the Supervisory Board with regard to specific topics.³⁴⁴ The Board of Managing Directors is committed to three core objectives: the financing of innovations, the provision of reliable support to customers and the undertaking of responsible actions for the benefit of the economy and society. The Board of Managing Directors is comprised of one female member and six male members. Each member is responsible for a distinct area, with the exception of Group Auditing and Compliance. This is the responsibility of the entire Board of Managing Directors.³⁴⁵ The Board of Managing Directors oversees the operations of LBBW and represents the institution in all matters. Furthermore, it is incumbent upon the Chairman of the Board of Managing Directors to apprise the Chairman of the Supervisory Board and his deputy of significant occurrences.³⁴⁶ The primary responsibility of the Supervisory Board of LBBW is to oversee the activities of the Board of Managing Directors and to provide guidance on strategic matters. It is regarded as the supreme controlling and advisory body and also represents the interests of the owners. Consequently, the Lord Mayor of the City of Stuttgart and the Deputy Minister of Finance of the State of Baden-Württemberg are two of its 21 members.³⁴⁷ The members of the Supervisory Board are elected by the Annual General Meeting, unless otherwise required by law.³⁴⁸ The owners constitute the Supervisory Board, which is responsible for making fundamental decisions, including the appropriation of profits and amendments to the articles of association.³⁴⁹ The organizational chart of LBBW encompasses the following principal business areas, in addition to ancillary domains such as information technology.³⁵⁰ The precise structure is not pertinent to this thesis and thus will not be addressed.

³⁴¹ LBBW Über uns, n.d.

³⁴² LBBW Konzern, n.d.

³⁴³ Cf. LBBW Satzung, 2022, p. 3

³⁴⁴ LBBW Konzern, n.d.

³⁴⁵ LBBW Vorstand, n.d.

³⁴⁶ Cf. LBBW Satzung, 2022, pp. 4 ff.

³⁴⁷ LBBW Aufsichtsrat, n.d.

³⁴⁸ Cf. LBBW Satzung, 2022, p. 5

³⁴⁹ Cf. LBBW Satzung, 2022, p. 4

³⁵⁰ LBBW Konzern, n.d.

Main business areas

Having considered the governance and general organizational structure of LBBW, the following section will examine the main business areas from which the bank generates profit.

- **Lending business:** LBBW, like other banking institutions, provides companies and institutions with the financial resources they require when needed. This makes it a central guarantor of stability and a key supporter of the economy. The provision of finance to companies and institutions enables the implementation of projects and the development of markets. In addition to the provision of loans, the bank also issues bonds and arranges promissory note loans.³⁵¹ In contrast to other banking institutions, LBBW also provides financing for significant capital projects, as evidenced by its role in funding the acquisition of four new Airbus A320-200 aircraft by an American airline. Furthermore, the financing of real estate represents a significant proportion of the bank's lending activities.³⁵²
- **Capital market business:** Another significant business area for LBBW is that of capital market financing. In this domain, it facilitates the convergence of companies and investors. The capital market facilitates the convergence of those seeking capital and those providing capital. Those seeking capital are not limited to corporate entities; countries and other institutions are also included in this category. Investors typically seek to enhance the value of their capital through the receipt of interest. LBBW assumes the role of an intermediary in this domain, operating both domestically and abroad. It is particularly involved in cases where the sums in question exceed the limits of conventional loans. Nevertheless, these processes are more intricate than those pertaining to conventional loans, necessitating the disclosure of the company's key financial metrics to prospective investors. It can be observed that there are four forms of capital market financing that are particularly attractive for German companies.³⁵³ The first form of capital market financing is that of the syndicated loan. LBBW provides financing from a single source, irrespective of the amount in question.³⁵⁴ The second form of capital market financing is that of bonds. Such transactions are those of the capital market, with a minimum value of €500 million. LBBW has considerable influence in the placement of bonds, and customers are advised by an experienced project team and receive comprehensive support.³⁵⁵ The third category, the borrower's note loan, is somewhat

³⁵¹ LBBW Finanzierung, n.d.

³⁵² Braun, 2019

³⁵³ Miketta, n.d.

³⁵⁴ Groß et al., n.d.

³⁵⁵ Bühner & Buric, n.d.

less complex. Such instruments are typically of a smaller scale than bonds.³⁵⁶ The final category comprises asset-backed securities. In this instance, a company's claims on business partners are sold in a bundle.³⁵⁷

- **Asset Management:** This includes the administration of assets for both institutional and private clientele. LBBW offers assistance in the formation of reserves for the purpose of financing prospective investments. It can be employed to optimally position customers' financial assets in a manner that reconciles liquidity requirements, investment opportunities and associated risks. The subsidiary LBBW Asset Management provides advice to institutional investors.³⁵⁸
- **Retail banking:** LBBW provides a comprehensive range of services for retail customers, encompassing account management, savings products and financial advice.³⁵⁹
- **Corporate Finance:** In this domain, LBBW provides its corporate clientele with bespoke financing solutions. The emphasis is not on the products themselves, but rather on bespoke solutions and a comprehensive approach. LBBW Advisory employs a comprehensive analytical approach to assess the financial circumstances of its clients, subsequently formulating recommendations regarding optimal financing alternatives. Furthermore, the aforementioned services encompass leasing, factoring, and merger and acquisition transactions.³⁶⁰

A comparison of the profit before tax figures for 2023 and 2022, as illustrated in Figure 12, reveals notable discrepancies. This analysis allows for the identification of the business areas with the highest profitability. To illustrate, corporate customers generate fivefold the profit before tax of retail customers and savings banks. Nevertheless, LBBW offers all areas as a universal bank.³⁶¹

³⁵⁶ Buric & Bühner, n.d.

³⁵⁷ Chevalier et al., n.d.

³⁵⁸ Asset Management, n.d.

³⁵⁹ LBBW Geschäfts- und Privatkunden, n.d.

³⁶⁰ LBBW Corporate Finance, n.d.

³⁶¹ LBBW Konzern, n.d.

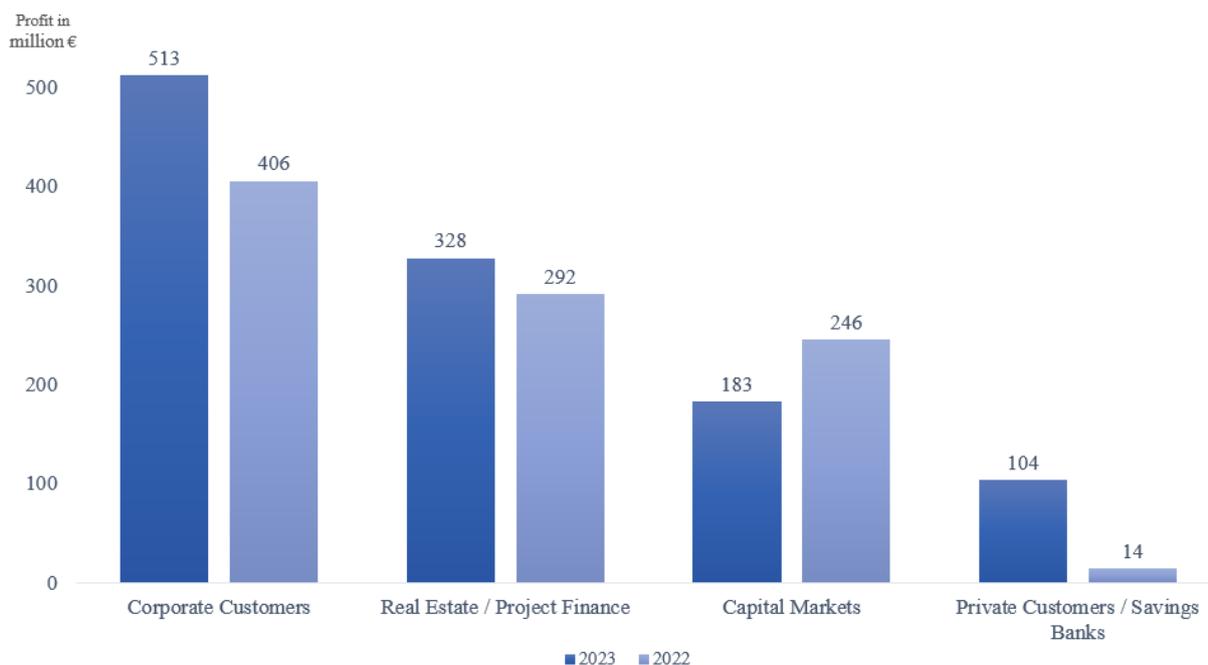


Figure 12: LBBW profit before tax by business area³⁶²

In addition to the primary business areas, LBBW offers comprehensive support to numerous secondary business areas. LBBW has established eleven subsidiaries in Germany with the objective of providing optimal support for its customers across all business areas. The following list is presented in alphabetical order: Berlin Hyp AG, BWK GmbH, Debtvision, Immobilienvermittlung BW, LBBW Asset Management, LBBW CREM, LBBW Immobilien Management, LBBW Pensionsmanagement, LBBW Service, LBBW Venture Capital, MMV Bank, Süd Beteiligungen, SüdFactoring, SüdLeasing. Upon examination of the subsidiaries, it becomes evident that some are dedicated to customer care and the advancement of LBBW employees. Moreover, a number of these entities are among the foremost limited liability companies in their respective industries within Germany.³⁶³

4.3.3 Sustainability Strategies of LBBW

The theoretical section demonstrated that banks, and consequently LBBW, are obliged to adapt to a revised sustainability standards and ESG factors in order to retain their competitive advantage in the market. In order to withstand the pressure, LBBW has launched a number of appealing offers on the market in recent years. One of the strategic directions since 2023 has been the pursuit of ‘sustainable transformation’.³⁶⁴ The strategic field of ‘sustainability’ has

³⁶² Extracted from: LBBW Financial Reports, n.d.

³⁶³ LBBW subsidiaries, n.d.

³⁶⁴ Cf. LBBW Satzung, 2023, p. 26

been a core tenet of the LBBW since 2017.³⁶⁵ In order to implement this strategy, LBBW offers its customers support and accompanies the implementation of measures on their behalf. The following section will examine some of these in greater detail.

Sustainability at LBBW

LBBW is committed to pursuing sustainable practices and acting in a sustainable manner. As a bank under public law, it considers itself to have a particular responsibility to proactively drive the transformation of the economy and society. It achieves this through a variety of means. The bank has implemented a comprehensive strategy to reduce its energy consumption. Since 2009, LBBW has been sourcing 100% of its electricity consumption from renewable energy sources. In 2012, a heat pump was installed in the central building in Stuttgart, which recovers heat energy from the data center and utilizes it as heating energy. The objective is to achieve carbon neutrality by 2020, for instance through the installation of solar panels on the buildings at the company's headquarters.³⁶⁶ In addition to its own sustainable actions, LBBW offers sustainable bonds and sustainability advisory services.³⁶⁷ The term sustainable bonds encompass those designated as green bonds. Such bonds are referred to as green bonds and are invested in sustainable and climate-friendly projects, thus falling within the domain of green finance. Those who sell such bonds must provide evidence that the funds will be utilized in an environmentally responsible manner and that the bond will contribute to the mitigation of climate change.³⁶⁸ The market for green bonds is expanding rapidly, with an increasing number of investors allocating capital to these instruments. Thus far, the demand for green bonds has far exceeded the available supply. In 2017, LBBW issued its inaugural green bond, with an issuance volume of €750 million.³⁶⁹ The proceeds are used to refinance commercial real estate that is energy-efficient. Subsequently, additional green bonds were placed in the following years. As of 31 December 2023, LBBW had green bonds outstanding with a total volume of €6.3 billion, thereby ranking among the largest green bond issuers worldwide. The following figures result from the green bonds, when viewed in a summary manner. The Social Finance portfolio comprises €3.1 billion, while €1.9 billion has been invested in renewable energies. This has resulted in 1.1 million tonnes of

³⁶⁵ Cf. LBBW Satzung, 2017, p. 33

³⁶⁶ Weidinger & Diesch, n.d.

³⁶⁷ Lohmüller, 2024

³⁶⁸ Offenhuber, 2019

³⁶⁹ LBBW Sustainability Advisory, n.d.

CO₂ emissions being saved annually. The Green Finance portfolio has reached €9.7 billion, while €6.3 billion in green bonds are currently outstanding.³⁷⁰

Sustainability advisory is the leading expert in sustainable financing. LBBW's diverse sustainability advisory teams provide comprehensive guidance to companies, offering impartial advice that is not product-specific. They disseminate knowledge and provide assistance with implementation.³⁷¹ The experts provide customers with comprehensive analyses based on a range of key performance indicators. In addition to providing advisory services to corporate clients, LBBW also offers guidance to banking and savings institutions on strategies for adapting their loan portfolios. Furthermore, foundations and other non-profit organizations may avail themselves of LBBW's expertise in order to certify the sustainability of their investment portfolios.³⁷² In addition to these large customers, private customers are also counselled by their advisors on sustainable investment products. The advice is designed to facilitate sustainable investment.³⁷³

Advice and support for emissions trading

LBBW offers advice and support to its clients in the area of emissions trading. In order to facilitate the sustainable transformation that is essential for companies, the bank acts as a strategic advisor with regard to suitable investments and financing. The concept of sustainability has become a new standard in economic practice, holding companies and investors to account for their actions in terms of responsibility.³⁷⁴ The objective of the EU is to become the first climate-neutral continent by 2050. In order to achieve this, the first step is to reduce the amount of greenhouse gases by 55% by 2030. This places significant demands on companies.³⁷⁵ In light of the mentioned target and other pertinent requirements, LBBW offers its corporate clientele a comprehensive range of services designed to facilitate the attainment of these objectives.³⁷⁶ A significant proportion of its corporate customers base is required present emission rights for their greenhouse gas emissions. However, the prices in emissions trading exhibit considerable volatility, which introduces a significant degree of uncertainty for companies. LBBW is able to mitigate this uncertainty for its customers through the implementation of targeted risk management strategies and the assumption of financing risk. Moreover, corporate customers have the

³⁷⁰ Offenhuber, 2019

³⁷¹ LBBW Sustainability Advisory, n.d.

³⁷² Etter et al., n.d.

³⁷³ Doedens, n.d.

³⁷⁴ Cf. LBBW Satzung, 2017, p. 33

³⁷⁵ LBBW Fit for 55, 2021

³⁷⁶ Stäfe-Anderka, n.d.

option of investing in CO₂ certificates, which can generate a profit.³⁷⁷ Furthermore, LBBW provides assistance to companies engaged in the implementation of climate change mitigation projects on a global scale, which serve to offset their own carbon dioxide emissions. This is a voluntary emissions trading scheme in which companies or private individuals provide financial support for climate protection projects in developing and emerging countries with the objective of reducing emissions.³⁷⁸

ESG implementation within LBBW

In addition to sustainable financing companies in accordance with ESG standards, it is essential for LBBW to integrate ESG considerations into its own operations.³⁷⁹ To this end, an ESG team has been established whose remit is to facilitate the sustainable transformation process by addressing strategic ESG issues. The team is instrumental in propelling the sustainable transformation forward.³⁸⁰ LBBW has already implementing a number of measures to integrate ESG factors. As previously outlined, LBBW has issued green bonds to finance environmentally friendly projects, thereby addressing environmental aspect.³⁸¹ Furthermore, the bank has sourced 100% of its electricity from green sources since 2009.³⁸² In the social domain, LBBW deploys social bonds. In addition to green bonds, the objective is to further establish sustainable bonds with these.³⁸³ Moreover, LBBW is firmly committed to the advancement of its employees and social engagement.³⁸⁴ These two topics have already been subjected to more detailed examination. LBBW aims to address the governance aspect through the implementation of a code of conduct, which was introduced as a code of conduct and encompasses both compliance and ethical business practices.³⁸⁵ Furthermore, the issue will be addressed through the high degree of transparency and the regular assessment by independent ESG rating agencies.³⁸⁶ LBBW has been assigned a favourable ESG rating by a number of independent rating agencies.³⁸⁷ The analysis has demonstrated that LBBW is progressing in accordance with its newly adopted strategic direction, namely ‘sustainable transformation’.

³⁷⁷ Mummenhoff & Hard, n.d.

³⁷⁸ Felscher, n.d.

³⁷⁹ Göck, n.d.

³⁸⁰ Hopf, n.d.

³⁸¹ Offenhuber, 2019

³⁸² Weidinger & Diesch, n.d.

³⁸³ Braun, 2021

³⁸⁴ Weidinger & Diesch, n.d.

³⁸⁵ LBBW Code of Conduct, 2024

³⁸⁶ Weidinger, n.d.

³⁸⁷ Diesch & Weidinger, 2019

4.3.4 Digitalization and Technological Transformation at LBBW

The theoretical section demonstrated that banks, and consequently LBBW, are obliged to adapt to a revised technological standard in order to retain their competitive advantage in the market. This part serves to illustrate the implementation of the strategic thrusts 'innovative solutions' and, to a certain extent, 'enhanced resilience'.³⁸⁸ It is anticipated that this implementation will prove resilient in the face of competitive pressure.

Digital banking

LBBW has been providing online banking services for several years. The online branch furnishes customers with account information via the Internet. This tool is an efficient use of customer time and a cost-effective solution for LBBW, as it allows the bank to redirect valuable employee resources.³⁸⁹ However, online banking is no longer a distinctive offering; it has become a standard feature. The provision of electronic banking is being extended to business customers. By providing its corporate customers with tools such as the "SFirm" finance software and the "HBCI" interface, LBBW is able to facilitate the efficient management of their financial affairs and the swift and seamless completion of payment transactions.³⁹⁰ The SFirm finance software represents a contemporary solution for electronic banking, offering straightforward digital banking services tailored to the specific requirements of individual customers.³⁹¹ The tools, along with others within the LBBW toolkit, facilitate the expedient fulfilment of customer requirements. Moreover, LBBW deploys chatbots in conjunction with digital banking solutions with the objective of enhancing the customer experience and streamlining service automation.³⁹² Debtvision, a subsidiary of LBBW, was established in 2018 with the objective of facilitating the expeditious and dependable processing of promissory note transactions via digital channels for its clientele.³⁹³ This initiative represents a component of the broader digital banking ecosystem. It is one of the key European marketplaces for corporate financing.³⁹⁴ The platform enables LBBW is able to attract a considerable level of interest from investors in promissory note loans.³⁹⁵ Debtvision's market presence enabled it to facilitate a record-breaking €2.7 billion promissory note transaction for Porsche in March 2023. Debtvision's endeavours

³⁸⁸ Cf. LBBW Satzung, 2023, p. 26

³⁸⁹ BW-Bank, n.d.

³⁹⁰ LBBW Electronic Banking, n.d.

³⁹¹ LBBW SFirm, n.d.

³⁹² Paxmann, n.d.

³⁹³ LBBW subsidiaries, n.d.

³⁹⁴ DEBTVISION GmbH, 2024

³⁹⁵ Braun & Danneboom, 2018

illustrated the growing familiarity with digital platforms among market participants and the benefits this brings in terms of streamlining and accelerating the process of capital raising for customers.³⁹⁶

Blockchain and cryptocurrency

LBBW was among the first to recognize the potential of blockchain technology to streamline the processing of complex contracts, thereby reducing the time and effort typically required.³⁹⁷ Consequently, LBBW commenced utilizing blockchain technology in conjunction with Daimler for promissory note transactions as early as 2017.³⁹⁸ In 2018, a 200 million euro promissory note transaction was conducted with Telefónica Deutschland.³⁹⁹ These two significant early blockchain transactions reinforced LBBW's conviction in the efficacy of the technology. This technology enables LBBW to conduct direct and secure, thereby offering advantages to its customers.⁴⁰⁰ Consequently, LBBW became a founding member of the Marco Polo network in November 2018. This is a substantial and expanding growing trade finance network that is based on blockchain technology. The network facilitates more effective and efficient transaction processing for banks and their customers, integrating data seamlessly while reducing costs, time, and risks.⁴⁰¹ In 2021, LBBW and its partners conducted trade transactions in a live environment for the first time.⁴⁰² Towards the end of July 2024, Berlin Hyp, a subsidiary of LBBW, announced the inaugural blockchain covered bond. This represents a further advance in the digitalization of the capital market, which is an important signal for LBBW's customers.⁴⁰³ In addition to blockchain technology, it is imperative for LBBW to consider cryptocurrencies. Consequently, in April 2024, the bank entered into a partnership with Bitpanda, a company specializing in cryptocurrencies.⁴⁰⁴ This partnership represents a pioneering initiative in the banking sector, positioning the institution as the inaugural traditional bank to offer cryptocurrency trading.⁴⁰⁵ In the context of the collaboration, Bitpanda has made available to LBBW an "Investing-as-a-Service" infrastructure. Such services may include the safekeeping and sourcing of cryptocurrencies, such as Bitcoin. The cryptocurrency custody platform will serve to

³⁹⁶ Herbert, 2023

³⁹⁷ LBBW Blockchain, 2024

³⁹⁸ Sackmann & Wagner, 2017

³⁹⁹ Rahn & Wagner, 2018

⁴⁰⁰ Sackmann & Wagner, 2017

⁴⁰¹ Wagner et al., 2018

⁴⁰² Adams & Wagner, 2021

⁴⁰³ Berlin Hyp AG, 2024

⁴⁰⁴ Meyer & Wolter, 2024

⁴⁰⁵ Rehne, 2024

complement the digital asset offering, with the intention of making it available to corporate customers from the second half of 2024 onwards. The collaboration will establish a technical and regulatory foundation at an early stage, thereby ensuring optimal support for the distinct crypto strategies of corporate clients. The partnership represents a significant milestone.⁴⁰⁶

AI applications

AI applications represent one of the most significant technological advancements of recent years.⁴⁰⁷ Furthermore, AI allows LBBW to capitalize on the potential for enhanced productivity within the company and for its customers.⁴⁰⁸ This is designated “blue.gpt” and is intended to provide assistance to LBBW personnel. The introduction of this technology will facilitate the personalization of products and services, as well as the manner in which the bank interacts with its customers. It is therefore evident that the tool will play a significant role in fostering deeper customer relationships. The solution is based on the technology underlying OpenAI's ChatGPT, which has been augmented with LBBW-specific security standards. It is anticipated that AI applications will be utilized by LBBW in the future for purposes of sales, risk management and internal knowledge management.⁴⁰⁹ In order to guarantee that employees utilize AI in an appropriate manner, a variety of learning opportunities have been made available, including e-learning, classroom training and regular office hours.⁴¹⁰

Cloud technologies

The utilization of cloud technologies, irrespective of the specific type employed, is predicated on the fundamental premise of customer trust. It is therefore imperative that the issues of data protection and data security are treated with the utmost seriousness. Consequently, LBBW has adopted a novel security paradigm that employs a sophisticated multi-cloud encryption technology from IBM.⁴¹¹ This approach enables LBBW to maintain comprehensive control over the data. Moreover, the environment can be utilized across multiple cloud computing platforms and data storage solutions.⁴¹²

⁴⁰⁶ Meyer & Wolter, 2024

⁴⁰⁷ Zimmermann, 2023

⁴⁰⁸ Zimmermann, 2023b

⁴⁰⁹ Schwerdtfeger, 2024

⁴¹⁰ Rudolph, 2024

⁴¹¹ Reder, 2022

⁴¹² Pehl, 2022

FinTechs

Despite LBBW's efforts to align with numerous trends, as illustrated in the aforementioned analysis, the potential for competition from FinTechs cannot be overlooked. In order to counteract the aforementioned competition, LBBW has established an "Innovation Lab". To the greatest extent possible, this entity operates in accordance with the relevant regulations and internal processes, emulating the characteristics of a FinTech. The Innovation Lab follows a three-part process to guarantee that LBBW and its customers can reap the benefits of digital advancement. The initial stage is the screening of emerging trends. This phase entails an examination of the potential impact of a digital mega- or macro-trend on LBBW. Subsequently, a feasibility analysis is conducted, after which specific use cases and prototypes are developed. Should these prove successful and demonstrate clear customer benefits, LBBW will consider expanding its portfolio of offers.⁴¹³ Furthermore, LBBW engages in collaborative endeavours with a diverse array of FinTech entities, eschewing a competitive stance and instead seeking to benefit from their expertise. To illustrate, in 2021 LBBW entered into a collaboration agreement with a Dutch financial technology company in the field of currency management.⁴¹⁴ Another illustration of a collaborative endeavour with a financial technology company is the partnership with "Swiat". This resulted in the development of a range of technological scenarios for LBBW for the settlement of digital securities. From the mentioned points, it can be inferred that LBBW perceives circumstances as an opportunity and endeavours to leverage them to its benefit.

Further technological transformations

LBBW can generate profit and benefits for its customers not only through the utilization of AI. The favourable growth prospects also make AI an investment theme for investors seeking to diversify their portfolios. Nevertheless, there are currently few, if any, listed companies whose activities are exclusively focused on AI. It seems probable that this will change in the coming years, thereby enabling investment in the shares of companies whose activities are focused on AI. For those investors who are unwilling or unable to assess the market opportunities of companies focusing on AI themselves or wish to diversify their investment risk, investment funds with a thematic focus on AI already represent a viable alternative.⁴¹⁵

⁴¹³ LBBW Innovation Lab, n.d.

⁴¹⁴ Van Daatselaar & Wagner, 2021

⁴¹⁵ Laschewski, 2024

Moreover, LBBW must devote greater attention to the matter of cybersecurity. Cybercrime can cost companies not only profit but also their reputation. The occurrence of cybercrime can result in financial losses for companies, in addition to reputational damage. It is susceptible to cyberattacks and must therefore implement measures to protect itself against them. Nevertheless, this aspect requires further elaboration.⁴¹⁶ However, this issue also affects LBBW's corporate customers. Consequently, a dedicated cybersecurity desk has been established for these customers. In the event of an attack, the aforementioned desk can be utilised by customers, with the objective of providing assistance. Furthermore, LBBW offers guidance to its corporate customers on the prevention of such attacks.⁴¹⁷

The analysis demonstrates that LBBW is at the vanguard of numerous digital transformation-related topics. Nevertheless, there are still numerous challenges that LBBW must address. The digital transformation will continue to be a significant factor for LBBW in the coming years, presenting both opportunities and risks. The initial section of the inaugural research question was addressed in this subchapter, wherein it was demonstrated which strategic avenues LBBW is pursuing and implementing. The following subchapter will address the second part of the first research question by examining the success factors associated with LBBW.

4.4 Success Factors of LBBW

In the preceding sub-chapter, an in-depth analysis of the LBBW was presented. This analysis was able to demonstrate which factors facilitate the LBBW's success, thereby establishing it as a model for other banking institutions. This sub-chapter presents a summary of the success factors, which will be compared in the subsequent sections of the thesis. This list also responds to the second part of the initial research question. The mentioned success factors are referenced in each case, with a detailed explanation of how they contribute to the success of LBBW.

- Historical development: LBBW has a long history.⁴¹⁸ This historical development has afforded the company a number of competitive advantages. Over time, the company has established a broad customer base in the Stuttgart region and worldwide. The bank's extensive network of loyal medium-sized company customers provides a robust foundation that enables LBBW to effectively navigate crises.⁴¹⁹ Moreover, through a series of mergers with other financial institutions, the bank has accumulated a substantial reservoir of experience

⁴¹⁶ LBBW Cybersecurity, 2023

⁴¹⁷ LBBW Cybersecurity, n.d.

⁴¹⁸ LBBW Über uns, n.d.

⁴¹⁹ LBBW Clients, n.d.

over the years. This enables the bank to provide customers with support and advice on complex financial matters.⁴²⁰ Furthermore, LBBW's long history evinces its resilience, as it has endured and surmounted a multitude of economic cycles and crises. It evinces an aptitude for adapting to novel regulatory stipulations and market circumstances.

- Ownership structure: LBBW's ownership structure is a significant contributing factor to its success. This factor ensures a high degree of stability and trustworthiness, as evidenced by the stabilizing influence exerted by LBBW in crises, such as the 2008 financial crisis, and thereby protecting its customers.⁴²¹ This enables LBBW to maintain a robust capital base and adopt a long-term perspective in major investments, in contrast to private investors, who tend to adopt a short-term perspective. Furthermore, the public ownership structure encourages LBBW's social commitment and sustainability initiatives, as the state has a vested interest in these matters. Consequently, investment in these areas serves to reinforce LBBW's public image, thereby facilitating customer retention and the acquisition of new customers.⁴²²
- Foreign branches: In contrast to the typical Landesbank, LBBW has a considerable number of foreign branches in addition to its locations in Germany. These are an important success factor.⁴²³ These foreign branches enable LBBW to access new markets, significantly increase its market potential and enhance its competitive position. Furthermore, they contribute to the diversification of LBBW's business areas. Such diversification serves to render LBBW more resilient to economic fluctuations and crises in specific regions. Furthermore, LBBW is able to offer comprehensive assistance to its corporate clientele through its presence in other countries. Such support serves to reinforce customer loyalty and promote the companies in question.⁴²⁴
- Strategic directions: The preceding sections examined LBBW's historical and contemporary strategic orientations. These factors contribute to the bank's visible success.⁴²⁵ Such initiatives demonstrate to employees the values espoused by the bank and delineate explicit objectives. Furthermore, they have a positive external impact. These measures serve to reinforce LBBW's digitalization and innovation processes, while simultaneously safeguarding customer data against the threat of cyberattacks.⁴²⁶ The bank has established a presence in

⁴²⁰ LBBW Über uns, n.d.

⁴²¹ Manager, 2009

⁴²² Weidinger, n.d.

⁴²³ LBBW Standorte, n.d.

⁴²⁴ LBBW International Business, n.d.

⁴²⁵ Kahl, 2024a

⁴²⁶ LBBW Cybersecurity, 2023

the domain of sustainability, including the provision of counsel to customers on matters of green finance, and has disseminated this information to the general public.⁴²⁷ Furthermore, the strategic directions of sustainability and digital transformation are combined in the AI area with the objective of increasing the sustainability factor.⁴²⁸ It is similarly engaged in social and sporting projects in Baden-Württemberg, thereby enhancing its public image.⁴²⁹ LBBW provides a plethora of support services and remunerative benefits with the objective of motivating its employees and attracting new talent.⁴³⁰ By pursuing all of these strategic priorities and maintaining a commitment to the past, LBBW has demonstrated an ability to adapt to challenging circumstances and establish a trajectory for future success.⁴³¹

- ESG factors: In the contemporary era, ESG factors represent a significant determinant of organizational success. It is of the utmost importance to integrate and establish this within your company. LBBW has achieved this and incorporated it into its image through its strategic approach and other aspects, thereby demonstrating its commitment to these values. The environmental aspect is addressed through the provision of green finance advice and support for sustainable projects.⁴³² The social factor is addressed through the advancement of employees and the involvement in a multitude of projects.⁴³³ Moreover, LBBW assists its corporate clientele in integrating ESG considerations into their organizational structures.⁴³⁴ In order to address the governance aspect, LBBW adheres to the principles of transparent and responsible corporate governance.⁴³⁵

In the context of prevailing uncertainty, LBBW has nevertheless achieved notable outcomes, as evidenced by its profit before taxes, among other indicators. Furthermore, the provided list responded to the second part of the initial research question and presented the success factors.

⁴²⁷ LBBW Green Finance, n.d.

⁴²⁸ Kremer et al., 2024

⁴²⁹ Ingelfinger, n.d.

⁴³⁰ Harke, n.d.

⁴³¹ LBBW, n.d.

⁴³² Weidinger & Diesch, n.d.

⁴³³ Beinroth et al., n.d.

⁴³⁴ Kneer, n.d.

⁴³⁵ Hisolutions, 2016

5 Benchmark Comparison of the Landesbank Baden-Württemberg with German Banks

In light of the fact that only LBBW has thus far been the subject of consideration, this chapter presents a benchmark comparison with other banks in Germany. This is intended to demonstrate the distinctive features of the LBBW, as well as the areas in which it may be perceived as having weaknesses. In order to achieve this, five banks are compared with LBBW. These are presented in the following section. For the benchmark comparison, three overarching categories are considered. In the final section, a SWOT analysis is employed in order to demonstrate how LBBW compares to the other banks and what it can learn from them. Based on this, the second research question of the thesis, namely how LBBW compares to other German banks, can be answered.

5.1 Comparison of LBBW with Leading Systemically Important Banks in Germany

The comparison was conducted by reviewing five banks. The following banks were included in the comparison: Deutsche Bank, Commerzbank, DZBank, BayernLB, Helaba. Prior to an examination of the banks themselves, it is first necessary to present the rationale behind a comparison with LBBW.

5.1.1 Selection Criteria and Relevance

The five banks were selected on the basis of specific and pre-established criteria.

On the one hand, Deutsche Bank, Commerzbank and DZ Bank cover all three pillars of the German banking sector.⁴³⁶ Furthermore, these three banks play a significant role in the German banking system and at international level. The two Landesbanken, BayernLB and Helaba, are also deemed to be systemically relevant and are of particular significance for their respective regions.⁴³⁷ In this context, LBBW can be compared to other systemically relevant and nation players. Furthermore, BayernLB and Helaba, as Landesbanken, can be used as a benchmark regarding their ownership structure, which is similar to that of LBBW.⁴³⁸ The remaining three banks, have adopted a divergent business model, which has resulted in a focus on other areas of responsibility. Nevertheless, a comparison with LBBW is a valuable means of highlighting the contrasts between the strategic approaches and their realization by public-sector and private-

⁴³⁶ Nagel, 2023

⁴³⁷ DSGVO, n.d.

⁴³⁸ BayernLB Owner, n.d.; Helaba, n.d.

sector banks. Moreover, all six banks are subject to the same regulatory framework. This group of financial institutions is subject to the regulatory supervisory regime of the ECB and the German Federal Financial Supervisory Authority. Furthermore, the three Landesbanks are subject to additional regulations due to their public-law ownership structure.⁴³⁹ The comparison demonstrates how the different regulatory requirements shape the banks' business strategies. The final point to be addressed is the extensive range of banking services provided by these banks. In terms of profitability and the focus of its products, LBBW is a good compare with the other banks.

Based on these considerations, it can be stated that these five banks are suited to serve as an orientation for positioning LBBW in the German market.

In light of the above, it is key to inquire why UniCredit is not included in this comparison with LBBW, given that it can also be classified as a systemically relevant institution. However, UniCredit is not included in this analysis for several reasons. Firstly, UniCredit is primarily represented in Germany by HypoVereinsbank, and therefore, it is sufficient to consider HypoVereinsbank at this juncture. Nevertheless, the strategy of UniCredit is primarily determined by its parent company, UniCredit.⁴⁴⁰ For the purposes of the comparison made here, it seems recommended to compare LBBW with German banks that operate as independent national banks. This also allows for a clearer distinction between national and international banks.

In Chapter 7, a detailed explanation is provided of why a comparison of LBBW with UniCredit Italia still is feasible.

5.1.2 Deutsche Bank: A Global Player in Competition

Deutsche Bank was established in Berlin in 1870 and, similarly to LBBW, can trace its history as a banking institution back many decades. It is categorized as a private bank.⁴⁴¹ The objective of the bank is to ensure the long-term success and financial security of its customers. Therefore, its primary goal is to be the 'global house bank' of choice for all financial matters. Consequently, the bank's primary objective is to establish itself as the 'global house bank' of choice for all financial matters.⁴⁴² In terms of the bank's operational structure, this entails a workforce comprising 90,130 employees from 153 different nationalities, with a presence in 57 countries worldwide. Since 2019, the bank has undergone a significant transformation in its business model, aligning it with the principles of sustainable growth. The business model is divided into

⁴³⁹ BaFin, 2023

⁴⁴⁰ HypoVereinsbank, n.d.-b

⁴⁴¹ Deutsche Bank History, n.d.

⁴⁴² Deutsche Bank, n.d.

four client-centric business units, namely the corporate bank, the investment bank, the private client bank and asset management.⁴⁴³ The corporate bank provides financial services to global corporations and medium-sized companies, facilitating their access to capital and support for global transactions on a global scale. In addition, the bank provides payment transaction and credit solutions for smaller companies and self-employed professionals within Germany.⁴⁴⁴ The investment bank provides expertise to institutional and corporate clients expertise in the areas of risk management in interest rate and currency trading, as well as in the provision of liquidity through financing solutions, advisory and underwriting services.⁴⁴⁵ The private client bank serves as the primary point of contact for all financing and investment matters pertaining to private clients in Germany.⁴⁴⁶ The asset management division offers a comprehensive range of investment products.⁴⁴⁷

5.1.3 Commerzbank: The Transformation from a Traditional to a Digital Bank

Commerzbank, which was established in Hamburg in 1870, is one of the German public-law banks with almost 11 million private and corporate customers in Germany.⁴⁴⁸ The bank's strategy is to provide customers with innovative products and solutions, to further enhance the customer experience across all channels and thereby to sustainably strengthen Commerzbank's earnings position. In order to achieve this objective, Commerzbank has adopted a three-pillar strategy that will be in place until 2027. This strategy is based on three key principles: growth, excellence and responsibility.⁴⁴⁹ The bank employs 42,107 people and has a presence on all continents with 14 operational foreign branches, 32 international representative offices and five subsidiaries. Its corporate banking business is represented in over 40 countries across the globe.⁴⁵⁰ Similarly, Commerzbank has identified four core business areas, comparable to those of Deutsche Bank. The four business areas in question are Private and Corporate Clients, Corporate Clients, Investment Banking and Capital Markets, and Asset Management.⁴⁵¹ The bank offers a range of banking services to private clients and smaller companies through a network of approximately 400 physical branches and digital media platforms.⁴⁵² As a principal partner

⁴⁴³ Deutsche Bank Strategy, n.d.

⁴⁴⁴ Deutsche Bank Unternehmensbank, n.d.

⁴⁴⁵ Deutsche Bank Investment Bank, n.d.

⁴⁴⁶ Deutsche Bank Privatkundenbank, n.d.

⁴⁴⁷ Deutsche Bank DWS, n.d.

⁴⁴⁸ Commerzbank, n.d.

⁴⁴⁹ Commerzbank Strategy, n.d.

⁴⁵⁰ Commerzbank, 2024

⁴⁵¹ Commerzbank Strategy, n.d.

⁴⁵² Commerzbank Unternehmerkunden, n.d.

for German medium-sized companies, it provides services to clients in this segment, as well as to larger companies. The bank provides a range of financial services, including financing solutions, risk management, international trade financing and individual advice.⁴⁵³ In the fields of investment banking and asset management, the bank offers advice to both private and corporate clients on a range of financial instruments, including capital markets, bonds and equities, tailored to the specific needs of each client. Furthermore, the bank provides assistance to companies in the areas of capital raising, acquisitions and mergers.⁴⁵⁴

5.1.4 DZ Bank: The Strength of the Cooperative Network

In the 19th century, DZ Bank was established as the inaugural cooperative bank in Germany. The most significant factors for them are sustainability, innovation, open-mindedness, performance and partnership. The principles highlighted earlier are intended to facilitate a partnership-oriented approach with customers, thereby generating societal value.⁴⁵⁵ The bank employs approximately 33,000 individuals and has a presence in over 70 locations across the globe.⁴⁵⁶ The bank's clients include of corporate, business, and private customers, with services provided across a range of business sectors. For corporate customers, the bank provides a range of financing options, offers support in risk management through interest and currency management, and facilitates the sale and purchase of companies, as well as succession arrangements through mergers and acquisitions.⁴⁵⁷ The institution's product range for its clients includes services relating to the primary and secondary markets, custody business, transaction banking, and bespoke solutions for insurance companies and banking institutions seeking to comply with regulatory requirements.⁴⁵⁸ Those seeking advice and products from the private client division will receive a bespoke service and a comprehensive range of options.⁴⁵⁹

5.1.5 BayernLB: Regional Focus with Global Challenges

The bank was established in 1972 and is headquartered in Munich. Its owners are the Free State of Bavaria (75%) and the Association of Bavarian Savings Banks (25%).⁴⁶⁰ As a specialized financial institution, it plays a significant role in providing investment finance for the German

⁴⁵³ Commerzbank Firmenkunden, n.d.

⁴⁵⁴ Commerzbank Wealth Management, n.d.

⁴⁵⁵ DZ Bank, n.d.

⁴⁵⁶ DZ Group, 2024

⁴⁵⁷ DZ Bank Firmenkunden, n.d.

⁴⁵⁸ DZ Bank Institutionelle Kunden, n.d.

⁴⁵⁹ DZ Bank Privatkunden, n.d.

⁴⁶⁰ BayernLB, 2024

and Bavarian economies.⁴⁶¹ BayernLB has approximately 7,700 employees on a global scale.⁴⁶² The bank's motto is "We finance progress", and it represents its customers as a stable and financially robust institution with global operations. It aims to provide counsel to its customers in all circumstances on an equal footing. The bank's client consists comprised primarily of companies, financial institutions, the public sector, and the Bavarian savings banks.⁴⁶³ The bank offers advice to companies on forward-thinking matters, including sustainability, technology and mobility.⁴⁶⁴ In its capacity as the central bank for the savings banks in Bavaria, it serves as a partner and provides stability.⁴⁶⁵ It offers the public sector a range of financial solutions that provide flexibility and autonomy.⁴⁶⁶

5.1.6 Helaba: Sustainability and Digital Transformation as Key Factors

Helaba represents the Landesbank Hessen-Thüringen. The institution was established in 1953 and has its headquarter in Frankfurt am Main. The institution employs a workforce of over 6,000 individuals and is present in 18 locations within Germany and abroad.⁴⁶⁷ The owners of Helaba include the Savings Bank and Giro Association Hesse-Thuringia (50%), the State of Hesse (30.1%), the Free State of Thuringia (3.5%), the Rheinischer Sparkassen- und Giroverband (4.1%), the Sparkassenverband Westfalen-Lippe (4.15) and FIDES Beta and Alpha GmbH (each 4.1%).⁴⁶⁸ The bank's strategic objective is to enhance the financial situation of its clients by offering banking services that are underpinned by a set of clearly defined values. The bank's core values are to act as a reliable partner, offering needs-based and innovative solutions; to contribute to the long-term strength of Germany as a business location in collaboration with savings banks; to generate profitable growth for the company; and to foster a motivating and rewarding work environment.⁴⁶⁹ The bank acts as a commercial bank for a diverse range of clients, including companies, financial institutions, the public sector, commercial real estate entities, and institutional clients. It offers them a comprehensive range of financial services and provides them with support in the pursuit of their activities. In its capacity as a central bank for the savings banks, it provides them with a range of financial products and services. It is the

⁴⁶¹ BayernLB, n.d.

⁴⁶² Karioth, 2024

⁴⁶³ BayernLB, 2024

⁴⁶⁴ BayernLB, n.d.

⁴⁶⁵ BayernLB Sparkassen, n.d.

⁴⁶⁶ BayernLB Strategy, n.d.

⁴⁶⁷ Helaba Profil, n.d.

⁴⁶⁸ Helaba, n.d.

⁴⁶⁹ Helaba Purpose, n.d.

central bank for the savings banks in Hesse, Thuringia, North Rhine-Westphalia and Brandenburg, thereby representing a partner for 40% of German savings banks. Additionally, it serves as a development bank for Hesse. The development programme is designed to assist a diverse range of individuals and entities, including private individuals, tradespeople, freelancers, as well as municipalities and districts.⁴⁷⁰

5.2 Comparison of the Economic Key Figures: LBBW’s Position in the Market

In order to demonstrate a purely numerical comparison, Table 2 presents the number of employees, return on equity, core capital ratio, profit before taxes, cost-income ratio and liquidity coverage ratio. These figures illustrate the comparative performance of the banks in question relative to their competitors. The number of employees provides insight into the size of the respective bank. The data presented in this table has been extracted from company and business reports published in 2023.

Bank	Employees	Return on Equity (ROE)	Core Capital Ratio (CET1)	Profit before taxes (Mio €)	Cost-Income Ratio	Liquidity Coverage Ratio (LCR)
LBBW	10,434	9.1%	14.6%	1,374	59.6%	150.5%
Deutsche Bank	90,134	7.4%	13.7%	5,700	75.1%	140%
Commerzbank	38,565	7.7%	14.7%	2,200	61%	145.4%
DZ Bank	33,622	7.4%	15.5%	3,189	56.4%	145.8%
BayernLB	8,241	12.7%	19.3%	1,441	46.8%	241.4%
Helaba	6,483	7.2%	14.7%	722	59.4%	168.3%

Table 2: Comparison of the economic key figures - German banks⁴⁷¹

It is evident that Deutsche Bank, Commerzbank and DZ Bank have a considerably larger workforce than LBBW and the other two Landesbanks. Accordingly, this section will first compare

⁴⁷⁰ Helaba Profil, n.d.

⁴⁷¹ Extracted from: LBBW Annual Report 2023, 2024; Deutsche Bank Annual Report 2023, 2024; Commerzbank Annual Report 2023, 2024; DZ Bank Annual Report 2023, 2024; BayernLB Annual Report 2023, 2024; Helaba Annual Report 2023, 2024

the three Landesbanks and then LBBW with Deutsche Bank, Commerzbank and DZ Bank. The analysis of ROE reveals that BayernLB has the highest rate at 12.7%.⁴⁷² This indicates that the most efficient use of equity is being made in order to generate profit. However, LBBW and Helaba also demonstrate stability. An analysis of the CET1 ratio reveals that the three banks are on a par with a stable value.⁴⁷³ Therefore, it can be concluded that all three banks are resilient to financial stress situations. With more than 1,300 million euros in pre-tax profits, LBBW is well positioned.⁴⁷⁴ This illustrates the robust operational performance and suggest that a lucrative business model and strategy exists. A comparison of the cost-income and liquidity coverage ratios reveals that the three banks are at an equivalent level in both cases. As illustrated in Table 2, the Landesbanken are all showing similarly favourable and stable performance. This can be attributed to a number of factors. All three banks are Landesbanken have a comparable business model with shareholders. Moreover, as systemically important banks, they are subject to the same regulatory requirements set forth by ECB, which primarily affect CET1 and LCR.⁴⁷⁵ To facilitate a comparison between LBBW and Deutsche Bank, Commerzbank and DZ Bank, the absolute figures presented in Table 3 are shown in conjunction with the respective number of employees.

Bank	Employees	Profit before Taxes per Employee	ROE per Employee	CET1 per Employee	Cost-Income Ratio per Employee	Liquidity Coverage Ratio per Employee
LBBW	10,434	131.69€	0.000872	0.00140	0.00571	0.01442
Deutsche Bank	90,134	63.24€	0.000082	0.00015	0.00083	0.00155
Commerzbank	38,565	57.05€	0.000200	0.00038	0.00158	0.00377
DZ Bank	33,622	94.85€	0.000220	0.00046	0.00167	0.00434

Table 3: Comparison LBBW⁴⁷⁶

⁴⁷² BayernLB Annual Report 2023, 2024

⁴⁷³ LBBW Annual Report 2023, 2024; BayernLB Annual Report 2023, 2024; Helaba Annual Report 2023, 2024

⁴⁷⁴ LBBW, n.d.

⁴⁷⁵ LBBW Annual Report 2023, 2024; BayernLB Annual Report 2023, 2024; Helaba Annual Report 2023, 2024

⁴⁷⁶ Extracted from: LBBW Annual Report 2023, 2024; Deutsche Bank Annual Report 2023, 2024; Commerzbank Annual Report 2023, 2024; DZ Bank Annual Report 2023, 2024

A review of the data reveals that LBBW exhibits the best performance relatively. It exhibits the most favourable ratios in terms of for profit before tax, ROE, CET1, cost income ratio and liquidity coverage ratio.⁴⁷⁷

Based on the two analyses, which are supported by the accompanying table, it can be stated that LBBW does not necessarily perform better than other Landesbanks. Nevertheless, it outperforms other traditional banking institutions that do not fall within the Landesbank category, including Deutsche Bank, Commerzbank and DZ Bank.

5.3 Sustainability and ESG Comparison: Leading Institution’s Role in Sustainable Banking

Following an objective examination of the data, this section will address the topics of sustainability and ESG. In order to examine this topic, which is partly subjective in nature, in an objective manner, four different categories are considered for comparison. The following categories are considered: ESG ratings and ESG integration, environment, social and governance. In each case, the other five banks are considered. LBBW has been excluded from the present analysis, as it has already been subjected to a comprehensive examination in Chapter 4. In order to facilitate a structured analysis, the ESG rating and ESG integration for all banks will first be considered. Subsequently, an analysis will be conducted of the five banks with regard to the remaining three categories.

ESG Ratings and ESG Integration

Firstly, the ESG rating of each bank and its integration into its business model are considered in general to provide a general insight. The ESG ratings of the banks are presented in Table 4.

Bank	ESG-Rating
LBBW	A
Deutsche Bank	BBB
Commerzbank	BBB
DZ Bank	A
BayernLB	A
Helaba	A

Table 4: ESG-Rating German banks⁴⁷⁸

⁴⁷⁷ LBBW Annual Report 2023, 2024

⁴⁷⁸ Extracted from: MSCI, n.d.

LBBW, DZ Bank, BayernLB and Helaba have been assigned an A rating, while Deutsche Bank and Commerzbank have been assigned a BBB rating. Therefore, all six banks are situated within the average range.⁴⁷⁹

The approach LBBW takes to address the integration of ESG was discussed in Chapter 4.3. Similarly, Deutsche Bank has incorporated its ESG strategy into its business strategy, with a particular emphasis on sustainable financial products and responsible corporate governance. The bank is making progress in achieving its ESG targets, but is currently facing challenges in implementing them in global business areas.⁴⁸⁰ The ESG strategy at Commerzbank is primarily concerned with sustainable financing, social responsibility and transparent governance.⁴⁸¹ In contrast, DZ Bank places principal emphasis on rigorous sustainability objectives and the incorporation of ESG considerations across all business domains.⁴⁸² Similarly to LBBW, BayernLB and Helaba have adopted an similar approach to ESG factors.⁴⁸³

Based on this analysis, it can be posited that all banks adhere to a comparable approach, whereby ESG factors and, consequently, the sustainability aspect represent a pivotal component for all six banks.

5.3.1 Deutsche Bank: Sustainability Strategies in an International Context

In the **environmental** factor, Deutsche Bank plans to achieve carbon neutrality by 2025. This encompasses the reduction of direct and indirect emissions, in addition to the transition to renewable energy sources for its buildings.⁴⁸⁴ Additionally, the objective is to attain cumulative target of €500 billion in sustainable financing and ESG investments by 2025.⁴⁸⁵ The bank's strategy relies on sustainable financing, such as green bonds or green loans, with the objective of making a responsible contribution to the development of a more sustainable economy. This approach is intended to send a signal to the bank's employees, customers and investors, while also promoting competitiveness through long-term growth.⁴⁸⁶

Regarding the **social** aspect, the Deutsche Bank has initiated a corporate social responsibility project encompassing the domains of education, entrepreneurship, and people and communities. The objective of these initiatives is to empower employees, foster deep customer loyalty,

⁴⁷⁹ MSCI Rating, n.d.

⁴⁸⁰ Deutsche Bank ESG, n.d.

⁴⁸¹ Commerzbank ESG, 2023

⁴⁸² DZ Bank Sustainability, n.d.

⁴⁸³ BayernLB Sustainability, n.d.; Helaba Sustainability, n.d.

⁴⁸⁴ Frien & Karkowski, 2024

⁴⁸⁵ Deutsche Bank Sustainable Finance, n.d.

⁴⁸⁶ Deutsche Bank Green Finance, 2024

and provide support to charitable organizations.⁴⁸⁷ The environmental projects contribute to the protection and regeneration of the nature environment. Educational initiatives are designed to assist young people and young adults, while social enterprises are supported through funding programmes.⁴⁸⁸

In the domain of **governance**, Deutsche Bank is currently engaged in a process of analysis and evaluation of its own business activities in order to identify negative impacts in its own operational processes. This constitutes an essential component of the risk management process. In order to guarantee the efficacy of the audit, a framework for dealing with environmental and social risks and for sustainable financing has been established.⁴⁸⁹

5.3.2 Commerzbank: Path to Ecological Responsibility

Since 2020, Commerzbank has integrated sustainability into its corporate strategy, recognizing the importance of aligning its activities with ESG principles and implementing appropriate measures. Its approach is based on international standards. In general, the objective is to achieve net-zero carbon emissions by 2050 and a climate-neutral supplier portfolio by 2040, with the aim of benefiting for the **environment**. Moreover, the company plans to expand its product range with a greater emphasis on climate protection. To address the **social** factor, a comprehensive programme for personnel development is to be introduced, an established diversity and health management system is to be created and social support is to be strengthened. In terms of **governance**, an ESG framework for transparency is being developed, along with a comprehensive compliance programme and risk management system, and detailed sustainability reporting.⁴⁹⁰ Commerzbank is currently one of the largest financiers of renewable energies in Europe and has been offering integrated sustainability in product development for corporate customers since 2019. The institution has already implemented tools and frameworks for sustainability management in its customer business. Furthermore, operational guidelines for corporate sustainability management have been established, including guidelines pertaining to environmental matters and sustainable procurement.⁴⁹¹

⁴⁸⁷ Deutsche Bank ESG, n.d.

⁴⁸⁸ Deutsche Bank Social, n.d.

⁴⁸⁹ Deutsche Bank ESG, n.d.

⁴⁹⁰ Commerzbank ESG, 2023

⁴⁹¹ Cf. Bettina Storck, 2023, p. 7

5.3.3 DZ Bank: Cooperative Principles and Sustainability

In the forthcoming year, DZ Bank will be broadening the scope of its ESG targets. The expanded ESG targets encompass both group-wide and company-specific objectives for the forthcoming years. Regarding **environment** concerns, the institution has established particular climate-related objectives and pathways for decarbonization within a number of key sectors, including energy, automotive, steel, cement and aviation. The objective of the DZ Bank is to achieve the near-elimination of CO₂ intensity in its lending business and in its own investments in the above-mentioned sectors by 2050 at the latest.⁴⁹² The bank offers its customers assistance in their transition to a low CO₂ economy by providing support for transformations and financing measures for the economy on the road to net zero emissions.⁴⁹³ Additionally, the bank offers sustainable financial products to its private customers.⁴⁹⁴ In the domain of **social** aspects, it is important to DZ Bank to ensure a high level of employee satisfaction. The target is for this figure to be over 70%. The current figure stands at 80%, thus meeting the target.⁴⁹⁵ Furthermore, the bank assumes a social responsibility through donations and the establishment of foundations.⁴⁹⁶ In terms of **governance**, a strategic approach is currently being developed with the objective of providing optimal support for this business activity. Furthermore, DZ Bank has set a goal of achieving a 30% female representation on its boards by 2030. At the present time, the figure stands at 23%.⁴⁹⁷

5.3.4 BayernLB: The Role of Regional Banks in Sustainability

The BayernLB has established comprehensive ESG standards that apply to all of its business activities.⁴⁹⁸ The implementation of these standards has positioned BayernLB as one of the most sustainable banks globally, as evidenced by the ratings.⁴⁹⁹ The primary focus of BayernLB with respect to ESG is the provision of advisory services to its clientele. In this way, they facilitate the innovation and transformation process and thereby advance the topic of sustainability. With regard to the **environmental** aspect, the BayernLB offers its customers a range of green products. In the **social** domain, the BayernLB assumes corporate responsibility and engages in social

⁴⁹² Cf. DZ Bank Nachhaltigkeitsbericht, 2024, pp. 11 ff.

⁴⁹³ Gaisdörfer, 2023

⁴⁹⁴ Cf. DZ Privatbank, 2024, pp. 3 ff.

⁴⁹⁵ Cf. DZ Bank Nachhaltigkeitsbericht, 2024, p. 14

⁴⁹⁶ DZ Bank Social, n.d.

⁴⁹⁷ Gaisdörfer, 2023

⁴⁹⁸ BayernLB Sustainability, n.d.

⁴⁹⁹ BayernLB ESG Rating, n.d.

activities. In contrast to the approach taken by some other financial institutions, the bank's donations are concentrated on a limited number of selected projects, including "Sternstunden e.V.". Furthermore, the bank offers its employees the opportunity to engage in corporate volunteering, whereby they are permitted to relinquish their professional obligations for a period of up to two working days per annum in order to participate in a social project.⁵⁰⁰ At BayernLB, the concept of corporate governance encompasses the notion of **governance** as a core factor. The objective is to develop responsible and transparent corporate governance and control mechanisms with a view to achieving a sustainable increase in the value of the company. Furthermore, a Sustainability Board has been established to provide strategic support for the sustainable orientation of BayernLB with regard to ESG issues across all business areas.⁵⁰¹

5.3.5 Helaba: Integrating ESG Strategies into Regional Banks

The final bank to be evaluated is Helaba. The bank has demonstrated its dedication to sustainability through the establishment of five ESG objectives. The initial two objectives relate to the **environment**. Helaba aims to reduce its own emissions as much as possible and, secondly, to contribute to the achievement of the Paris Agreement on climate change.⁵⁰² At the present time, the proportion of sustainable financing in the total volume of business is 51%. The bank's own real estate sources 100% of its electricity from renewable energy sources. By 2025, the bank's objective is to reduce its gross CO₂ emissions from operations by 30%. Furthermore, the objective is to achieve a 50% share of sustainable business volume in the portfolio by 2025.⁵⁰³ Helaba has identified green bonds as a key component of its sustainable finance strategy. In this way, it aims to provide its customers with innovative and sustainable solutions.⁵⁰⁴ Two targets have also been set for the **social** aspects. The promotion of diversity and investment in employees and society are key aspects of Helaba's social strategy. Employees contributed 609 social volunteering days, 4.6 million euros were invested in employee training, and 1.2 million euros were donated and spent on sponsoring. By 2025, the proportion of female managers should be at least 30%. Furthermore, 2.0 training/further education days per employee per year should be utilised, and in excess of 1,000 social volunteering days per year should be provided.⁵⁰⁵ In regard to the **governance** component, the objective is to attain a stable and favourable position in

⁵⁰⁰ BayernLB Corporate Responsibility, n.d.

⁵⁰¹ BayernLB Corporate Governance, 2019

⁵⁰² Cf. Helaba Group ESG, n.d., p. 1 f.

⁵⁰³ Helaba Sustainability, n.d.

⁵⁰⁴ Helaba Green Finance, n.d.

⁵⁰⁵ Helaba Sustainability, n.d.

the ESG rating.⁵⁰⁶ In regard to the governance component, the objective is to attain a stable and favourable position in the ESG rating. In order to achieve this objective, a number of sustainability-related topics have been integrated into the core business operations and supported by a comprehensive set of guidelines.⁵⁰⁷ Helaba is currently positioned within the top 10% of organisations with regard to their ESG ratings.⁵⁰⁸

The analysis of the five banks and LBBW reveals that, while the banks pursue similar goals, they nevertheless set their priorities in different ways. It is evident that the implementation of these measures varies from one bank to another, as does the extent to which they have been implemented. Nevertheless, it is evident that the subject of sustainability and ESG is of significant importance to all banking institutions, and will continue to be so in the future. This is evidenced by an analysis of the respective strategies and medium-term planning of the banks.

5.4 Digital Transformation in the German Banking Sector: Leading Institutions in the Digital Shift

The third comparative level is the digital transformation. In addition to sustainability, this is an essential topic for banks in the present and future in order to meet customer needs and remain competitive. Accordingly, this sub-chapter examines the strategies that the five comparison banks intend to pursue with regard to digital transformation, both in the present and in the future. It should be noted that not all topics of digital transformation will be considered, rather only those that can be compared with LBBW will be addressed. Accordingly, the following topics will be considered: artificial intelligence, blockchain technology, cryptocurrencies, and cloud computing.

5.4.1 Deutsche Bank: Progress in Digital Infrastructure

Deutsche Bank is currently undergoing a significant technological transformation. The bank's current areas of focus are the cloud, AI, and talent promotion.⁵⁰⁹ The majority of the bank's applications are to be stored in a public cloud to reduce maintenance and costs and increase developer productivity.⁵¹⁰ AI has an impact on the customer base of Deutsche Bank. In order to leverage the effect of AI and provide recommendations to its customers, Deutsche Bank also

⁵⁰⁶ Cf. Helaba Group ESG, n.d., p. 1 f.

⁵⁰⁷ Helaba Nachhaltigkeit, n.d.

⁵⁰⁸ Helaba Sustainability, n.d.

⁵⁰⁹ Deutsche Bank Technology, n.d.

⁵¹⁰ Deutsche Bank Cloud, n.d.

relies on external support.⁵¹¹ In December 2022, Deutsche Bank entered into a collaboration agreement with the technology manufacturer “Nvidia”. This should increase the greater utilization of AI and machine learning in the domains of risk management and the lending business. The objective of Deutsche Bank is to provide an enhanced level of customer service and to obtain data in a more expedient manner.⁵¹² In 2023, the bank is investing in the start-up “Kodex AI”. This AI is designed to comprehend technical language and analyse documents. In the domain of the blockchain technology, Deutsche Bank is engaged in collaborative endeavours with industry partners to develop a blockchain platform that can be utilized.⁵¹³ Furthermore, Deutsche Bank is dedicated to fostering the digital competencies of its workforce to ensure alignment with evolving trends.⁵¹⁴

5.4.2 Commerzbank: Digitalisation as Core Strategy

In its pursuit of digital transformation, Commerzbank has placed its trust in cloud technology. In 2021, it was one of the founding members of the European Cloud User Coalition. The objective of this coalition is to collectively establish security standards and best practices for the utilization of cloud technology by European financial institutions. Ultimately, this will enable financial institutions to exercise greater autonomy in their technology choices and enhance their competitive advantage.⁵¹⁵ As early as 2021, Commerzbank augmented its multi-cloud strategy with the incorporation Google Cloud and Azure. By 2024, Commerzbank intends to operate 85% of its decentralized applications in the cloud.⁵¹⁶ Moreover, Commerzbank has pioneered the integration of generative AI and avatar technology in a customer-facing application, a first in the banking sector. This project represents a new phase in the IT strategy with the objective of providing customers with the optimal digital experience. The objective is to facilitate the management of financial affairs in an accessible and reassuring manner, while also introducing customers to an array of innovative financial products.⁵¹⁷ In consideration of the potential applications of blockchain and cryptocurrency in mind, Commerzbank became one of the first major German banks to obtain a crypto custody licence at the end of 2023. This enhances its competitive position.⁵¹⁸

⁵¹¹ Deutsche Bank AI, n.d.

⁵¹² Sinß, n.d.

⁵¹³ Deutsche Bank, 2024

⁵¹⁴ Deutsche Bank Technology, n.d.

⁵¹⁵ Thomas, 2021

⁵¹⁶ IT Finanzmagazin, 2021

⁵¹⁷ Schmitt & Zimmer, 2023

⁵¹⁸ Mußler, 2023b

5.4.3 DZ Bank: The Role of Digitalisation in the Cooperative Model

DZ Bank has also adopted cloud technology. The objective is to increase the proportion of cloud-based applications in the company's IT landscape from approximately 25% to around 60%. For instance, since 2022, the calculation of trading risks has been conducted in a cloud-based environment.⁵¹⁹ In view of the growing importance of cryptocurrencies, DZ Bank is launching its own digital custody platform for crypto assets this year. The platform is capable of facilitating the settlement and custody of digital financial instruments. This makes DZ Bank one of the first credit institutions to offer such a service for institutional customers based on blockchain technology. Furthermore, DZ Bank has also expressed its intention to facilitate investment in cryptocurrencies such as Bitcoin for its customers. Consequently, it submitted an application for a crypto custody licence in June 2023, although it has not yet been granted this licence. Furthermore, the bank is currently developing a product that will allow retail customers to invest directly in cryptocurrencies.⁵²⁰ Since 2017, DZ Bank has been supported in the development of AI services in terms of methodology and content. For instance, AI is employed in the field of compliance to facilitate the sorting of legal norms. Moreover, an internal forum and a knowledge base are available for employees to access comprehensive information on AI. It is important to highlight the collaborative approach adopted by DZ Bank in its engagement with FinTech partnerships. Rather than perceiving these entities as rivals, DZ Bank engages with numerous FinTech collaborations with the objective of deriving the greatest possible benefit for its customers.⁵²¹

5.4.4 BayernLB: Digital Change in Regional Banks

BayernLB has elected to pursue a strategic orientation predicated on a "technology offensive". This subject constitutes the focal point of attention. Significant capital outlay is to be made in the modernization of information technology and the associated infrastructure.⁵²² Thus far, BayernLB has typically relied on conventional automation techniques, such as robotic process automation, which emulates human behaviour and executes it automatically. Moreover, BayernLB utilizes the Microsoft cloud world for a select number of applications. This should result in a more modern and future-proof IT landscape. Additionally, the utilisation of cloud compu-

⁵¹⁹ Kraft, 2022

⁵²⁰ Seliger, 2023

⁵²¹ Elsner, 2018

⁵²² BayernLB, 2019

ting presents a multitude of prospects for BayernLB, encompassing modularisation, flexibilization, automation and standardisation. Moreover, the testing of AI technologies is a relatively straightforward process.⁵²³ In July 2024, BayernLB successfully completed the ECB's evaluation phase. The objective is to assess the potential and practical applications of financial transactions with blockchain technology. The successful test represents a significant milestone in the development of a blockchain application.⁵²⁴

5.4.5 Helaba: Digitalisation as a Success Factor in Public Banking

In June 2023, Helaba became a member of the FinTech “Cashlink” consortium. This is a request for a preliminary license to maintain a register for crypto securities. The Blockchain technology facilitates the complete digital issuance of securities.⁵²⁵ This strategic investment aligns with Helaba's digital agenda, as it offers enhanced value to the bank and its customers.⁵²⁶ Furthermore, in late July 2024, Helaba took additional steps in the domain of AI and its implementation. The bank has initiated the implementation of ChatGPT for all employees, with the objective of integrating this technology into their daily workflows. Prior to utilizing the aforementioned AI, employees are to undergo training in its use.⁵²⁷ By May 2024, proportion of Helaba's operations will have been automated through the use of AI to streamline the invoice receipt process. This facilitates the processing of tasks by employees in a more expedient manner. Similarly, Helaba participated in the ECB evaluation phase, as did BayernLB.⁵²⁸ In collaboration with “VC Trade”, a FinTech partnership initiated in 2018, Helaba has pioneered the complete digitization of the school certificate market for the first time. This constitutes a significant stride towards the establishment of uniform and efficacious digital procedures at Helaba.⁵²⁹

The analysis of the digital transformation of the respective banks has revealed significant discrepancies in the approach and progress among the banks. It is notable that the Landesbanks, BayernLB and Helaba exhibit a comparatively delayed pace of advancement in comparison to the other three banks.

⁵²³ Moczarski, 2022

⁵²⁴ BayernLB Blockchain, 2024

⁵²⁵ Mußler, 2023a

⁵²⁶ Benders, 2023

⁵²⁷ Fonds professionell, 2024

⁵²⁸ Pohlen, 2024

⁵²⁹ Steffes, 2024

5.5 Evaluating LBBW's Competitive Landscape: Strengths, Weaknesses, and Strategic Insights

In the previous subchapter, the five comparison banks were assessed. This subchapter will demonstrate how LBBW compares in the areas of sustainability and digitalization. A SWOT analysis is conducted for each bank in order to provide a comprehensive evaluation that also identifies areas for potential improvement within the LBBW framework.

5.5.1 Explanation and Application of SWOT-Analysis in Evaluating LBBW's Market Position

Prior to the implementation of a SWOT analysis, it is essential to explain the fundamental principles of this analytical technique and to lay out its rationale for utilization in a competitive analysis. The SWOT analysis is a strategic management tool. It can be employed to evaluate the present circumstances of a company within the context of the market environment. The internal view of the company encompasses its strengths and weaknesses, whereas the external view represents the opportunities and threats that the company faces in its market environment.⁵³⁰ Consequently, the analysis entails a comparison between the results of the external company environment analysis and the strengths and weaknesses profile of the internal company analysis. A further step in the process is the addition of SWOT matrix to the SWOT analysis.⁵³¹ However, this is not a focus of this thesis because it is not necessary for the consideration. In the context of a SWOT analysis, the term "strengths" encompasses all characteristics of the company that confer an advantage over competitors or enable the company to perform better than its competitors. A "weakness" is defined as a characteristic that is disadvantageous in a competitive environment and, as a result, has a negative impact on success. An "opportunity" can be defined as a factor or development within the market that could prove advantageous for a company. Conversely, "threats" may be defined as factors that have the potential to result in disadvantages for a company, thereby weakening its position.⁵³² This thesis employs a SWOT analysis is used to illustrate LBBW's position within the market environment in the areas of sustainability and digital transformation. The SWOT analysis was selected for this purpose because the competitors and LBBW have already been subjected to analysis and the objective is now to classify LBBW.⁵³³

⁵³⁰ Bundesministerium des Innern, 2024a

⁵³¹ Gabler, 2018

⁵³² Fleig, 2023

⁵³³ Asana, 2024

5.5.2 Sustainability in the SWOT comparison: LBBW's Position in the Domain of Sustainability

The SWOT analysis should demonstrate LBBW's position in the domain of sustainability. The principal points are illustrated in Figure 13. These will be discussed in more detail below.

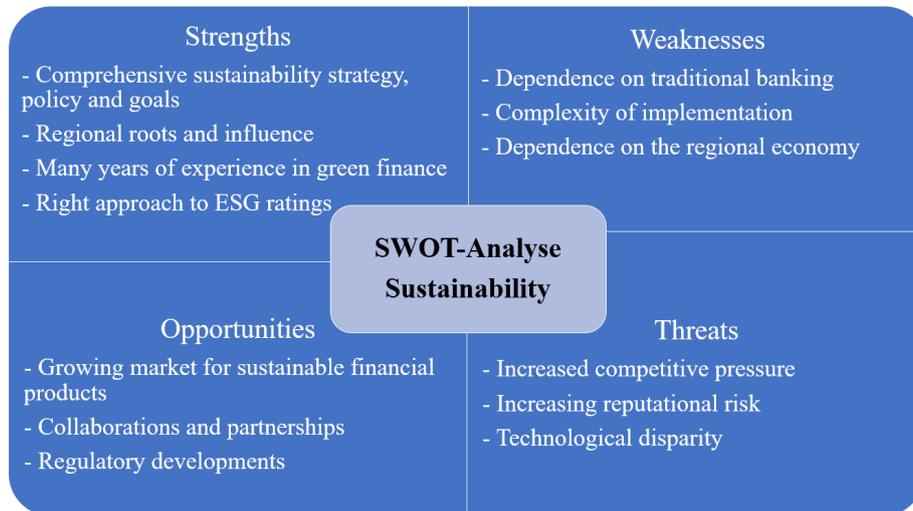


Figure 13: SWOT analysis regarding sustainability

Strengths

LBBW has a number of notable strengths in the area of sustainability. They also show how LBBW positively sets itself apart from other banks.

- **Comprehensive sustainability strategy, policy and goals:** LBBW has been engaged in the pursuit of a sustainability strategy for a number of years. This strategic direction was first defined in 2017.⁵³⁴ The sustainability policy serves to provide an overarching framework for the implementing of sustainability goals and activities throughout LBBW. Furthermore, it offers employees with guidance in their day-to-day business activities.⁵³⁵ This sustainability strategy has been in place as a strategic direction within LBBW for a longer period of time than in other banks.
- **Regional roots and influence:** In comparison to Deutsche Bank, Commerzbank and DZ Bank, LBBW, as a state bank, a particularly strong historical and geographical connection to Baden-Württemberg. Consequently, it offers considerably greater support for sustainable projects in the region than these other banking institutions.⁵³⁶ Moreover, LBBW has a larger

⁵³⁴ Wagner, 2018

⁵³⁵ Weidinger, n.d.

⁵³⁶ LBBW Verantwortung, n.d.

workforce than BayernLB and Helaba in terms of the number of employees alone.⁵³⁷ Consequently, it is able to support a greater number of projects than the other Landesbanks, due in part to their expanded responsibilities across multiple federal states. It may therefore be surmised that LBBW has a more pronounced regional focus on sustainable projects in Baden-Württemberg.⁵³⁸

- Many years of experience in green finance: LBBW has considerable experience in green finance, having identified this as a key area of interest.⁵³⁹ LBBW already offers a comprehensive range of products and services in this field and provides guidance to its clients in identifying the optimal solution for their needs.⁵⁴⁰
- Right approach to ESG ratings: LBBW is pursuing an appropriate course of action with regard to its ESG ratings, as evidenced by the findings of several independent rating agencies.⁵⁴¹

Weaknesses

While LBBW displays a number of strengths, it also shows certain weaknesses in comparison to its competitors.

- Dependence on traditional banking: As a traditional Landesbank, a significant proportion of its business model remains anchored in traditional financing and financial products. Furthermore, the pace of transformation towards a sustainable banking model is relatively gradual. Additionally, the time required to bring sustainable products to market is longer than that which can be achieved by startups.⁵⁴²
- Complexity of implementation: Despite the presence of a comprehensive sustainability strategy, the integration of these principles across all business areas is a relatively time-consuming process, largely due to the size and complexity of LBBW. Furthermore, as a state-owned bank, LBBW is subject to a multitude of regulatory obligations. This considerably complicates and prolongs the implementation of sustainability objectives.⁵⁴³
- Dependence on the regional economy: Despite the fact that LBBW has numerous international locations for a Landesbank, its primary focus remains on Baden-Württemberg and

⁵³⁷ HZ Banking, 2024

⁵³⁸ LBBW Verantwortung, n.d.

⁵³⁹ Erdle et al., 2024

⁵⁴⁰ Müller, 2024

⁵⁴¹ Diesch & Weidinger, 2019

⁵⁴² LBBW Über uns, n.d.

⁵⁴³ LBBW Compliance, n.d.

the provision of support to customers from this region.⁵⁴⁴ This results in a regional dependency, with LBBW exhibiting lower market penetration than other banking institutions. Consequently, in the event of economic difficulties within the region, this has a considerable impact on LBBW, which is then unable to pursue its sustainability objectives. Moreover, the implementation of LBBW's sustainability goals in other regions is hindered by the bank's limited customer base in these areas, coupled with the strong presence of other state banks and international banks.⁵⁴⁵

Opportunities

For LBBW, as well as for other banking institutions, the domain of sustainability presents prospective avenues for exploration in the forthcoming years.

- **Growing market for sustainable financial products:** The market for sustainable investments and products is experiencing a period of rapid growth in Germany. Over the past four years, the proportion of financial decision-makers who have relied on ESG-linked loans has increased from 1% to 17%. Therefore, the growth is considerable and is expected to continue in the coming years. The concept of sustainability is becoming an integral part of the strategic planning process for the majority of companies. Consequently, there has been a notable shift towards green finance.⁵⁴⁶ LBBW stands to gain from this robust growth in the future in two distinct ways. This will enable the bank to expand its portfolio of green finance products and, most importantly, offer them to its private customers as an investment option. Furthermore, it can act as a partner and advisor to its corporate customers, offering guidance on the implementation of sustainable strategies.⁵⁴⁷
- **Collaborations and partnerships:** It is anticipated that there will be an increase in the number of FinTech companies or innovative start-ups in the future. Although these entities may also be considered competitors of LBBW, they can also serve as potential partners. Despite LBBW's existing collaborations, other financial institutions, such as the DZ Bank, have already established themselves as leaders in this field.⁵⁴⁸ It would be farsighted for LBBW to capitalize on this opportunity in the future by pursuing further collaborations and partnerships. This is already being contemplated.⁵⁴⁹

⁵⁴⁴ LBBW Deutschland, n.d.

⁵⁴⁵ LBBW Standorte, n.d.

⁵⁴⁶ Erdle et al., 2024

⁵⁴⁷ LBBW Transformation, n.d.

⁵⁴⁸ IT Finanzmagazin, 2024

⁵⁴⁹ Schröder, 2024

- Regulatory developments: In the majority of instances, regulatory frameworks present significant challenges for financial institutions such as LBBW when it comes to the swift implementation of new initiatives. Nevertheless, rigorous ESG standards may prove advantageous for LBBW, given its advantageous positioning in this domain relative to certain competitors.⁵⁵⁰

Threats

A further consideration is the potential risks associated with sustainability.

- Increased competitive pressure: As evidenced in chapter 5, all five comparison banks have prioritized sustainability, thereby enhancing their market potential in this domain. Furthermore, other financial institutions and emerging businesses are pursuing a similar approach. Consequently, LBBW is not only facing competition from traditional banking institutions but also from start-ups and FinTech companies that have alternative operational strategies. This intensifies the pressure on LBBW, compelling it to take action.⁵⁵¹
- Increasing reputational risk: Furthermore, the competitive landscape intensifies the reputational risk associated with investments in sustainability, as any misstep in this domain could potentially lead to a loss of reputation. This is particularly the case in relation to the comparison banks.⁵⁵²
- Technological disparity: Banks such as Commerzbank and Deutsche Bank are investing heavily in digital support for the implementation of sustainable projects. LBBW must decide for itself whether it can keep pace with the competition in this area without making losses.

The SWOT analysis has revealed that LBBW possess a number some strengths that distinguish it from other banking institutions and the broader competitive landscape. Furthermore, numerous opportunities exist for it to capitalize on in the near future. However, the bank also exhibits certain weaknesses that render it comparatively less attractive than its competitors. Moreover, it is imperative that the bank addresses the potential risks in order to maintain its competitive edge. Nevertheless, it can be stated that LBBW is at least on a par with its competitors in terms of sustainability, particularly in comparison to other Landesbanken. In addition, it has even established a competitive advantage in certain areas.

⁵⁵⁰ Hopf, n.d.

⁵⁵¹ Focus, 2018

⁵⁵² Diesch & Weidinger, 2023

5.5.3 Digital Transformation in the SWOT Comparison: LBBW's Technological Standing

The objective of the SWOT analysis is to illustrate LBBW's stance regarding digital transformation. Figure 14 illustrates the key points. These points will be discussed in greater detail in the following section.

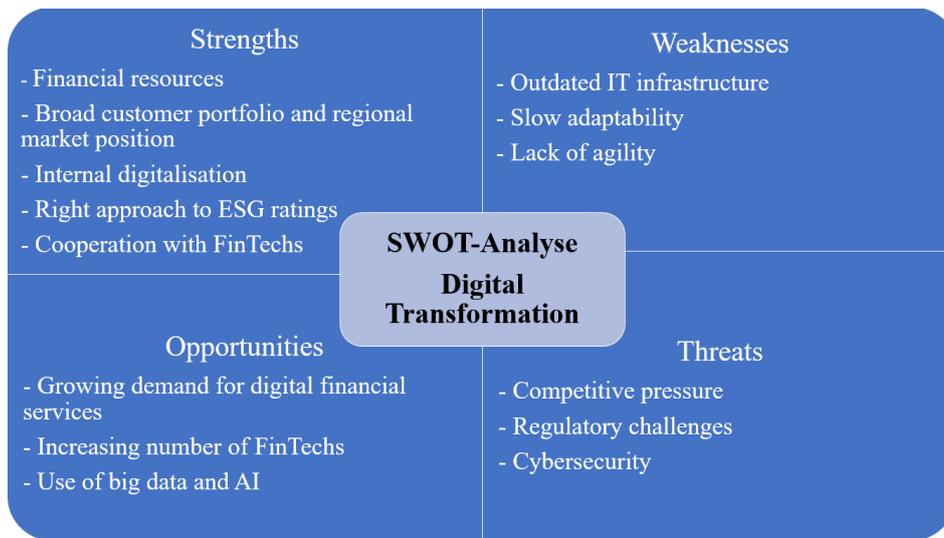


Figure 14: SWOT analysis regarding digital transformation

Strengths

- Financial resources: LBBW has generated considerable profits before taxes as a consequence of its business strategy.⁵⁵³ The profitability of recent years has enabled LBBW to invest in new technologies and digitization projects.
- Broad customer portfolio and regional market position: LBBW's extensive customer base provides the company with a wealth of data. This allows the development and testing of digital services for all customer groups.⁵⁵⁴
- Dealing with new technologies: LBBW has established a competitive in the market through the introduction of blockchain technology. LBBW was among the first banking institutions in Germany to utilize blockchain technology for promissory note loans.⁵⁵⁵ Additionally, the

⁵⁵³ LBBW, n.d.

⁵⁵⁴ LBBW Clients, n.d.

⁵⁵⁵ Sackmann & Wagner, 2017

bank offers its corporate customers opportunities in the area of cryptocurrencies.⁵⁵⁶ Furthermore, the bank is expanding its operations in the cloud computing domain.⁵⁵⁷

- Internal digitalization: With the introduction of “blue.gpt”, LBBW is taking a significant step forward in its internal digitalization efforts, positioning itself ahead of the peer group banks.⁵⁵⁸
- Cooperation with FinTechs: In order to keep pace with the ongoing technological transformation, LBBW is already engaged in collaborative initiatives with FinTechs.⁵⁵⁹ Furthermore, LBBW wants to significantly increase the number of cooperations per year.⁵⁶⁰

Weaknesses

- Outdated IT infrastructure: LBBW has a long history and has undergone numerous mergers, resulting in the accumulation of a considerable amount of IT infrastructure. Some of this infrastructure is outdated and cannot be replaced easily due to the interdependencies within the structure.⁵⁶¹ This has the effect of slowing down processes and limiting the ability of the IT department to act. Consequently, the implementation of digitalization trends is not feasible.
- Slow adaptability: Similarly, the implementation of digital adaptations at LBBW is a more complex process than at smaller banking institutions or start-ups. This is attributable to the considerable scale and structural complexity of LBBW.⁵⁶² Consequently, the implementation of novel digital solutions is a protracted process.
- Lack of agility: Despite the fact that LBBW has defined agility as a strategic direction for a number of years, the bank still lacks agility, particularly in comparison to FinTechs and other smaller banks. As with the points already mentioned, this results in a slower implementation of new, digital solutions.

Opportunities

- Growing demand for digital financial services: Thus far, there has been a considerable demand for digital financial services. It is anticipated that the demand for digital services will

⁵⁵⁶ Leja, 2024

⁵⁵⁷ Pehl, 2022

⁵⁵⁸ Schwerdtfeger, 2024

⁵⁵⁹ Van Daatselaar & Wagner, 2021

⁵⁶⁰ Schröder, 2024

⁵⁶¹ Potthoff, 2013

⁵⁶² LBBW Über uns, n.d.

continue to grow in the coming years.⁵⁶³ Furthermore, customers will require more comprehensive guidance. LBBW is well-positioned to leverage these two trends to its advantage.

- **Increasing number of FinTechs:** There are already numerous FinTechs and Startups engaged in the digitalization trends and digital transformation. Nevertheless, the number of such entities is set to increase rapidly in the years ahead.⁵⁶⁴ LBBW can establish a competitive advantage by forming strategic alliances with selected FinTechs.
- **Use of big data and AI:** The utilisation of big data and AI enables the optimisation of services, thereby ensuring LBBW's continued competitiveness. The potential exists for the automation of numerous banking processes, the generation of bespoke customer offerings and the enhancement of the customer experience. Furthermore, this can facilitate the expeditious determination of decisions.

Threats

- **Competitive pressure:** It can be argued that the greatest risk is that of competitive pressure. This is derived from the actions of other financial institutions and emerging technology companies.⁵⁶⁵ The analysis examined the activities of other banking institutions. It is notable that, despite the lack of further development, there are discernible differences in the focus of the implementation of technological trends among these institutions. Such a strategy could have a detrimental effect on the LBBW if it were to prioritise the incorrect trends. Nevertheless, it is evident that FinTechs, start-ups and online banks are also exerting competitive pressure. These institutions have focused their efforts on a select few digital financial products, resulting in the loss of customers to LBBW and other traditional banking institutions.
- **Regulatory challenges:** LBBW is confronted with regulatory challenges. As a systemically important bank, it is subject to rigorous regulatory scrutiny. The implementation of these challenges has an impact on the speed and flexibility of implementing digital solutions.⁵⁶⁶
- **Cybersecurity:** This represents a significant risk for LBBW. Its increased dependence on technologies and data makes it more vulnerable to cyberattacks the majority of which are aimed at accessing customer data. Nevertheless, LBBW is subject to strict requirements. Still, a successful cyberattack could result in severe damage to LBBW's reputation.⁵⁶⁷

⁵⁶³ Mordorintelligence, n.d.

⁵⁶⁴ Fechter, 2022

⁵⁶⁵ Meinecke & Streim, 2023

⁵⁶⁶ LBBW Compliance, n.d.

⁵⁶⁷ LBBW Cybersecurity, 2023

The SWOT analysis has demonstrated that LBBW is more advantageously positioned than its competitors in a number of areas pertaining to digital transformation. Nevertheless, it must overcome a number of significant challenges. It is also imperative to consider the potential risks, as they could inflict greater damage than those pertaining to sustainability. It can be stated that the area of sustainability is typically served more effectively than this. This is due to the accelerated pace of change in the digitalisation domain.

The two SWOT analyses, in conjunction with the preceding analysis of competitors, provided an answer to the second research question, namely how LBBW is positioned in relation to its German competitors.

5.5.4 Strategic Recommendations Based on the SWOT-Analysis

The two SWOT analyses have demonstrated that LBBW exhibits deficiencies and is confronted with hazards in both domains. Consequently, this section, presents a series of measures for each area, which have been developed by the authors as a contribution to the internal discourse on how LBBW can address its weaknesses and risks. The initial focus is on the sustainability area, where measures are considered. Subsequently, the following section will address the measures pertaining to digital transformation.

Improvement measures in the area of sustainability

At this juncture, the specific improvement measures for LBBW in the domain of sustainability are delineated.

- **Extended range of green finance products:** LBBW has already established a relatively comprehensive portfolio of green finance products.⁵⁶⁸ Nevertheless, the demand for such products is considerable and is set to grow further in the coming years.⁵⁶⁹ Consequently, the first step that LBBW should take is to expand its portfolio of such products. This will enable the bank to continue to provide its customers with the optimal level of service and meet their needs.
- **Diversification outside Stuttgart and the Baden-Württemberg region:** Given its status as a state bank in Baden-Württemberg, LBBW is primarily represented in the Stuttgart and Baden-Württemberg region.⁵⁷⁰ Consequently, the bank's support is largely concentrated in this

⁵⁶⁸ Offenhuber, 2019

⁵⁶⁹ LBBW Green Finance, n.d.

⁵⁷⁰ LBBW Standorte, n.d.

region, which creates a dependency.⁵⁷¹ To overcome this dependency, it is necessary to provide increasing support for sustainable projects outside this area. This may be achieved at the national or international level.

- **Strengthening in the ESG rating:** LBBW is subject to an ESG rating. This is currently an advantageous position.⁵⁷² Nevertheless, efforts should be made to enhance the institution's ESG rating. An enhanced ESG rating has the potential to differentiate the institution from its competitors and attract customers.
- **Increased collaboration with FinTechs and other partnerships:** In the domain of sustainability, there have already been a few instances of collaboration with FinTechs and other partnerships. Furthermore, there are plans to increase the number.⁵⁷³ Nevertheless, it is a crucial objective to expand collaborative endeavours in this domain in a timely manner and to reinforce existing partnerships. This allows LBBW to identify and monitor trends in a timelier manner.

Improvement measures in the area of digital transformation

This section outlines the measures that LBBW has taken to enhance its digital capabilities and the current state of its digitalization efforts.

- **IT infrastructure modernization:** It was determined that LBBW's IT infrastructure, as a bank that has undergone significant growth over time, exhibits certain aspects of obsolescence.⁵⁷⁴ Consequently, it will be necessary for the bank to invest both financial and human resources in the coming years to drive modernization forward. The implementation of this measure should enable LBBW to remain aligned with the prevailing trends of digital transformation.
- **Encouraging agility:** The lack of agility was identified as a potential weakness in the SWOT analysis. It is therefore crucial to enhance the agility of both the IT infrastructure and the entire banking institution through the implementation of agile methodologies. It is anticipated that this improvement will serve to reinforce the capacity for innovation.
- **Expansion of cybersecurity:** Considering the growing prevalence of cyber threats, it is imperative that LBBW enhances its cybersecurity measures. Such improvements can be achieved through employee training and enhancements to the IT infrastructure. These measures will enable LBBW to reduce the risk of reputational damage.

⁵⁷¹ LBBW Über uns, n.d.

⁵⁷² Diesch & Weidinger, 2019

⁵⁷³ Schröder, 2024

⁵⁷⁴ Potthoff, 2013

- Increased cooperation with FinTechs: As with the improvement measures in the sustainability area, LBBW must in future, as is already planned to some extent, increasingly cooperate with FinTechs and cooperate with them.⁵⁷⁵ This should enable innovation trends to be identified and adopted more quickly, thus enabling LBBW to better withstand competitive pressure.

In addition to the previously outlined improvement measures, there are numerous others. However, these explicitly relate to the identified weaknesses and risks of the SWOT analysis. In light of the aforementioned improvement measures, it is reasonable to posit that LBBW will be well-positioned to pursue further development and maintain its competitive edge.

⁵⁷⁵ Schröder, 2024

6 In-Depth Analysis of UniCredit – Challenges and Success Strategies

This chapter presents an analysis of UniCredit. The initial sub-chapter offers a comprehensive overview of UniCredit. The second section addresses the most significant success factors. This chapter will provide the foundation for a comparative analysis of UniCredit and LBBW in the subsequent phase of the study. Furthermore, this chapter seeks to address the third research question, namely, the factors that contribute to the success of UniCredit.

6.1 Strategic Analysis of UniCredit: Adapting in a Dynamic Market Environment

First, an overview of UniCredit is given. Subsequently, a more detailed analysis is undertaken of the technological status, sustainability and current challenges are discussed in more detail. UniCredit represents a very significant banking entity within the European economic landscape. The company has a significant presence in numerous European countries, with its headquarters located in Italy.⁵⁷⁶ In Germany, the company is known by two distinct names: UniCredit Bank AG and Hypovereinsbank.⁵⁷⁷ As a consequence of a series of mergers and acquisitions, UniCredit has become one of the largest financial services providers in Europe. The bank provides a comprehensive range of financial services.⁵⁷⁸

History

The origins of UniCredit can be traced back to the year 1870, when Banca di Genova was established and subsequently became Credito Italiano. The constituent banks that subsequently became part of UniCredit have even more ancient roots, dating back to 1473. UniCredit Group was constituted in 1998 through the merger of Credito Italiano, Rolo Banca 1473 and UniCredito. In the subsequent period, a considerable number of banks were consolidated to form UniCredit Group.⁵⁷⁹ The company's expansion into the European market commenced in 2005 with the merger of two Bavarian banks.⁵⁸⁰ In 2007, the company further consolidated its position in Central and Eastern Europe with the acquisition of Ukrsofbank in Ukraine.⁵⁸¹ After years of expansion in Europe, the years from 2008 to 2010 were characterized by external challenges

⁵⁷⁶ UniCredit, 2024

⁵⁷⁷ UniCredit Bank AG, n.d.

⁵⁷⁸ UniCredit, n.d.

⁵⁷⁹ UniCredit, 2023

⁵⁸⁰ HypoVereinsbank, n.d.-a

⁵⁸¹ UniCredit, 2012

and consolidation. In 2016, the bank introduced the strategic plan, entitled ‘Transformation 2019’. The plan covers all of the bank's main areas in order to strengthen and optimize the group's capital base, improving profitability and further develop business activities.⁵⁸² In 2017, UniCredit implemented the most substantial capital increase in the history of the Italian stock exchange. It amounted to 13 billion euros.⁵⁸³ In 2019, the bank launched a new four-year strategic plan. However, this was adjusted just two years later by UniCredit's new management board. UniCredit's new strategic plan, ‘Unlocked’, was launched for the period spanning 2022 to 2024. The objective is to optimize the group's current structure and to establish a transparent long-term programme for the future.⁵⁸⁴

Business areas and strategic direction

UniCredit Group is a pan-European commercial bank that provides services in Italy, Germany, Central and Eastern Europe. The overarching objective of the organization is to facilitate progress for the community by providing optimal solutions for all stakeholders and by promoting the potential of its customers and employees across Europe. The bank serves over 15 million customers worldwide and is structured into four core regions and three main areas of activity. These comprise the following three categories: Corporate, Individual and Group Payment Solutions. Furthermore, the organization is placing an emphasis on digital transformation and ESG principles.⁵⁸⁵ A closer examination of the bank's areas of activity reveals its involvement in a range of financial services, including retail banking, corporate banking, wealth management, private banking, asset management, and investment banking. The objective is to provide customers with optimal service and support across all customer groups through these areas of activity.⁵⁸⁶ In order to ensure that these standards are met for its customers, UniCredit in Italy has defined five strategic priorities under its new ‘Unlocked’ strategy:

1. Empowering and Unifying: Having a common vision, a unifying culture and a winning mentality that promotes ownership and empowerment.⁵⁸⁷ To reach that the approach is to be listed as a foundation, living the three values: Integrity, Ownership and Caring, and leading by example with concrete commitment.⁵⁸⁸

⁵⁸² UniCredit, 2023

⁵⁸³ Manager, 2017

⁵⁸⁴ UniCredit, 2023

⁵⁸⁵ UniCredit, n.d.

⁵⁸⁶ UniCredit Purpose, 2023

⁵⁸⁷ Cf. UniCredit Spa, 2024, p. 2

⁵⁸⁸ UniCredit Strategy, n.d.

2. Simplifying and Delaying: Developing a new way of working, creating a lean, fast and efficient organization cultivating empowerment within a clear framework.⁵⁸⁹ UniCredit wants to achieve this objective by a leaner structure, decisions in the right place and embracing a new way of working.⁵⁹⁰
3. Rationalizing and Strengthening: Partnerships and procurement are planned leverage Group scale and bargaining power, to rationalize supplier contracts and build long-lasting Group relationships.⁵⁹¹ UniCredit wants a mindset that encourages rationalization of the old legacy structures and wants to build a Global ecosystem.⁵⁹²
4. Investing and Growing: In employees on the front-line and UniCredit distribution channels, in the franchise and building product ‘factories’, to deliver an unmatched and fully-fledged product offering.⁵⁹³ UniCredit wants to train its staff to deliver the best tailored offerings and build up the factories to deliver.⁵⁹⁴
5. Modernizing and Enhancing: With the new strategy UniCredit wants to improve digital and in data, taking back control of core competencies, streamlining and enhancing their digital organization and standardizing and modernizing their digital technology.⁵⁹⁵ The approach is to take back control, rationalize and converge.⁵⁹⁶

This strategy will be pursued until the end of the current fiscal year, with the objective of enabling UniCredit to maintain its competitive position in the face of intensifying market pressures.

Locations and employees

UniCredit Group is represented by 13 banking institutions across four distinct European regions. These regions are as follows: Italy, Germany, Central Europe with Austria, Czech Republic and Slovakia, Hungary, Slovenia and Eastern Europe with Bosnia and Herzegovina, Bulgaria, Croatia, Romania, Serbia, (Russia). Additionally, it is also represented in France, Luxembourg, Spain, Switzerland, United Kingdom and intercontinentally in China, Singapore and the USA, while not maintaining its own banking presence in these countries.⁵⁹⁷ By 2024, UniCredit Group is projected to employ a workforce of over 70,000 individuals across the

⁵⁸⁹ Cf. UniCredit Spa, 2024, p. 9

⁵⁹⁰ UniCredit Strategy, n.d.

⁵⁹¹ Cf. UniCredit Spa, 2024, p. 9

⁵⁹² UniCredit Strategy, n.d.

⁵⁹³ Cf. UniCredit Spa, 2024, p. 9

⁵⁹⁴ UniCredit Strategy, n.d.

⁵⁹⁵ Cf. UniCredit Spa, 2024, p. 9

⁵⁹⁶ UniCredit Strategy, n.d.

⁵⁹⁷ UniCredit Locations, 2023

globe. Of these, 32,381 are employed in Italy and 11,473 in Germany.⁵⁹⁸ UniCredit Group encourage a corporate culture that fosters teamwork among employees, enabling them to serve as a reliable partner for stakeholders.⁵⁹⁹ The organization places considerable emphasis on diversity, equity and inclusion for its employees' place. This is designed to support the realization of employees' full potential and enable them to make a positive contribution to value creation.⁶⁰⁰ Furthermore, UniCredit is dedicated to eliminating the gender pay gap and promotes the advancement of women in leadership roles.⁶⁰¹

The employees of UniCredit operate within an organizational and business model. This model allows for a certain degree of autonomy at the country level while maintaining centralized control.⁶⁰²

Economic analysis and key achievements

The year 2023 proved to be a successful one for UniCredit. The profit figure was considerably higher than anticipated. The annual profit of €8.6 billion will be distributed among investors.⁶⁰³ In the view of CEO Andrea Orcel, 2023 was a remarkable year, the result of three years of transformation.⁶⁰⁴ The financial key figures provide clear evidence of the company's success. Accordingly, the most significant of these are presented below.

- Net profits have exhibited a notable increase, reaching €8.6 billion. There was a 54% increase in net profit.⁶⁰⁵
- Return on tangible equity: 20%.⁶⁰⁶
- Quality Growth: €23.3 billion. Net revenue increased by 26%.⁶⁰⁷
- The ratio of CET1 was: 16.2%.⁶⁰⁸
- Operational Excellence: The figure is 39.7%. The cost-to-income ratio was 7.2 per person.⁶⁰⁹

UniCredit has identified the most significant anticipated outcomes for the forthcoming year. These are founded upon the recently implemented strategic plan. They are presented in the

⁵⁹⁸ UniCredit, n.d.

⁵⁹⁹ UniCredit Purpose, 2023

⁶⁰⁰ UniCredit Diversity, 2024

⁶⁰¹ UniCredit Women, 2023

⁶⁰² UniCredit Organisational structure, 2023

⁶⁰³ Handelsblatt, n.d.

⁶⁰⁴ Orcel, n.d.

⁶⁰⁵ UniCredit Strategy, n.d.

⁶⁰⁶ UniCredit Group results, 2024

⁶⁰⁷ UniCredit Strategy, n.d.

⁶⁰⁸ UniCredit Group results, 2024

⁶⁰⁹ UniCredit Strategy, n.d.

following. The inaugural Culture Day, which involved over 30,000 colleagues from all countries' banks, constituted a notable achievement. Furthermore, the AA MSCI ratings exhibited an enhancement in ESG ratings.⁶¹⁰ A substantial investment of €100 million was allocated to address the gender pay gap and promote diversity and inclusion. Moreover, the input of 400 employees was collected and translated into 200 measures designed to enhance simplicity. A noteworthy decrease was observed in the number of organisational structures, with a reduction of approximately 30%. Furthermore, processes were simplified by 25% based on the end-to-end customer journey.⁶¹¹ Insurance partnerships were rationalised by 55%, reducing the number from 9 to 4. The Alpha Bank partnership in Greece has enabled access to 5 million clients.⁶¹² Annual training per employee since 2021 has been approximately 39 hours. The proportion of the workforce engaged in digital roles has been approximately 15%. Since 2022, over 1,300 technology professionals have employed. In parallel the reduction in the number of vendors has resulted in a 35% reduction in external daily rates.⁶¹³

These key achievements demonstrate which areas are important to UniCredit in beyond economic success.

6.2 UniCredit's Path to Digital Transformation: Key Developments and Initiatives

This section presents the strategy that UniCredit is pursuing in order to maintain pace with technological transformation, together with an account of its current status.

Strategy

Given that UniCredit plans to become a bank that serves the needs of Europe's future, it is imperative that it undergoes a digital transformation to align itself with the demands of the modern banking sector. It is therefore key that digital and data capabilities are embedded within the banking operations in order to implement the new operating model. In the period between 2022 and 2024, the company plans to invest 2.8 billion euros with the objective of transforming its technological infrastructure.⁶¹⁴ A total of 2,100 individuals are to be employed in the digital and data sector. Furthermore, four key projects will be initiated with the objective of providing support in this area. These focus areas are: user experience, new digital offerings, payment

⁶¹⁰ UniCredit ESG rating, n.d.

⁶¹¹ UniCredit Strategy, n.d.

⁶¹² UniCredit Alpha, n.d.

⁶¹³ UniCredit Strategy, n.d.

⁶¹⁴ UniCredit Digital and data, 2024

value chains and cyber security. Moreover, UniCredit has identified several key priorities to support this topic. It is regarded more prudent to develop core competencies internally rather than purchasing them externally. The objective is that solutions are designed with the intention of being reusable, and that investment models are constructed in a way that cost reductions are enabled. Moreover, products must be developed at a level that ensures the delivery of superior quality in a more expedient manner.⁶¹⁵ From these points, it can be summarized that UniCredit is pursuing a customer-centric approach and process optimization.⁶¹⁶ Furthermore, the strategy also includes the involvement of employees in the 'digital living' culture.⁶¹⁷

Digital transformation

In recent years, UniCredit has implemented a series of measures aimed at digitally transforming its operations to maintain competitiveness in the market. A significant proportion of UniCredit's IT infrastructure has been migrated to the cloud. This has facilitated the wide spread introduction of new digital products and a reduction in IT costs.⁶¹⁸ The modernization process commenced in 2013 with the signature of a ten-year contract between UniCredit and IBM, which supports the gradual migration of the bank's data centres to cloud solutions.⁶¹⁹ Nevertheless, as of 2024, UniCredit is still engaged in efforts to identify optimal cloud solutions. In July 2024, the company made an investment of 370 million euros in a Belgian cloud-based banking service provider. Furthermore, in addition to the products, UniCredit also assumed responsibility for the employees who are assigned with providing support throughout the process within the bank.⁶²⁰

The bank employs AI in several areas. On the one hand, the data is employed to analyse customer behaviour in greater detail and to create personalized offers.⁶²¹ Moreover, it is employed to automate decision-making processes and to identify and halt fraudulent activity. The topic of AI is introduced to employees in workshops, thus integrating it into the corporate culture.⁶²² Towards the end of July 2024, UniCredit initiated the launch of the inaugural AI-driven certificate. This was sponsored by “ACOMEA”. The objective of the certificate is to facilitate access

⁶¹⁵ UniCredit Unlocked, 2021

⁶¹⁶ UniCredit Digital and data, 2024

⁶¹⁷ UniCredit Strategy, n.d.

⁶¹⁸ UniCredit Digital and data, 2024

⁶¹⁹ Cloer, 2013

⁶²⁰ Reuters, 2024

⁶²¹ UniCredit Vision, n.d.

⁶²² UniCredit Digital and data, n.d.

to sophisticated investment instruments for all investors, irrespective of their investment horizon.⁶²³ In August 2018, UniCredit concluded its first transaction via the blockchain-based trading platform “we.trade”.⁶²⁴ A platform that is no longer operational.⁶²⁵ In 2019, the first commercial transaction in Italy was processed via the Marco Polo blockchain platform.⁶²⁶ Over a decade ago, the UniCredit founded the ‘UniCredit Start Lab’, an initiative designed to foster collaboration with emerging technology enterprises, particularly those operating in the FinTech space. This initiative is designed to support the growth of start-ups in Italy.⁶²⁷ Furthermore, UniCredit perceives FinTechs as potential collaborators rather than direct competitors. By the end of 2023, UniCredit entered into a strategic collaboration with the German financial technology company “Banxware”.⁶²⁸

Regarding cryptocurrencies, UniCredit is currently adopting a more cautious approach. Summarizing, it is evident that the bank is addressing the challenges caused by digital transformation and new technologies in order to maintain its competitive edge.

6.3 Sustainability Strategies of UniCredit: Balancing Regulatory Pressure and Market Opportunities

As a significant financial institution in Europe, UniCredit has established a series of objectives around sustainability and ESG, and has initiated the implementation of several of these objectives.

Sustainability strategy

UniCredit has published a sustainability strategy comprising five levels. This is illustrated in Figure 15.

⁶²³ Axyon, n.d.

⁶²⁴ UniCredit Blockchain, 2018

⁶²⁵ Paulus, 2022

⁶²⁶ UniCredit Blockchain, 2019

⁶²⁷ UniCredit Start Lab, 2022

⁶²⁸ Jhaxell, 2023

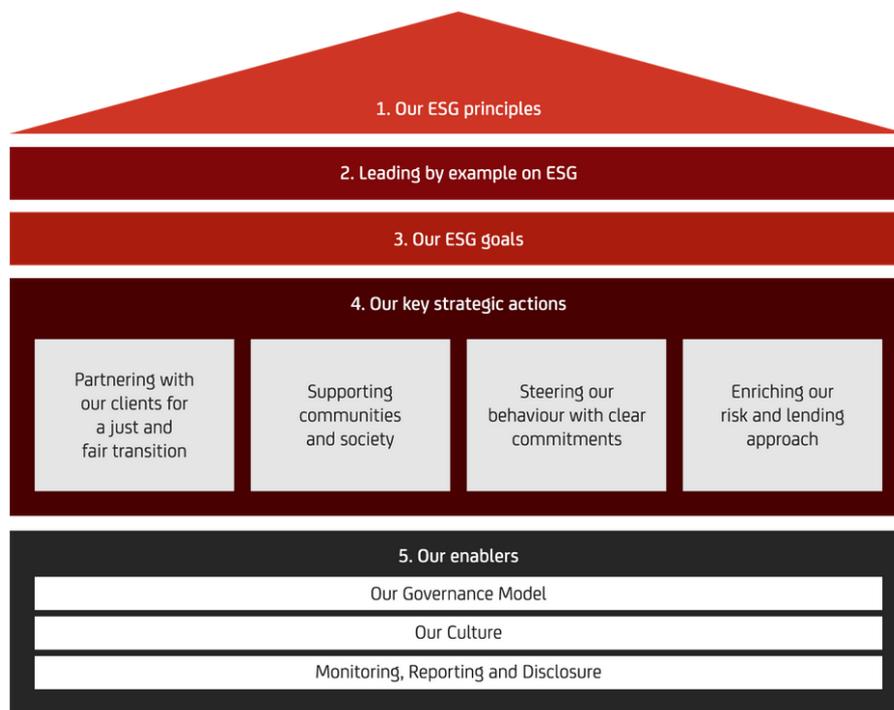


Figure 15: UniCredit sustainability strategy⁶²⁹

The initial three levels of Figure 15 pertain to the ESG principles and the manner in which UniCredit can exemplify these. The fourth level lays out the strategy that UniCredit intends to pursue in order to achieve its stated objectives. The final level illustrates the resources and actors that are necessary to implement the goals. The strategy has resulted in the formulation of a plan that will serve as a foundation for the bank's potential, paving the way for future growth and setting an exemplary precedent.⁶³⁰

Implementation of the sustainability strategy

In order to implement its sustainability strategy, UniCredit is already implementing or planning to implement a number of measures.⁶³¹

In October 2021, UniCredit became a member of the “Net-Zero Banking Alliance”. The banking group has pledged to align its credit and investment portfolios with net-zero emissions by 2050. Furthermore, UniCredit has made notable advancements in recent years with regard to the reduction of its own greenhouse gas emissions.⁶³² To illustrate, the company has transitioned to procuring electricity from renewable sources and has enhanced its energy efficiency.

⁶²⁹ Extracted from: UniCredit Sustainability Strategy, 2024

⁶³⁰ UniCredit Sustainability Strategy, 2024

⁶³¹ UniCredit Strategy, n.d.

⁶³² UniCredit Net zero, 2024

By 2030, the objective is to achieve net zero emissions with regard to the group's own activities. To date, 87% of the group's departments have sourced their electricity from renewable sources. As of 2022, the company has already achieved 100% renewable electricity sourcing in Italy, Germany, Austria, Hungary, the Czech Republic, and Slovenia.⁶³³

ESG factors constitute a pivotal element of the company's strategic approach. These issues are addressed in several areas within UniCredit Unlocked strategy.⁶³⁴ UniCredit is well positioned in terms of its ESG rating, with an MSCI ESG rating of AA. This view is shared by other rating agencies.⁶³⁵

In the **environmental** sector, UniCredit is not only pursuing CO₂ reduction and net-zero targets, but is also engaged in initiatives in the areas of green finance and sustainable bonds.⁶³⁶ In particular, it provides support for financial instruments in a number of countries. To date, the institution has issued ten green bonds of its own since 2021, with a total value of approximately 5.6 billion euros.⁶³⁷ Furthermore, the bank has established explicit criteria for the financing of sectors with a significant environmental impact, including oil, gas, and coal.⁶³⁸ UniCredit serves the **social** aspect in several ways. On the one hand, it specifically supports socially disadvantaged groups with microcredits through its 'Social Impact Banking' programme.⁶³⁹ Moreover, it offers assistance to social education initiatives.⁶⁴⁰ It offers assistance in the form of humanitarian aid and financial capability training.⁶⁴¹ The organization also espouses the values of diversity and inclusion in the workplace.⁶⁴² To make this more accessible to employees, employees, there are various employee networks, such as "Unicorn's network" for the LGBTIA+ community or a disability network.⁶⁴³ To facilitate greater accessibility for employees, a number of employee networks are in place, including "Unicorn's network" for the LGBTIA+ community and a network for employees with disabilities.⁶⁴⁴ Additionally, the company strives to create a work environment that allows employees to achieve a healthy work-life balance. The emphasis is on the interrelated aspects of mental and physical health, career, social and financial wellbeing.⁶⁴⁵ One aspect of **governance** is the provision of transparent insight and reporting through

⁶³³ UniCredit Net zero, 2024

⁶³⁴ UniCredit Strategy, n.d.

⁶³⁵ UniCredit ESG rating, 2024

⁶³⁶ UniCredit Net zero, 2024

⁶³⁷ Cf. UniCredit Spa, 2024, p. 14

⁶³⁸ UniCredit Net zero, 2023

⁶³⁹ UniCredit SIB, 2021

⁶⁴⁰ Cf. UniCredit Spa, 2024, p. 14

⁶⁴¹ UniCredit Social, 2024

⁶⁴² UniCredit Diversity, 2024

⁶⁴³ UniCredit Culture, 2024

⁶⁴⁴ UniCredit Diversity, 2024

⁶⁴⁵ UniCredit Empowering, 2024

sustainability reporting.⁶⁴⁶ Stakeholders are engaged in the decision-making process.⁶⁴⁷ Furthermore, UniCredit is aiming to eliminating the gender pay gap in the financial sector.⁶⁴⁸ Currently, 35% of teams are already led by women.⁶⁴⁹

The analysis demonstrates that UniCredit is effectively positioned as a bank, yet it also has identified areas for improvement and challenges that it will have to address in the coming years to maintain its effectiveness.

6.4 Current and Future Challenges of UniCredit: Analysing Market and Corporate Risks

While UniCredit has demonstrated robust performance as a financial institution, particularly in recent years, it is confronted with several challenges in the years ahead. Some of these will be highlighted in this sub-section. It will be described how UniCredit is addressing these challenges, if an approach has already been established.

Geopolitical uncertainties

Italy, like other European countries, is confronted with a multitude of geopolitical uncertainties. This also has an impact on UniCredit. The ongoing Russia-Ukraine conflict has a significant impact on UniCredit Group. This is a consequence of the bank's presence in Eastern Europe and in Russia.⁶⁵⁰ In consequence of the sanctions imposed on Russia and the prevailing economic instability, the bank is compelled to curtail its exposure and undertake a comprehensive re-evaluation of its activities in the region. The situation gives rise to both financial and operational risks. Nevertheless, UniCredit Group has expressed its intention to maintain an active presence in Eastern Europe as of April 2024.⁶⁵¹ Although, in May 2024, Russia proceeded to freeze the accounts and assets of UniCredit Group. The decision was made in response to the cancellation of the construction of an LNG terminal on the Baltic Sea.⁶⁵² In July 2024, the ECB will require UniCredit Group to dismantle its Russian business. Nevertheless, UniCredit Group is hesitant to withdraw entirely from the Russian market, citing the potential for unintended

⁶⁴⁶ UniCredit Sustainability reporting, 2024

⁶⁴⁷ UniCredit Sustainability, 2024

⁶⁴⁸ UniCredit Women, 2023

⁶⁴⁹ Cf. UniCredit Spa, 2024, p. 14

⁶⁵⁰ UniCredit Locations, 2023

⁶⁵¹ Bläske, 2024

⁶⁵² Börse Frankfurt, 2024

consequences.⁶⁵³ Furthermore, in addition to the ongoing conflict between Russia and Ukraine, UniCredit Group is monitoring the increasing tensions between China and the West. The potential risks posed by China are incorporated into the risk management process. While the geopolitical uncertainties pertain to the entire UniCredit Group, they also have an impact on UniCredit in Italy.⁶⁵⁴

Macro- and microeconomic situation in Italy

UniCredit anticipates a further deterioration in global economic growth in both 2024 and 2025. Nevertheless, UniCredit expects a deflationary trend that may result in inflation rates falling below 2% by 2025. A reduction in inflation will result in a decrease in the cost of living in Italy. Consequently, UniCredit anticipates a reduction in the demand for savings deposits and mortgage loans.⁶⁵⁵ However, UniCredit benefits from a higher interest rate environment, as its interest income is increased due to the interest rate margin.⁶⁵⁶ The Italian economy, which is growing more slowly than the European average, is creating a difficult business environment. The Italian economy is currently experiencing a period of slower growth than the European average, which is creating a challenging business environment. Consequently, the reduced demand for loans and other financial products is leading to a decline in revenue for UniCredit, while the increased risk of payment defaults represents a significant financial risk.⁶⁵⁷

At the microeconomic level, the burden of high unemployment is evident in the form of lower consumer consumption. This is particularly evident in the southern regions of the country, where regional disparities are pronounced. This presents UniCredit with the challenge of developing differentiated products and a differentiated risk management strategy.⁶⁵⁸

Further challenges in Italy

The rapid changes in market and customer needs are also having an impact on UniCredit. In particular, the increasing focus on sustainability, the ongoing digital transformation and the investment in new technologies are influencing the business of UniCredit. In order to meet these challenges, UniCredit has adapted its strategy to 'UniCredit Unlocked' earlier than had been anticipated.⁶⁵⁹

⁶⁵³ Kröner, 2024

⁶⁵⁴ UniCredit GCC, 2024

⁶⁵⁵ Valli et al., 2023

⁶⁵⁶ UniCredit Customers, n.d.

⁶⁵⁷ Valli et al., 2023

⁶⁵⁸ Sanna, 2024

⁶⁵⁹ UniCredit Strategy, n.d.

Furthermore, demographic change is having an impact on UniCredit. Concurrently, the company is experiencing an ageing workforce. It is becoming increasingly challenging to retain the current staff level, particularly given the difficulty in attracting new, young, and qualified employees. In order to attract these employees, it is essential that UniCredit maintains a diverse and equally treated workforce. This should enhance the bank's appeal.⁶⁶⁰ Moreover, the ageing population is also influencing the demand for financial products. Working to meet these demands, UniCredit intends to implement a hybrid service model in the future that will address the requirements of older customers and also serve customers with a higher level of digital affinity.

This analysis demonstrates that UniCredit is currently confronted with a multitude of challenges, which it is attempting to address, albeit to a limited extent.

6.5 Success Factors of UniCredit: Strategies for Ensuring Future Competitiveness

Notwithstanding the numerous challenges confronting UniCredit, the company's net profit exceeded €8.5 billion.⁶⁶¹ The preceding analysis has identified several factors that contribute to success. In order to facilitate a more comprehensive understanding and comparison, the most significant success factors are presented herewith.

On the one hand, UniCredit has implemented rigorous cost control measures with the objective of enhancing operational efficiency. The implementation of the "UniCredit Unlocked" strategy has enabled the company to achieve cost savings.⁶⁶² Furthermore, UniCredit was able to achieve an increase in return on capital in the second quarter of 2024. This suggests that the capital base is being employed effectively. In addition, UniCredit has maintained a low risk premium level. This can be attributed to the implementation of robust risk management strategies and a prudent approach to lending.⁶⁶³

UniCredit's success is attributable to its extensive customer base and its presence in a multitude of locations. The extensive customer base in Italy and across Europe enables UniCredit to navigate crises in individual countries while reducing its reliance on any single customer segment or geographical area.⁶⁶⁴

⁶⁶⁰ UniCredit Gender equality, 2024

⁶⁶¹ Handelsblatt, n.d.

⁶⁶² UniCredit Unlocked, 2021

⁶⁶³ Affaritaliani, 2024

⁶⁶⁴ UniCredit Clients, 2023

The investment of approximately three billion euros in digital transformation and digital banking is proving instrumental in enabling UniCredit to flourish and maintain a competitive edge in an increasingly dynamic market. The investment will facilitate the advancement of both technological capabilities and employee competencies.⁶⁶⁵

Furthermore, in addition to the substantial investment in new technologies, UniCredit is also allocating approximately 150 billion euros towards the realization of its ESG objectives. Such investment will facilitate the achievement of the aforementioned goals, thereby enabling the organization to assume a leadership position in society. This contributes to its success.⁶⁶⁶

The sixth chapter demonstrated how UniCredit and UniCredit Group has achieved success in Italy and also across Europe. This addresses the third research question regarding the factors that contribute to the success of UniCredit. Furthermore, the analysis illuminated the challenges that the entity is currently confronted with, as well as those that it is likely to encounter in the future.

⁶⁶⁵ UniCredit Digital and data, 2024

⁶⁶⁶ UniCredit ESG, 2023

7 Comparison of the Landesbank Baden-Württemberg and UniCredit

In this chapter, the preceding analysis of LBBW and UniCredit will be complemented by a direct comparison of the two entities. Potential learnings for UniCredit from LBBW will be identified. This chapter will therefore address the final research question, namely the potential improvement measures that UniCredit could implement.

Prior to undertaking a comparison of the two banks, it is first necessary to establish whether a comparison between them is actually a valid one. This question will be covered whether a different bank should be selected for analysis if the study was to be repeated.

7.1 Assessing the Comparability of LBBW and UniCredit: Opportunities and Limitations

This sub-chapter aims to confirm the substance of a comparison between LBBW and UniCredit. It presents a rationale for and against the comparison.

7.1.1 Justifications for Comparing LBBW and UniCredit: Strategic Similarities

Both banks are of significant importance at the regional and national levels. LBBW is one of the largest Landesbanks in Germany, particularly in the state of Baden-Württemberg. The bank further consolidates its position and influence through its large customer base in the region.⁶⁶⁷ As one of the largest banks in Italy and with a significant role in Central and Eastern Europe, UniCredit demonstrates considerable influence over the Italian financial landscape.⁶⁶⁸ Furthermore, the business models of the two banks are closer than anticipated. Both are classified as universal banks. This indicates that they provide a comprehensive range of financial services to a diverse customer base. Despite the divergence in their business strategies, both banks are ultimately pursuing the same objective. The objective is to provide customers with the optimal level of service and support.⁶⁶⁹ The integration of ESG factors and digital transformation represents a pivotal aspect of both banks' business strategies. This is the strategy they have communicated to ensure their continued agility and competitiveness at times of growing market pressures.⁶⁷⁰

⁶⁶⁷ LBBW Über uns, n.d.

⁶⁶⁸ UniCredit, n.d.

⁶⁶⁹ LBBW Clients, n.d.; UniCredit Clients, 2023

⁶⁷⁰ Weidinger, n.d.; UniCredit Strategy, n.d.

Both banks are active within the European context. Consequently, LBBW and UniCredit are subject to ECB regulation and are obliged to comply with its rigorous standards. They are subject to a higher level of regulation, in addition to their respective national frameworks. Therefore, they are unable to operate in the same manner as, for instance, startups or companies in other sectors.⁶⁷¹ Moreover, both banks are confronted with similar challenges and risks. These relate to interest rate policy, inflation, and to the emergence of new market and customer requirements.⁶⁷² A further similarity between the two banks is that they have successfully navigated the challenges and adverse market conditions of the past years.⁶⁷³

7.1.2 Identifying Key Differences: Challenges in Comparing Two Distinct Institutions

Nevertheless, there are also some reasons that call for a comparison. Firstly, LBBW is a public-sector bank with an ownership structure. This implies that the bank is to some extent subject to the influence of its owners.⁶⁷⁴ In contrast, UniCredit is a publicly traded private bank. Consequently, the objective of profit maximization is of greater importance to the bank in question than it is to LBBW.⁶⁷⁵ In addition, the significant discrepancy in scale must be taken into account. LBBW has approximately 10,000 employees and is predominantly represented in Baden-Württemberg, with a presence in other countries as well.⁶⁷⁶ In comparison, UniCredit Group employs over 70,000 individuals and has a more substantial presence in Europe, particularly in Italy. However, the bank has a minimal presence outside of the continent.⁶⁷⁷ It would be remiss to ignore the cultural and economic differences between Germany and Italy. A comparison is rendered challenging by the multiplicity of differences. However, this is not contingent on the selected banks, but rather on the countries in question. Consequently, this would also be the case with other banks.

The comparison has revealed the existence of certain points that do not suggest a comparison. On the other side, the arguments in favour of the comparability of the two institutions are more compelling than those against. At least the comparison of the two banks represents a promising avenue for the validation of measures for UniCredit. A comparison of LBBW with UniCredit

⁶⁷¹ European Central Bank, 2021

⁶⁷² Srinivas et al., 2023

⁶⁷³ LBBW, n.d.; Handelsblatt, n.d.

⁶⁷⁴ LBBW Über uns, n.d.

⁶⁷⁵ UniCredit, n.d.

⁶⁷⁶ LBBW Über uns, n.d.

⁶⁷⁷ UniCredit, n.d.

is now warranted, although not within the context of Chapter 5. This is primarily due to the fact that UniCredit, despite being significantly present in Germany through Hypovereinsbank, is an Italian banking institution with a historical and operational focus in that country.⁶⁷⁸ Consequently, a comparison with other German banking institutions would not have been a suitable approach.

7.2 In-Depth Comparison of Strategic Directions and Market Positions

In order to facilitate a more accurate comparison, the comparison was divided into four distinct sections.

7.2.1 Strategic Approaches and Market Presence: A Comparative Evaluation

As one of the largest Landesbanks in Germany, LBBW has a significant presence in the domestic market. The bank's business model is centred on four core areas of activity: corporate customers, private customers, capital market business and real estate financing.⁶⁷⁹ Their strategy focuses strongly on sustainability, innovation, its employees and a stable capital base. In this context, LBBW invests heavily in sustainable and socially responsible projects.⁶⁸⁰ The institution's strategic approach is underpinned by a commitment to sustainability, innovation, its workforce and a robust capital base. Furthermore, the bank places considerable emphasis on cultivating long-term and stable customer relationships, particularly with medium-sized enterprises. It is therefore of particular importance to LBBW that regional development is facilitated.⁶⁸¹ An analysis of the bank's annual reports reveals that its key strengths are a robust equity base and a conservative risk management approach.⁶⁸² These key figures and the ownership structure of LBBW serve to illustrate its stability and resilience in challenging market conditions.⁶⁸³ As one of Europe's largest banks, UniCredit Group operates mainly in Italy, Germany and Central and Eastern Europe.⁶⁸⁴ The "UniCredit Unlocked" strategy is designed to enable the bank to realize its full potential mainly in Italy. The emphasis is on sustainability, digitalization and capital optimization.⁶⁸⁵ The objective is to provide optimal support to its extensive customer base, comprising over 15 million individuals from diverse backgrounds, through the

⁶⁷⁸ UniCredit, 2023

⁶⁷⁹ LBBW Über uns, n.d.

⁶⁸⁰ Weidinger, n.d.

⁶⁸¹ LBBW Über uns, n.d.

⁶⁸² LBBW Investor Relations, n.d.

⁶⁸³ LBBW Über uns, n.d.

⁶⁸⁴ UniCredit, n.d.

⁶⁸⁵ UniCredit Strategy, n.d.

implementation of a tailored service model that is both customer-centric and financially sustainable.⁶⁸⁶

A comparison of the two banks reveals that UniCredit is placing a greater emphasis on international expansion and technological change than LBBW. UniCredit also places considerable importance on its regional roots and a risk-averse approach.⁶⁸⁷ LBBW is more resilient in the context of global market volatility that impact have a more direct impact on UniCredit. In light of the above-mentioned evidence and the more detailed analyses presented in Chapters 4 and 5, it can be highlighted that LBBW exhibits greater stability than UniCredit. In terms of market positioning and competition, LBBW concentrates its efforts on medium-sized and regional companies in Baden-Württemberg. To date, the bank's international presence is confined to a limited number of locations, serving primarily to support its German customers abroad.⁶⁸⁸ UniCredit Group has a broad international presence, offering products designed for such a context.⁶⁸⁹ This factor also serves to reinforce the stability of LBBW, as it is less vulnerable to geopolitical risks than UniCredit due to the regional nature of its customer base.

7.2.2 Financial Performance Comparison: Key Figures and Growth Indicators

In financial year 2023, UniCredit reported a profit in excess of €9 billion, representing a record result. This was distributed to investors.⁶⁹⁰ Furthermore, additional parameters, such as the return on tangible equity and the cost-income ratio, indicate high efficiency. Profit was influenced by capital optimization measures and high dividend payments, suggesting short-term financial impacts driven by these factors.⁶⁹¹ In 2023, LBBW exhibited a notable enhancement in its principal financial indicators. Furthermore, it exhibits a reduced cost-income ratio, robust capital resources and robust growth across all business areas.⁶⁹² In comparison, UniCredit is particularly impressive in terms of its short-term profitability. In contrast, LBBW prioritizes stability and conservative risk management. Both banks reflect and objectives of their respective shareholders.

⁶⁸⁶ UniCredit Clients, 2023

⁶⁸⁷ UniCredit Strategy, n.d.

⁶⁸⁸ LBBW International Business, n.d.

⁶⁸⁹ UniCredit, n.d.

⁶⁹⁰ Handelsblatt, n.d.

⁶⁹¹ UniCredit Annual report, n.d.

⁶⁹² LBBW Annual Report 2023, 2024

7.2.3 Sustainability and ESG Commitments: A Comparative Perspective

The concept of sustainability was integrated into the strategic direction of LBBW as early as 2017.⁶⁹³ Subsequently, the bank has provided assistance to businesses undergoing a transition towards sustainable business models, while concurrently reducing its own CO₂ footprint and offering customers green finance products. Moreover, it has a robust ESG rating and is engaged in numerous initiatives in social and sustainable domains, aligning its operations with ESG criteria.⁶⁹⁴ Similarly, sustainability is a key consideration for UniCredit. The company has set itself the objective of reducing its emissions.⁶⁹⁵ Moreover, it utilizes green bonds and ESG-linked financing. Furthermore, the bank has received a favourable assessment from independent rating agencies.⁶⁹⁶ Both banks demonstrate a commitment to sustainability, investing in their own operations as financial institutions, supporting their customers, and financing sustainable and socially beneficial projects. LBBW has a more concentrated regional focus, whereas UniCredit Group has distinguished itself by demonstrating a comprehensive commitment to Italy and other countries. It is not possible to determine which bank performs better in this area.⁶⁹⁷

7.2.4 Digital Transformation Initiatives: Technological Progress in Both Banks

LBBW initiated a digital transformation strategy at an early stage, thereby ensuring its ability to remain competitive in the context of the digital revolution. This entails the digitalization of existing processes. Furthermore, the digitalization of processes enables the company to respond more effectively to customer needs, thus strengthening customer loyalty.⁶⁹⁸ LBBW was notably prompt in its adoption of novel technologies, including blockchain technology.⁶⁹⁹ Furthermore, the bank offers its customers advice regarding potential investments in AI and other technology-oriented companies.⁷⁰⁰ As with sustainability, digital transformation constitutes a significant element of the new strategy adopted by UniCredit.⁷⁰¹ The digitalization of business processes represents a key driver of growth. The objective is to enhance business processes through a series of initiatives within the banking institution, thereby facilitating a more comprehensive and responsive customer experience. The strategy is designed to facilitate greater access to AI

⁶⁹³ Weidinger, n.d.

⁶⁹⁴ Weidinger & Diesch, n.d.

⁶⁹⁵ UniCredit Net zero, 2024

⁶⁹⁶ UniCredit Sustainability Strategy, 2024

⁶⁹⁷ Weidinger & Diesch, n.d.; UniCredit Sustainability Strategy, 2024

⁶⁹⁸ LBBW Innovation Lab, n.d.

⁶⁹⁹ Wagner et al., 2018

⁷⁰⁰ Laschewski, 2024

⁷⁰¹ UniCredit Digital and data, 2024

and big data.⁷⁰² Based on the most recent information available, both banks are investing significant resources into digital transformation initiatives. However, the two institutions are pursuing disparate strategies. While LBBW places a greater emphasis on the provision of customer-oriented services, UniCredit is directing its attention towards a more comprehensive digital transformation. It can be argued that LBBW is pursuing an evolutionary path to transformation, building on existing strengths. In contrast, UniCredit is pursuing a revolutionary approach to the complete overhaul of its operational framework. Consequently, LBBW is in a favourable strategic position, particularly in the context of corporate banking. Nevertheless, the technological transformations pursued by UniCredit are more comprehensive and, as a result, better equipped to meet the demands of the digital future.⁷⁰³

The comparative analysis of this work has demonstrated that both LBBW and UniCredit perform above industry average. Both entities have demonstrated their ability to navigate challenging market and environmental conditions, resulting in commendable outcomes.

7.3 Developing Actionable Strategies for UniCredit Based on the Comparative Insights

Given the superior performance of LBBW in the analysis, this sub-chapter proposes measures for UniCredit that would enable it to improve. Three categories of measures are under consideration.

7.3.1 General Strategic Recommendations for UniCredit

Primarily, UniCredit has the potential to reinforce its corporate culture through the implementation of employee development initiatives, the establishment of leadership programmes and the facilitation of cross-border employee networking. LBBW demonstrates a profound dedication to the advancement of its personnel, both employees and managers.⁷⁰⁴ This is evidenced by the organisation's facilitation of cross-location and cross-country celebrations, as well as group-wide management conferences. By means of such events and other internal measures, LBBW fosters and maintains a workforce that is both engaged and satisfied.⁷⁰⁵ UniCredit and UniCredit Group would be well advised to consider the benefits of such cross-company events,

⁷⁰² UniCredit Digital and data, 2024

⁷⁰³ Cf. LBBW Annual Report 2023, 2024, p.26; UniCredit Digital and data, 2024

⁷⁰⁴ 0711, 2023; Marbet, n.d.

⁷⁰⁵ 0711, 2023

given the increasing focus on leadership development and employee culture within its own organisation. Such initiatives may also be bolstered by the implementation of mentoring programmes. Those measures serve to motivate employees and managers to perform at a higher level, while also fostering a willingness to innovate. Another general measure that can be mentioned is the diversification of the business model through the introduction of new market segments and products. LBBW has successfully distinguished its business model and products over the past few years. Such differentiation has enabled the company to diversify its risk profile and access additional sources of revenue.⁷⁰⁶ Although UniCredit has already diversified some of its sources of income, it would be farsighted for the company to continue diversifying its market segments, products, and customer base. Such a strategy will enable the entity in question to respond more effectively to risks and market instability. In this regard, the bank is more vulnerable than LBBW.

7.3.2 Enhancing Sustainability Initiatives at UniCredit

The initial step towards enhancing sustainability and integrating ESG considerations is to broaden the range of green finance and green bond products. LBBW is regarded as one of the foremost issuers of green bonds in Europe, reflecting its unwavering commitment to this field. The volume of green assets under its management is undergoing a continuous increase.⁷⁰⁷ Additionally, UniCredit offers products in this field, albeit with a lesser volume than that of LBBW. By extending its portfolio of green bonds, the bank can expand its market reach and better serve its customer base. Furthermore, an enhancement of the ESG rating may be achieved by augmenting the institution's backing for sustainable investments, thereby rendering it a more appealing prospect for investors and customers. The second measure is the increased promotion of social and environmental projects through the formation of targeted partnerships. LBBW has established partnerships with a greater number of local and international social and environmental projects than UniCredit. Sponsorship enhances the positive public image of the company, as well as its market influence and ESG rating.⁷⁰⁸ It would be farsighted for UniCredit to expand its strategic partnerships with social and environmental projects. This could result in an improvement in its ESG rating, a strengthening of its position as a responsible financial services provider and a reinforcement of trust in it as a reliable partner. Furthermore, UniCredit should direct its attention towards the promotion of renewable energies, which can be achieved through

⁷⁰⁶ LBBW Halbjahresgewinn, n.d.

⁷⁰⁷ Wagner, 2022

⁷⁰⁸ Ingelfinger, n.d.

the implementation of targeted investments in environmental projects. LBBW is already engaged in pursuing this objective through the establishment of select partnerships.⁷⁰⁹ As a concluding recommendation, it is advised that the customer interaction focus be shifted towards a greater emphasis on the range of sustainable solutions. LBBW has already established a focus on the recommendation of sustainable financial products to its private customers. However, the sustainability aspect is also a key topic when advising its corporate customers.⁷¹⁰ UniCredit may also choose to adopt this approach, with the aim of enhancing customer loyalty and satisfaction through the provision of personalized ESG advice. Furthermore, it has the potential to reinforce its sustainable investment operations, which could ultimately lead to sustained business expansion.

The mentioned measures represent a mere sampling of the ways in which UniCredit can cultivate a sustainable future, with LBBW as a point of reference.

7.3.3 Improving Digital Transformation Efforts at UniCredit

Three measures are proposed for implementation by UniCredit with the objective of enhancing its capacity to manage digital transformation. The initial proposal is the establishment of a dedicated digital innovation laboratory within UniCredit organization. This should function as a catalyst for the screening, analysis, development and implementation of new digital products and technologies, in a manner analogous to that observed at LBBW. The unit enables LBBW to respond more expeditiously to prevailing trends and to dispatch experts to the bank's divisions, thereby facilitating more efficacious implementation.⁷¹¹ Such a unit at UniCredit would be capable of functioning as an interdisciplinary unit, thereby providing support to all areas of the bank. For UniCredit, this measure has the potential to enhance competitiveness and foster a culture of innovation within the institution. The second potential avenue for improvement is the implementation of a more agile IT infrastructure. In recent years, LBBW has made significant investments in the development of an agile IT infrastructure. This allows the bank to respond more rapidly to digital trends and transformations. This infrastructure encompasses cloud solutions that enhance the bank's flexibility.⁷¹² UniCredit is well advised to continue with the modernization of its IT infrastructure and an increased reliance on cloud-based solutions. The

⁷⁰⁹ Riedel, 2023

⁷¹⁰ LBBW Transformation, n.d.

⁷¹¹ LBBW Innovation Lab, n.d.

⁷¹² Pehl, 2022

above-mentioned measures have the potential to reduce expenditure on IT and enhance operational efficiency. Furthermore, this will facilitate the expeditious introduction of novel digital products and reinforce the adaptability of IT systems. The final measure under consideration is the digitalization of customer service through the utilization of automation and AI. LBBW has already implemented a variety of automation and AI tools in both customer service and internal processes with the objective of enhancing the quality of customer service.⁷¹³ As a further comparable case study, Commerzbank has already implemented the use of an avatar based on AI for the purpose of enhancing customer service.⁷¹⁴ It would be farsighted for UniCredit to allocate a greater proportion of its resources to the development of such applications as automated advisory systems and AI-driven customer services.

The preceding analysis provided a response to the final research question. The implementation of these measures has the potential to facilitate further growth and development for the UniCredit, while simultaneously enhancing customer relationships and achieving improved profitability.

⁷¹³ Schwerdtfeger, 2024

⁷¹⁴ Schmitt & Zimmer, 2023

8 Final considerations

The final considerations of this paper are split into two parts: the conclusion and evaluation, and the critical appraisal.

8.1 Conclusion and Evaluation of Findings

This initial sub-chapter presents and evaluates the most significant findings of the paper in a retrospective manner.

The work had several objectives and the key objective was to assess potential enhancements UniCredit could leverage based on the analysis and comparison with LBBW. The mentioned objectives have been defined in response to the growing challenges traditional banking institutions are facing, such as LBBW and UniCredit, while defending their position in the market and securing success.⁷¹⁵ Both banks, particularly LBBW, are capable addressing these challenges and achieving favourable outcomes.⁷¹⁶ That is why the success factors of LBBW have been analysed and compared to those of other German banks. On this basis further analysis of the success factors of UniCredit can be conducted, leading to recommendations for action that can for example improve profits. The recommendations for action presented here derive from a comparison with LBBW that started with four objective questions defined as follows:

1. Which strategic directions is LBBW pursuing and what are its success factors?
2. How is LBBW positioned compared to other German banks?
3. What are the success factors of UniCredit?
4. Which improvement measures can be derived for UniCredit based on a comparison with LBBW?

Addressing these questions, the German and Italian banking sectors were subjected to analysis in selected aspects within the theoretical section. The research questions were subsequently addressed in the practice-oriented sections. The initial research question highlighted that LBBW has been pursuing five strategic directions since 2023: sustainable transformation, innovative solutions, enhanced resilience, inspiring employees, and social contribution.⁷¹⁷ These strategic directions, in addition to those previously pursued, have an impact on the LBBW's success factors, thereby strengthening them. In addition to the strategic directions, the historical development, the ownership structure, the foreign branches and the implementation of the ESG

⁷¹⁵ Research, n.d.

⁷¹⁶ LBBW Halbjahresgewinn, n.d.

⁷¹⁷ Cf. LBBW Annual Report 2023, 2024, p.26

factors were also identified as contributing to the success of the bank.⁷¹⁸ Leading to the assessment that LBBW has a solid basis for addressing present challenges, with its success factors distributed across multiple domains. A comparison with other German banks from different areas revealed that LBBW has been successful in establishing a strategic competitive advantage in numerous areas, particularly in the domains of sustainability and digital transformation.⁷¹⁹ This allows it to distinguish itself from other banking institutions. Consequently, these two areas were subject to a more comprehensive examination in the context of a SWOT analysis for LBBW. The SWOT analysis demonstrates that LBBW possesses a multitude of strengths in these domains, and that a wide range of opportunities exist for the further expansion of these strengths in the forthcoming years. However, it is also evident that the company shows certain deficiencies that call for improvement. Furthermore, it is imperative to acknowledge potential risks. The exact results of the SWOT analyses are shown in the Figure 16 and in Figure 17. They are also examined in more detail in sections 5.5.2 and 5.5.3.

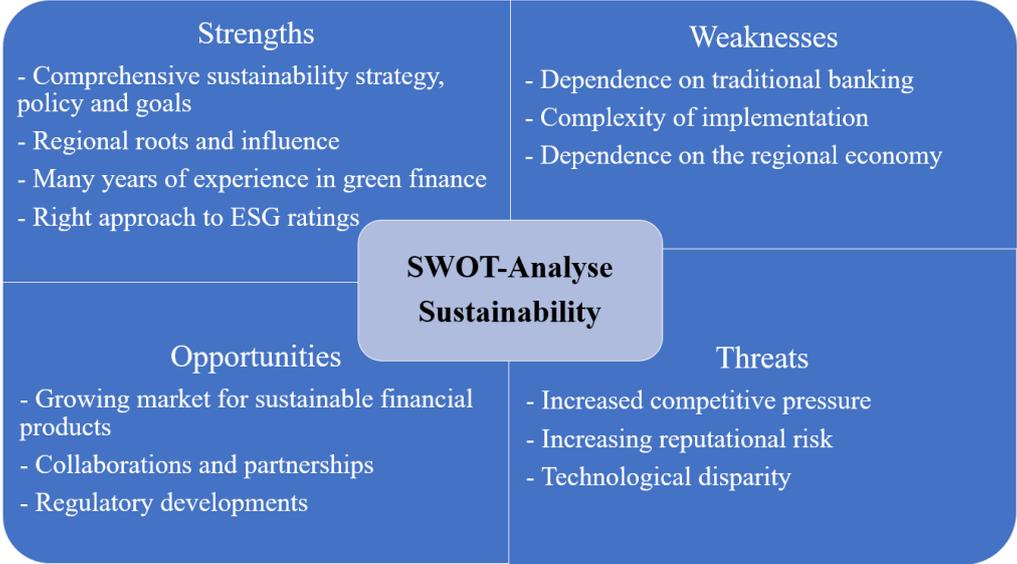


Figure 16: Results SWOT analysis regarding sustainability

⁷¹⁸ LBBW Über uns, n.d.; Manager, 2009; LBBW International Business, n.d.; Weidinger & Diesch, n.d.
⁷¹⁹ LBBW Annual Report 2023, 2024; Deutsche Bank Annual Report 2023, 2024; Commerzbank Annual Report 2023, 2024; DZ Bank Annual Report 2023, 2024; BayernLB Annual Report 2023, 2024; Helaba Annual Report 2023, 2024

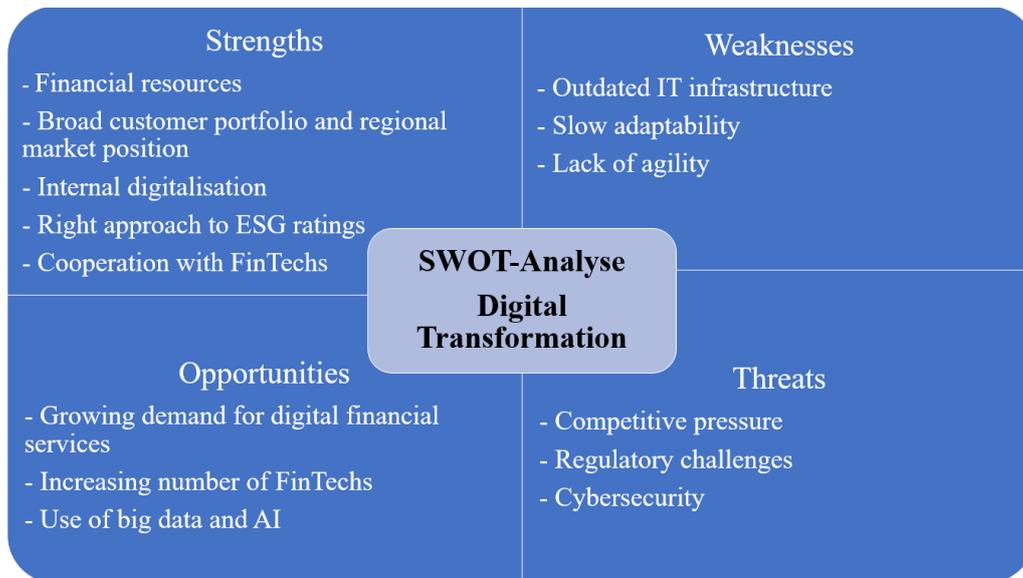


Figure 17: Results SWOT analysis regarding digital transformation

Complementing LBBW, an analysis was conducted on UniCredit with respect to the Italian banking sector. Also, this bank has demonstrated its ability to navigate the current challenges through its profitability in recent years.⁷²⁰ In recent years, it has been able to expand in the areas of sustainability and digital transformation. Consequently, it can be identified as a key factor contributing to its success. Moreover, the company can leverage a broad international customer base as a further advantage. UniCredit's recently implemented strategic plan can be regarded as a contributing factor to the bank's continued growth and development.⁷²¹ The comparison with LBBW revealed that LBBW is better positioned than UniCredit in certain areas. UniCredit can take actions concerning with the sustainability aspect and the digital transformation. Considering these improvement measures, it is reasonable to posit that UniCredit will be able to further exploit its market potential and expand its profits. The improvement measures are shown in Table 5.

⁷²⁰ Handelsblatt, n.d.

⁷²¹ UniCredit Digital and data, 2024; UniCredit Strategy, n.d.; UniCredit Unlocked, 2021

General strategic recommendations	Enhancing sustainability initiatives	Improving digital transformation
Employee development initiatives	Broaden the range of green finance and green bond products	Establishment of a digital innovation laboratory
Cross-company events	Enhance support for sustainable investments	Implementation of a more agile IT infrastructure
Mentoring programmes	Expand partnerships with social and environmental projects	Digitalization of customer service through automation and AI
Diversification of the business model	Targeted investments in renewable energies	-
-	Emphasize sustainable solutions in customer interactions	-

Table 5: Improvement measures for UniCredit

The identification of improvement measures for UniCredit answered the fourth and final research question, achieving the objective defined add. The value of this thesis is based on its theoretical analysis and comparison of German and Italian banking sector. From a practical standpoint, this thesis offers a comprehensive understanding of LBBW, its key success factors, and its role within the German banking sector. The analysis and comparison of UniCredit with LBBW was conducted on the basis of the conclusions drawn earlier. Adding all up, the key contribution of this thesis is the identification of potential improvement measures combined with recommendations for UniCredit to become even more successful.

8.2 Critical Reflection

The final section of this paper provides a critical analysis and proposes further directions for research.

As previously stated, this paper cannot be comprehensive in all areas it has touched. Still, there are some aspects of the arguments provided that can be subjected to critical analysis.

One area open to further investigation is the selection of the comparison banks. On initial examination, LBBW and UniCredit appear to be quite different.⁷²² Nevertheless, there are some points that allow for a comparison, as demonstrated in the thesis. In addition, it could be argued that a further analysis of two banks with the same ownership structure would provide further

⁷²² LBBW Über uns, n.d; UniCredit, n.d.

insights. In this thesis, however, a conscious decision was made in favour of comparing these two banks because it does not follow standard patterns. This allows for out of boundaries insights to be gained.

The choice of comparison topics should also be subjected to a critical assessment. In this instance, the economic key figures were selected as an objective point of comparison. Two key areas have been in focus of this thesis: the sustainability aspect, including ESG factors, and the digital transformation. Nevertheless, there are several additional categories that can be subject to comparisons. And in other categories LBBW could learn from UniCredit. The two categories were selected by design as they represent current topics and provide a suitable basis for an initial comparison. To provide a more comprehensive comparison, it would be beneficial to include additional categories such as globalization or economies of scale.

A further point of criticism is that the UniCredit was not as thoroughly compared with other Italian banks, as was the case with the LBBW. This would have provided further insights on UniCredit's position within the Italian banking sector.

While there are aspects that can be analysed further, by its specific approach this thesis has achieved the research objectives defined and addressed the research questions highlighted.

Literature

- 0711. (2023, November 17):** *LBBW Mitarbeiterfest 2023 - 0711*. Retrieved September 15, 2024, from <https://www.0711.net/projekte/lbbw-mitarbeiterfest-2023/>
- Adams, K., & Wagner, B. (2021, May 27):** *LBBW und Partner gehen mit Trade-Finance-Netzwerk Marco Polo live*. LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/marco-polo-geht-live_ac27ox25iu_d.html
- Affaritaliani. (2024, July 24):** *UniCredit: nel II trimestre 2024 utile netto pari a 2,7 miliardi di euro*. Affaritaliani.it. <https://www.affaritaliani.it/economia/notizie-aziende/unicredit-nel-ii-trimestre-2024-utile-netto-pari-a-2-7-miliardi-di-euro.html>
- ahd. (2022, September 14):** *Was ist eine Blockchain? Einfach erklärt für Einsteiger*. Ahd. Retrieved September 15, 2024, from <https://www.ahd.de/was-ist-eine-blockchain-die-erklaerung-fuer-einsteiger/>
- AlleAktien - Genossenschaftsbanken. (2024, January 16):** *Genossenschaftsbank Definition / AlleAktien*. AlleAktien. Retrieved September 15, 2024, from <https://www.alleaktien.de/lexikon/genossenschaftsbank>
- AlleAktien. (2024, January 16):** *Förderungsauftrag Definition / AlleAktien*. Retrieved September 15, 2024, from <https://www.alleaktien.de/lexikon/foerderungsauftrag>
- Anpfiffinsleben. (2020, January 22):** *Anpfiff ins Leben*. anpfiffinsleben.de. Retrieved September 13, 2024, from <https://www.anpfiffinsleben.de/>
- Asana, T. (2024, February 26):** *Wettbewerbsanalyse: Anleitung und Beispiele im Überblick! [2024] • Asana*. Asana. <https://asana.com/de/resources/competitive-analysis-example>
- Asset Management. (n.d.):** *Damit Werte im Wert steigern: das Asset Management der LBBW*. LBBW Webespace. Retrieved September 13, 2024, from https://www.lbbw.de/leistungen/unsere-loesungen/asset-management/asset-management/asset-management_7v6qjicq4_d.html
- Axyon. (n.d.):** *The first AI-driven certificate issued by UniCredit and sponsored by AcomeA*. Axyon AI. Retrieved September 14, 2024, from <https://axyon.ai/news/ai-driven-certificate-unicredit>
- Azzali, L. M., Casini, M., Chiofalo, P., Alessandrini, J., Casciaro, G., & Rubino, V. (2023):** *Overview on the soundness of the Italian banking system*. In Banca D'Italia,

Bollettino Economico 2 / 2023 [Report]. <https://www2.deloitte.com/content/dam/Deloitte/it/Documents/finance/deloitte-overview-on-the%20soundness-of-the-italian-banking-system.pdf>

BaFin. (2022, September 1): *DLT/Blockchain*. Retrieved September 15, 2024, from https://www.bafin.de/DE/Aufsicht/FinTech/InnovativeFinanztechnologien/DLT_Blockchain/DLT_Blockchain_node.html

BaFin. (2023, December 1): *Anderweitig systemrelevanten Instituten*. Retrieved September 15, 2024, from https://www.bafin.de/DE/Aufsicht/BankenFinanzdienstleister/Eigenmittelanforderungen/ASRI/asri_node.html

BaFin. (n.d.): *Unternehmen*. Retrieved September 13, 2024, from https://www.bafin.de/DE/Aufsicht/unternehmen_node.html

Banca d'Italia. (2007, November 12): *Bank of Italy - History*. (C) Banca D'Italia. Retrieved September 15, 2024, from <https://www.bancaditalia.it/chi-siamo/storia/index.html?com.dotmarketing.htmlpage.language=1>

Banca d'Italia. (n.d.-a): *Banca d'Italia - Chi siamo*. (C) Banca D'Italia. Retrieved September 13, 2024, from <https://www.bancaditalia.it/chi-siamo/index.html>

Banca d'Italia. (n.d.-b): *Banca d'Italia - Compiti*. (C) Banca D'Italia. Retrieved September 13, 2024, from <https://www.bancaditalia.it/compiti/index.html>

Banco BPM. (n.d.): *BCC (Banche di credito cooperativo)*. [bancobpm.it](https://www.bancobpm.it). Retrieved September 13, 2024, from <https://www.bancobpm.it/magazine/glossario/bcc-banche-di-credito-cooperativo/>

Bank, J. M. P. (n.d.): *Was ist eigentlich eine „Privatbank“?* Retrieved September 13, 2024, from <https://privatebank.jpmorgan.com/eur/de/insights/wealth-planning/what-is-private-bank-really>

Banken Auskunft. (n.d.): *Banken Italien*. Retrieved September 13, 2024, from <https://www.banken-auskunft.de/ausland/italien>

Bankenaufsicht. (n.d.): *Bankenaufsicht*. Retrieved September 13, 2024, from <https://www.bundesbank.de/de/aufgaben/bankenaufsicht/bankenaufsicht-597748>

Barabino. (2023, April 14): *Fachkräftemangel in Deutschland und Italien*. ITKAM Germania / Improve Your Business Between Italy and Germany. Retrieved September 15, 2024, from <https://itkam.org/de/hemmnis-fuer-das-wirtschaftswachstum/>

- Bauer, E. (2024, August 1):** *ESG – Was bedeuten die ESG-Kriterien für die Finanzbranche?* / *BankingHub*. BankingHub. Retrieved September 15, 2024, from https://bankinghub.de/themen/esg-finanzbranchenachhaltigkeitsstandards_2/nachhaltigkeitsstandards.jsp
- BayernLB. (2019, December 19):** *BayernLB beschließt strategische Neuausrichtung*. Bayerische Landesbank. Retrieved September 15, 2024, from https://www.bayernlb.de/internet/de/blb/resp/bayernlb_rd/nachricht_242048.jsp
- BayernLB. (2024, August 16):** *Kurzportrait: Wer wir sind*. Bayerische Landesbank. Retrieved September 15, 2024, from https://www.bayernlb.de/internet/de/blb/resp/meta_7/ueber_uns_1/marke/kurzportrait_1/kurzportrait_1.jsp
- BayernLB. (n.d.):** *Investitionsfinanzierer BayernLB*. Bayerische Landesbank. Retrieved September 14, 2024, from https://www.bayernlb.de/internet/de/blb/resp/corporates_1/wofuer_wir_stehen/einstieg_3.jsp
- BayernLB Annual Report 2023. (2024):** *BayernLB Geschäftsbericht 2023*. In BayernLB. Retrieved September 15, 2024, from https://www.bayernlb.de/internet/media/de/ir/downloads_1/investor_relations_3/finanzberichte/2023_22/konzernabschluss_2023.pdf
- BayernLB Blockchain. (2024, July 19):** *BayernLB und Stadtsparkasse München bei Blockchain-Trials der EZB erfolgreich*. Bayerische Landesbank. Retrieved September 15, 2024, from https://www.bayernlb.de/internet/de/blb/resp/bayernlb_rd/nachricht_332867.jsp
- BayernLB Corporate Governance. (2019, January 1):** *Corporate governance*. Bayerische Landesbank. Retrieved September 15, 2024, from https://www.bayernlb.de/internet/de/blb/resp/meta_7/ueber_uns_1/verantwortung/unternehmensfuehrung/corporate_governance_1/corporate_governance.jsp
- BayernLB Corporate Responsibility. (n.d.):** *Corporate Responsibility - gesellschaftliches Engagement*. Bayerische Landesbank. Retrieved September 14, 2024, from https://www.bayernlb.de/internet/de/blb/resp/meta_7/ueber_uns_1/verantwortung/mitarbeitende_und_gesellschaft/corporate_responsibility_gesellschaftliches_engagement/cr.jsp
- BayernLB ESG Rating. (n.d.):** *BayernLB gehört zu den nachhaltigsten Banken weltweit*. Bayerische Landesbank. Retrieved September 14, 2024, from https://www.bayernlb.de/internet/de/blb/resp/meta_7/ueber_uns_1/verantwortung/publikationen_1/nachhaltigkeitsratings/nachhaltigkeitsratings_1.jsp

- BayernLB Owner. (n.d.):** *Die Eigentümerstruktur der BayernLabo*. Retrieved September 14, 2024, from <https://bayernlabo.de/foerderinstitut/eigentuemstruktur>
- BayernLB Sparkassen. (n.d.):** *Sparkassen*. Bayerische Landesbank. Retrieved September 14, 2024, from https://www.bayernlb.de/internet/de/blb/resp/sparkassen_2/einstieg_fuer_sparkassen/Einstieg.jsp
- BayernLB Strategy. (n.d.):** *Öffentliche hand*. Bayerische Landesbank. Retrieved September 14, 2024, from https://bayernlb.de/internet/de/blb/resp/oeffentliche_hand_2/wofuer_wir_stehen_5/oeffentliche_hand.jsp
- BayernLB Sustainability. (n.d.):** *Nachhaltigkeitsstandards*. Bayerische Landesbank. Retrieved September 14, 2024, from https://www.bayernlb.de/internet/de/blb/resp/meta_7/ueber_uns_1/verantwortung/unternehmensfuehrung/
- Bedford, D., Bellens, J., & Meekings, K. P. M. (2018, June 15):** *Wie Banken das Potenzial von FinTech ausschöpfen können*. EY - Österreich. Retrieved September 15, 2024, from https://www.ey.com/de_at/banking-capital-markets/how-can-banks-unleash-the-potential-of-fintech
- Beinroth, N., Düll, S., Marschner, K., & Schorn, S. (n.d.):** *Mit langem Atem für Gutes sorgen: die LBBW-Stiftung*. LBBW Webpace. Retrieved September 14, 2024, from https://www.lbbw.de/lbbw-stiftung/lbbw-stiftung-homepage_92epjx6tu_d.html
- Beise, M. (2023, April 12):** „Italien verschwindet“. Süddeutsche.de. <https://www.sueddeutsche.de/panorama/italien-bevoelkerung-geburten-elon-musk-1.5792910>
- Benders, R. (2023, June 27):** *Helaba - News: Helaba investiert in Frankfurter Start-Up Cashlink*. Retrieved September 15, 2024, from <https://www.helaba.com/de/presse/news/meldungen/2023/helaba-investiert-in-frankfurter-start-up-cashlink.php>
- Berenberg. (2021, March 16):** *Über uns*. Berenberg. Retrieved September 15, 2024, from <https://www.berenberg.de/ueber-uns/>
- Berlin Hyp AG. (2024):** *Berlin Hyp kündigt ersten Blockchain Pfandbrief an*. Retrieved September 15, 2024, from <https://www.berlinhyp.de/de/media/newsroom/berlin-hyp-k%C3%BCndigt-ersten-blockchain-pfandbrief-an>
- Berns, M. (n.d.):** *Künstliche Intelligenz im Finanzsektor*. PwC. Retrieved September 13, 2024, from <https://www.pwc.de/de/finanzdienstleistungen/kuenstliche-intelligenz-im-finanzsektor.html>
- Bettina Storck. (2023):** *Das ESG-Rahmenwerk der Commerzbank*. <https://www.commerzbank.de/ms/documents/de-DE/esg-rahmenwerk-pdf.pdf>

- Bläske, G. (2024, April 18):** *Unicredit will in Osteuropa weiter aktiv werden: Unicredit setzt auf Alpha Bank.* Börsen-Zeitung. Retrieved September 15, 2024, from <https://www.boersen-zeitung.de/banken-finanzen/unicredit>
- Blikk. (2012):** Arten von Genossenschaften. In Blikk. Retrieved September 15, 2024, from https://www.blikk.it/bildung/application/files/8113/7836/4383/33_BWL_RK_Arten_von_Genossenschaften_alle.pdf
- Bloom, D. (2020, March 1):** *Changing Demographics and Economic Growth – IMF F&D.* IMF. Retrieved September 15, 2024, from <https://www.imf.org/en/Publications/fandd/issues/2020/03/changing-demographics-and-economic-growth-bloom>
- Bojen, G. (2020, January 31):** *Das Potenzial der Cloud entfalten.* KPMG. https://kpmg.com/de/de/home/themen/uebersicht/cloud-services-financial-services.html?gad_source=1&gclid=CjwKCAjwodC2BhAHEi-wAE67hJLcjZAuztG3XnZhS-tJHdjml2sLGs3GUFhCMqJ-BW5oZDcfj8Isb-exoCi98QAvD_BwE
- Börse Frankfurt. (2024, May 17):** *Russland friert Konten und Vermögen von Bank Unicredit ein.* Retrieved September 15, 2024, from <https://www.boerse-frankfurt.de/nachrichten/Russland-friert-Konten-und-Vermoeegen-von-Bank-Unicredit-ein-a7a5ad9c-19af-42b5-a4b8-5c7c5029b3b2>
- Bosco, D. (2023, April 22):** *Die italienische Lira von 1861 bis 2001 und 2022. Die Währung zu Don Boscos Zeiten.* donbosco.press. Retrieved September 15, 2024, from <https://donbosco.press/de/don-bosco/die-italienische-lira-von-1861-bis-2001-und-2022-die-waehrung-zu-don-boscos-zeiten/>
- BPB Finanzmarktkrise. (2021, November 25):** *Finanzmarktkrise.* bpb.de. Retrieved September 15, 2024, from <https://www.bpb.de/kurz-knapp/lexika/lexikon-der-wirtschaft/19366/finanzmarktkrise/>
- BPB Grossbanken. (2021, June23):** *Großbanken.* bpb.de. Retrieved September 15, 2024, from <https://www.bpb.de/kurz-knapp/lexika/lexikon-der-wirtschaft/19554/grossbanken/>
- BPB Landesbanken. (2021, June 23):** *Landesbanken.* bpb.de. Retrieved September 15, 2024, from <https://www.bpb.de/kurz-knapp/lexika/lexikon-der-wirtschaft/20001/landesbanken/>
- BPB Zinspolitik. (2021, November 15):** *Zinspolitik.* bpb.de. Retrieved September 15, 2024, from <https://www.bpb.de/kurz-knapp/lexika/lexikon-der-wirtschaft/21275/zinspolitik/>

- Brandl, B. (2020):** *Ist Blockchain das Ende der Banken?* KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie, 72(4), 543–565. <https://doi.org/10.1007/s11577-020-00716-w>
- Braun, A. (2018, May 9):** *LBBW feiert 200-Jahr-Jubiläum – Start im Mai mit Jubiläumstag und Festakt.* LBBW Webspaces. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/200-jahr-jubilaem_8k2p6o7aj_d.html
- Braun, A. (2019, January 16):** *LBBW finanziert vier neue Airbus A 320-200 für amerikanische Fluggesellschaft.* LBBW Webspaces. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/lbbw-finanziert-vier-neue-airbus-a-320-200-fuer-amerikanische-fluggesellschaft_8we5dyi2r_d.html
- Braun, A. (2021, January 13):** *LBBW begibt ihren dritten Social Bond.* LBBW Webspaces. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/lbbw-begibt-dritten-social-bond_ace54egps5_d.html
- Braun, A., & Danneboom, M. (2018, July 16):** *Debtvision – ein Gemeinschaftsunternehmen der LBBW und Boerse Stuttgart.* LBBW Webspaces. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/auf-dem-weg-zur-etablirung-von-debtvision-als-digitaler-marktplatz-fuer-schuldscheindarlehen_7z5vdju7o_d.html
- Brendel, M. (2022, February 7):** *Die Transformation der ostdeutschen Genossenschaftsbanken nach 1989.* bpb.de. Retrieved September 15, 2024, from <https://www.bpb.de/themen/deutschlandarchiv/208818/die-transformation-der-ostdeutschen-genossenschaftsbanken-nach-1989/>
- Breßgott, J. (2023):** *Die Fugger: der Aufstieg einer Handelsdynastie in Europa.* Universitätsverlag Hildesheim.
- Breustedt, H. (2024, March 7):** *Milliardengewinn und Rekorddividende - LBBW trotz Signa-Debakel und Immobilienkrise.* stuttgarter-zeitung.de. <https://www.stuttgarterzeitung.de/inhalt.milliardengewinn-und-rekorddividende-lbbw-trotzt-signa-debakel-und-immobilienkrise.999ebf2f-3a76-4945-807e-dec2899dee7d.html>
- Brost-Steffens, H. (2020, April 9):** *Definition: onlinebanking.* Gabler Banklexikon. Retrieved September 15, 2024, from <https://www.gabler-banklexikon.de/definition/onlinebanking-60244>

- Buch, C. (2021, September 10):** *Die Corona-Pandemie als exogener Schock für die Finanzindustrie*. Bundesbank. Retrieved September 15, 2024, from <https://www.bundesbank.de/de/presse/reden/die-corona-pandemie-als-exogener-schock-fuer-die-finanzindustrie-875270>
- Buehler, K., Dietz, M., Fumagalli, F., Levy, C., Lund, S., White, O., & Windhagen, E. (2020, July 28):** *Banking system resilience in the time of COVID-19*. McKinsey & Company. Retrieved September 15, 2024, from <https://www.mckinsey.com/industries/financial-services/our-insights/banking-system-resilience-in-the-time-of-covid-19>
- Bühner, K.-H., & Buric, D. (n.d.):** *Die LBBW weiß: Zu jeder Anleihe gilt es eine überzeugende Geschichte zu erzählen*. LBBW Webespace. Retrieved September 13, 2024, from https://www.lbbw.de/leistungen/unsere-loesungen/finanzierung/kapitalmarktfinanzierung/anleihen_aimqvbqkmz_d.html
- BSI Informationstechnik. (n.d.):** *Blockchain macht Daten praktisch unveränderbar*. Bundesamt Für Sicherheit in Der Informationstechnik. Retrieved September 13, 2024, from https://www.bsi.bund.de/DE/Themen/Verbraucherinnen-undVerbraucher/Informationen-und-Empfehlungen/Technologien_sicher_gestalten/Blockchain-Kryptowaehrung/blockchain-kryptowaehrung_node.html
- Bundesbank. (n.d.):** *Zur Rolle der Banken im deutschen Finanzsystem*. Retrieved September 12, 2024, from <https://www.bundesbank.de/de/presse/reden/zur-rolle-der-banken-im-deutschen-finanzsystem-890198>
- Bundesministerium des Innern. (2023, November 2):** *Demografischer Wandel*. Bundesministerium Des Innern Und Für Heimat. <https://www.bmi.bund.de/DE/themen/heimat-integration/gleichwertige-lebensverhaeltnisse/demografie/demografischer-wandel/demografischer-wandel-node.html>
- Bundesministerium des Innern. (2024a, February 8):** *SWOT analyse*. Bundesministerium Des Innern Und Für Heimat. https://www.orghandbuch.de/Webs/OHB/DE/OrganisationshandbuchNEU/4_MethodenUndTechniken/Methoden_A_bis_Z/SWOT_Analyse/swot_analyse_node.html
- Bundesministerium des Innern. (2024b, July 3):** *Austritt Großbritanniens aus der EU*. Bundesministerium Des Innern Und Für Heimat. <https://www.bmi.bund.de/DE/themen/verfassung/europa/brexit/brexit-node.html>

- BRD Finanzagentur GmbH. (n.d.):** *Finanzagentur - Ziele und Aufgaben.* Deutsche Finanzagentur. Retrieved September 13, 2024, from <https://www.deutsche-finanzagentur.de/fms/finanzmarktstabilisierungsfonds/fms-auf-einen-blick>
- Bundeszentrale Für Politische Bildung. (2021, June 23):** *Landesbanken.* bpb.de. Retrieved September 15, 2024, from <https://www.bpb.de/kurz-knapp/lexika/lexikon-der-wirtschaft/20001/landesbanken/>
- Buric, D., & Bühner, K.-H. (n.d.):** *Schuldscheine etablieren sich international als Alternative zu Anleihen.* LBBW Webpace. Retrieved September 13, 2024, from https://www.lbbw.de/leistungen/unsere-loesungen/finanzierung/kapitalmarktfinanzierung/schuldscheindarlehen_aimvd5ucrg_d.html
- Busch, B. (2019, August 16):** *Europäische Union.* Iwd. Retrieved September 15, 2024, from <https://www.iwd.de/artikel/italiens-hausgemachte-misere-439564/>
- Buswell, G. (2024, August 7):** *Italian banks and services | Expatica.* Expatica Italy. Retrieved September 15, 2024, from <https://www.expatica.com/it/finance/banking/italian-banks-and-services-79419/#overview>
- BW-Bank Sparkassen. (n.d.):** *Die BW-Bank – Ihre Sparkasse in Stuttgart | BW-Bank.* Die BW-Bank – Ihre Sparkasse in Stuttgart. Retrieved September 13, 2024, from <https://www.bw-bank.de/de/home/bwbank/ueber-uns/sparkasse-stuttgart.html?n=true&stref=imagetextbox>
- BW-Bank Unternehmensprofil. (n.d.):** *Unternehmensprofil | BW-Bank.* Retrieved September 13, 2024, from <https://www.bw-bank.de/de/home/bwbank/ueber-uns/unternehmensprofil.html?n=true&stref=imagebox>
- BW-Bank. (n.d.):** *Internetfiliale | BW-Bank.* Retrieved September 13, 2024, from <https://www.bw-bank.de/de/home.html>
- Chevalier, S., Kemper, A., & Pierer, F. (n.d.):** *Verlässliche Liquidität mit Asset Backed Securities der LBBW.* LBBW Webpace. Retrieved September 13, 2024, from https://www.lbbw.de/leistungen/unsere-loesungen/finanzierung/kredite-und-forderungen/worAIng-capital-abs-abcps_aim173r4zk_d.html
- Cloer, T. (2013, July 18):** *Multi-Milliarden-Dollar-Deal: IBM soll Unicredit-IT modernisieren.* Computerwoche. <https://www.computerwoche.de/a/ibm-soll-unicredit-it-modernisieren,2542741>
- Commerzbank Annual Report 2023. (2024):** *Geschäftsbericht 2023.* In Commerzbank. Retrieved September 15, 2024, from <https://www.commerzbank.de/konzern/z-portale/cfcb-luxembourg/downloads/cfcb2024012-geschaeftsbericht2023-extern.pdf>

- Commerzbank ESG. (2023, November 24):** *ESG – Dimensionen der Nachhaltigkeit*. Retrieved September 15, 2024, from <https://www.commerzbank.de/nachhaltigkeit/corporate-governance/nachhaltigkeitsstrategie-stakeholderdialoge/esg-kriterien/>
- Commerzbank Firmenkunden. (n.d.):** *Firmenkunden Portal Commerzbank - Commerzbank*. Retrieved September 14, 2024, from <https://www.commerzbank.com/firmenkunden/>
- Commerzbank Strategy. (n.d.):** *Strategie und Marke - Konzern-Webseite*. Konzern-Webseite. Retrieved September 14, 2024, from <https://www.commerzbank.de/konzern/wer-wir-sind/strategie-marke/>
- Commerzbank Unternehmerkunden. (n.d.):** *Die Bank für Unternehmerkunden - Commerzbank*. Retrieved September 14, 2024, from <https://www.commerzbank.de/unternehmerkunden/>
- Commerzbank Wealth Management. (n.d.):** *Commerzbank Wealth Management - Commerzbank*. Retrieved September 14, 2024, from <https://www.commerzbank.de/wealth-management/>
- Commerzbank. (2024, August 7):** *Zahlen und Fakten - Konzern-Webseite*. Konzern-Webseite. Retrieved September 15, 2024, from <https://www.commerzbank.de/konzern/wer-wir-sind/zahlen-fakten/>
- Commerzbank. (n.d.):** *Wer wir sind - Konzern-Webseite*. Konzern-Webseite. Retrieved September 14, 2024, from <https://www.commerzbank.de/konzern/wer-wir-sind/>
- CONSOB. (n.d.):** *Home - CONSOB AND ITS ACTIVITIES - CONSOB*. CONSOB AND ITS ACTIVITIES. Retrieved September 13, 2024, from <https://www.consob.it/web/consob-and-its-activities>
- Corporate Communications. (2018, April 12):** *Santander launches the first blockchain-based international money transfer service across four countries* [Press-release]. Banco Santander; Banco Santander. <https://www.santander.com/content/dam/santander-com/en/documentos/historico-notas-de-prensa/2018/04/NP-2018-04-12-Santander%20launches%20the%20first%20blockchain-based%20international%20money%20transfer%20service%20across%20-en.pdf>
- Cudden, M. (2021, August 1):** *We.Trade | IBM*. Retrieved September 15, 2024, from <https://www.ibm.com/case-studies/wetrade-blockchain-fintech-trade-finance>
- Data, G. (2024, May 31):** *Die Geschichte des Online Bankings - G DATA*. G DATA | Trust in German Sicherheit. Retrieved September 13, 2024, from <https://www.gdata.de/tipps-tricks/geschichte-des-online-banking>

- DEBTVISION GmbH. (2024, August 28):** *Über uns | DEBTVISION*. DEBTVISION. Retrieved September 15, 2024, from <https://www.debtvision.de/ueber-uns/>
- Deller, J., Kern, S., Hausmann, E., & Diederichs, Y. (2008, January 1):** *Personalmanagement im demografischen Wandel: Ein Handbuch für den Veränderungsprozess*. ResearchGate. Retrieved September 15, 2024, from https://www.researchgate.net/publication/321562936_Personalmanagement_im_demografischen_Wandel_Ein_Handbuch_fur_den_Veranderungsprozess
- Deos, S., Mattos, O. B., & Mendonça, A. R. (2013, October 1):** *Banking systems transformations after the crisis and their impacts on regulation*. ResearchGate. Retrieved September 15, 2024, from https://www.researchgate.net/profile/Olivia-Bullio-Mattos/publication/299343572_Banking_systems_transformations_after_the_crisis_and_their_impacts_on_regulation/links/56f153bb08aec9e096b31f10/Banking-systems-transformations-after-the-crisis-and-their-impacts-on-regulation.pdf
- DerTreasurer. (2024, September 6):** *Green Finance im Treasury – DerTreasurer*. <https://www.dertreasurer.de/themen/green-finance/>
- Deutsche Bank. (2024, June 7):** *Deutsche Bank collaborates with industry partners to launch paper on blockchain interoperability*. Retrieved September 15, 2024, from https://www.db.com/news/detail/20240607-deutsche-bank-collaborates-with-industry-partners-to-launch-paper-on-blockchain-interoperability?language_id=1
- Deutsche Bank. (2020):** *History of Deutsche Bank*. Retrieved September 15, 2024, from <https://www.db.com/who-we-are/history/history-of-deutsche-bank>
- Deutsche Bank. (n.d.):** *About Deutsche Bank*. Retrieved September 14, 2024, from <https://www.db.com/who-we-are/>
- Deutsche Bank AI. (n.d.):** *Wie Künstliche Intelligenz das Bankgeschäft verändert*. Retrieved September 14, 2024, from https://www.db.com/what-next/digital-disruption/better-than-humans/how-artificial-intelligence-is-changing-banking/index?language_id=3
- Deutsche Bank Annual Report 2023. (2024):** *Geschäftsbericht 2023*. In Deutsche Bank. Retrieved September 15, 2024, from <https://investor-relations.db.com/files/documents/annual-reports/2024/DB-AG-Geschaeftsbericht-2023.pdf>
- Deutsche Bank Cloud. (n.d.):** *How cloud technology is silently revolutionising our economy*. Retrieved September 14, 2024, from https://www.db.com/what-next/digital-disruption/cloud/index?language_id=1

- Deutsche Bank DWS. (n.d.):** *DWS*. Retrieved September 14, 2024, from https://www.db.com/what-we-do/products-and-services/dws?language_id=3&AId=dwsde.redirect-en.shortcut
- Deutsche Bank ESG. (n.d.):** *ESG – Deutsche Bank*. Retrieved September 14, 2024, from https://investor-relations.db.com/esg/index?language_id=3
- Deutsche Bank Green Finance. (2024, July 16):** *Nachhaltige Finanzierungen*. Deutsche Bank. Retrieved September 15, 2024, from <https://www.deutsche-bank.de/ub/unsere-loesungen/nachhaltigkeit/nachhaltige-finanzierung.html>
- Deutsche Bank History. (n.d.):** *Geschichte der Bank*. Retrieved September 15, 2024, from https://www.db.com/who-we-are/history/history-of-deutsche-bank?language_id=3
- Deutsche Bank Investment Bank. (n.d.):** *Investment Bank Solutions – corporates and institutions*. Retrieved September 14, 2024, from https://corporates.db.com/solutions/investment-bank-solutions/?language_id=1&AId=ib.redirect-en.shortcut
- Deutsche Bank Privatkundenbank. (n.d.):** *Privatkundenbank*. Retrieved September 14, 2024, from https://www.db.com/what-we-do/products-and-services/private-bank?language_id=3&AId=pkb.redirect-en.shortcut
- Deutsche Bank Social. (n.d.):** *Gesellschaftliche Verantwortung*. Retrieved September 14, 2024, from https://www.db.com/what-we-do/responsibility/society/index?language_id=3
- Deutsche Bank Strategy. (n.d.):** *Strategy – Global Hausbank*. Retrieved September 14, 2024, from <https://www.db.com/who-we-are/strategy/>
- Deutsche Bank Sustainable Finance. (n.d.):** *Nachhaltige Finanzierungen & ESG-Anlagen*. Retrieved September 14, 2024, from https://www.db.com/what-we-do/responsibility/sustainability/sustainable-finance?language_id=3&AId=nachhaltige-finanzierungen.redirect-en.shortcut
- Deutsche Bank Technology. (n.d.):** *Technology transformation*. Retrieved September 14, 2024, from <https://www.db.com/what-we-do/focus-topics/tech/index>
- Deutsche Bank Unternehmensbank. (n.d.):** *Unternehmensbank*. Retrieved September 14, 2024, from https://www.db.com/what-we-do/products-and-services/corporate-bank?language_id=3&AId=ub.redirect-en.shortcut
- Deutsche Bundesbank Eurosystem. (2015, January 22):** *Asset Purchase Programme (APP)*. Retrieved September 15, 2024, from <https://www.bundesbank.de/de/aufgaben/geldpolitik/geldpolitische-wertpapierankauefe/asset-purchase-programme-app--830334>

- Deutscher Bundestag. (2009):** *Bankensystem und Bankenaufsicht in Deutschland* [Report].
<https://www.bundestag.de/resource/blob/409624/7592c651aef84a826a8e2251d4d676ff/WD-4-094-09-pdf-data.pdf>
- Die Bundesregierung. (2024, September 3):** *Fragen und Antworten zur Inflation | Bundesregierung*. Die Bundesregierung Informiert | Startseite. Retrieved September 15, 2024, from <https://www.bundesregierung.de/breg-de/aktuelles/faq-inflation-2062284>
- Diesch, N., & Weidinger, S. (2019, August 1):** *Sustainability ratings*. LBBW Webpace. Retrieved September 15, 2024, from https://www.lbbw.de/group/lbbw/sustainability/esratings/ratings_7vz24r4ha_e.html
- Diesch, N., & Weidinger, S. (2023, March 27):** *Weltklimakonferenzen: gemeinsam für den Klimaschutz*. LBBW Webpace. Retrieved September 15, 2024, from https://www.lbbw.de/perspektiven/themenspecials/energiewende/weltklimakonferenz/cop_93q6r15ik_d.html
- Dinter, S., & Knörr, M. (n.d.):** *FinTech*. Retrieved September 13, 2024, from <https://www.bundesbank.de/de/aufgaben/bankenaufsicht/einzelaspekte/fintech-598228>
- Doedens, K. (n.d.):** *So können Privatanleger nachhaltig investieren*. LBBW Webpace. Retrieved September 13, 2024, from https://www.lbbw.de/konzern/lbbw/nachhaltigkeit/privatkunden/privatkunden_adsexpgkvg_d.html
- Dohmen, C. (2024, April 12):** *Die Finanzkrise von 2007/2008 und ihre Folgen*. bpb.de. Retrieved September 15, 2024, from <https://www.bpb.de/themen/wirtschaft/finanzwirtschaft/524122/die-finanzkrise-von-2007-2008-und-ihre-folgen/>
- Dpa. (2019, March 5):** *Laut einer Studie wird im hohen Alter mehr gespart*. FAZ.NET.
<https://www.faz.net/aktuell/finanzen/meine-finanzen/sparen-und-geld-anlegen/laut-einer-studie-wird-im-hohen-alter-mehr-gespart-16073026.html>
- DPA. (2023, March 8):** *Bilanz: LBBW mit Milliardengewinn im Krisenjahr 2022*. ZEIT ONLINE. Retrieved September 15, 2024, from <https://www.zeit.de/news/2023-03/08/lbbw-mit-milliardengewinn-im-krisenjahr-2022>
- dpa. (2024, February 27).** *Demografischer Wandel in Italien*. DER SPIEGEL, Hamburg, Germany. Retrieved September 25, 2024, from <https://www.spiegel.de/wirtschaft/unternehmen/italien-demografischer-wandel-molkerei-chef-stellt-nur-mitarbeiter-ueber-60-ein-a-0a54ef97-a2a9-49d1-ab89-5d180b9cf7a8Drews>

- E., Wolf, J., & Gräfe, D. (2023, August 1):** *Unternehmen beim CSD - Wie glaubw¨rdig ist das Engagement der Firmen in der queeren Szene?* stuttgarter-zeitung.de. <https://www.stuttgarter-zeitung.de/inhalt.unternehmen-beim-csd-wie-glaubwuerdig-ist-das-engagement-der-firmen-in-der-queeren-szene.317baa95-e2eb-4089-a765-9dce95b3fa93.html>
- DSGV. (n.d.):** *Landesbanken: regionale Spitzeninstitute - DSGV.de.* DSGV_De. Retrieved September 14, 2024, from <https://www.dsgv.de/sparkassen-finanzgruppe/organisation/landesbanken.html>
- DZ Bank Annual Report 2023. (2024):** *Geschäftsbericht.* In DZ Bank. Retrieved September 15, 2024, from <https://www.geschaeftsbericht.dzbank.de/de/service/download-bereich>
- DZ Bank Firmenkunden. (n.d.):** *DZ BANK | Firmenkunden.* Retrieved September 14, 2024, from <https://firmenkunden.dzbank.de/>
- DZ Bank Institutionelle Kunden. (n.d.):** *Institutionelle kunden.* Retrieved September 14, 2024, from <https://www.dzbank.de/content/dzbank/de/home/institutionelle-kunden.html>
- DZ Bank Nachhaltigkeitsbericht. (2024):** *Nachhaltigkeitsbericht 2023.* https://www.dzbank.de/content/dam/dzbank/dokumente/de/dzbank/nachhaltigkeit/berichte-und-downloads/DZ%20BANK_NHB23_DE_final.pdf
- DZ Bank Privatkunden. (n.d.):** *Privatkunden.* Retrieved September 14, 2024, from <https://www.dzbank.de/content/dzbank/de/home/privatkunden.html>
- DZ Bank Social. (n.d.):** *Gesellschaftswerte.* Retrieved September 14, 2024, from <https://www.dzbank.de/content/dzbank/de/home/die-dz-bank/nachhaltigkeit/gesellschaftswerte.html>
- DZ Bank Sustainability. (n.d.):** *Nachhaltigkeit.* Retrieved September 14, 2024, from https://www.dzbank.de/content/dzbank/de/home/die-dz-bank/nachhaltigkeit.html?mtm_campaign=2024_KM_MM_Nachhaltigkeit_Umwelt_Search_phr&mtm_medium=SEA&mtm_group=2024_KM_MM_Nachhaltigkeit_Search&pk_campaign=Image-HJ2-2017&pk_kwd=SEA&gad_source=1&gclid=Cj0KCQjwiOy1BhD-CARIsADGvQnBUYJZd-dygddX6tTzWZS7zqDRVNa5y7VmN1Ow5H44xGS3Olt6d6FjQaAuzAE-ALw_wcB

- DZ Bank. (n.d.):** *Unsere Haltung*. Retrieved September 14, 2024, from <https://haltung.dzbank.de/content/haltung/de/homepage.html>
- DZ Group. (2024):** *DZ BANK Corporate Presentation*. https://www.dzbank.de/content/dam/dzbank/dokumente/en/dz-bank/investor-relations/presentations/DZ_BANK_Corporate_presentation.pdf
- DZ Privatbank. (2024):** *Leitlinie für verantwortungsvolles Investieren*. https://www.dz-privatbank.com/dzpb/pdf/RI_Policy_DZPB_04_2024.pdf
- Effenberger, A., Enkelmann, S., Menzel, C., Neumann, D., & Stolle, J. (2020):** *Marktkonzentration, Produktivität und Preisaufschläge: Deskriptive Evidenz auf Basis amtlicher Daten für Deutschland*. In Diskussionspapier Nr. 9. https://www.bmwk.de/Redaktion/DE/Downloads/Diskussionspapiere/20200716-diskussionspapier-marktkonzentration-produktivitaet-und-preisaufschlaege.pdf?__blob=publicationFile
- Elsner, D. (2018, February 26):** *Zusammenarbeit statt Konkurrenz: die Fintech-Kooperationen der DZ BANK Gruppe › Innovation LAB der DZ BANK Gruppe*. Retrieved September 15, 2024, from <https://innovationlab.dzbank.de/2018/02/26/zusammenarbeit-statt-konkurrenz-die-fintech-kooperationen-der-dz-bank-gruppe/>
- Engelbrecht, P. (2018, November 9):** *Crashkurs Finanzkrise*. fluter.de. Retrieved September 15, 2024, from <https://www.fluter.de/finanz-und-bankenkrise-einfach-erkl%C3%A4rt>
- Engel-Müller, M. (2023, June 19):** *Die Inflation und ihre Risiken mit Blick auf das Bankenumfeld — Finbridge GmbH & Co KG*. Finbridge GmbH & Co KG. Retrieved September 15, 2024, from <https://www.finbridge.de/aktuelles/2023/05/25/die-inflation-und-ihre-risiken-mit-blick-auf-das-bankenumfeld>
- Erdle, J., Kögler, A., & Preuße, J. (2024, April 15):** *Green Finance: Schluss mit reden, jetzt wird gehandelt!* LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/erfolge-erzielen/green-finance-studie_abchh3wokn_d.html
- ESGVolution. (2023, June 29):** *ESG für Banken und Finanzunternehmen*. Esgvolution. Retrieved September 15, 2024, from <https://www.esgvolution.com/de/wissen/esg-blog/esg-banken/>
- Etter, A., Flämig, M., Friedrich, L., Steil, F., & Zengerling, C. (n.d.):** *Sustainability Advisory für Finanzinstitute und institutionelle Investoren*. LBBW Webespace. Retrieved

September 13, 2024, from https://www.lbbw.de/leistungen/unsere-loesungen/advisory/sustainable-advisory/sustainability-advisory-finanzinstitute-institutionelle-kunden_ae5g2h69vh_d.html

Euramco. (2024, May 2): *Environmental Social Governance (ESG)*. EURAMCO. Retrieved September 15, 2024, from <https://www.euramco-asset.de/glossar/environmental-social-governance-esg/>

Europäischer Rat. (2024, June 19): *Basel III: internationaler Regulierungsrahmen für Banken*. Retrieved September 15, 2024, from <https://www.consilium.europa.eu/de/policies/basel-iii/>

European Banking Authority. (n.d.): *European Banking Authority (EBA)*. Retrieved September 13, 2024, from <https://www.bundesbank.de/de/aufgaben/bankenaufsicht/bundesbank/eba/european-banking-authority-eba--597796>

European Central Bank. (2021, December 7): *EZB-Bankenaufsicht – Aufsichtsprioritäten für die Jahre 2022-2024*. European Central Bank - Banking Supervision. Retrieved September 15, 2024, from https://www.bankingsupervision.europa.eu/banking/priorities/html/ssm.supervisory_priorities2022~0f890c6b70.de.html

European Central Bank. (2022a, January 13): *The digital transformation of the European banking sector: the supervisor's perspective*. European Central Bank - Banking Supervision. Retrieved September 15, 2024, from <https://www.bankingsupervision.europa.eu/press/speeches/date/2022/html/ssm.sp220113~8101be7500.en.html>

European Central Bank. (2022b, December 12): *EZB-Bankenaufsicht: Aufsichtsprioritäten des SSM für die Jahre 2023-2025*. European Central Bank - Banking Supervision. Retrieved September 15, 2024, from https://www.bankingsupervision.europa.eu/banking/priorities/html/ssm.supervisory_priorities202212~3a1e609cf8.de.html

European Central Bank. (2024, March 14): *Über uns*. Retrieved September 15, 2024, from <https://www.ecb.europa.eu/ecb/html/index.de.html>

European Central Bank Interest rates. (2024, September 12): *Official interest rates*. European Central Bank. Retrieved September 15, 2024, from https://www.ecb.europa.eu/stats/policy_and_exchange_rates/key_ecb_interest_rates/html/index.en.html

- Fechter, M. (2022, October 27):** *McKinsey-Studie: Europäische Fintechs haben trotz Herausforderungen enormes Wachstumspotenzial*. McKinsey & Company. Retrieved September 15, 2024, from <https://www.mckinsey.de/news/presse/studie-europaeische-fintechs-haben-trotz-herausforderungen-enormes-wachstumspotenzial>
- Fees, I. (2023, August 29):** *Aufstieg Venedigs: Knotenpunkt des Handels* - wissenschaft.de. Retrieved September 15, 2024, from <https://www.wissenschaft.de/damalsplus/knotenpunkt-des-handels/>
- Felscher, M. (n.d.):** *Jenseits des Emissionshandels: freiwillige CO₂-Kompensation*. LBBW Webservice. Retrieved September 14, 2024, from https://www.lbbw.de/perspektiven/themenspecials/emissionshandel/funktionsweise/emissionshandel-freiwillige-zertifikate_aeyds8nbwz_d.html
- Fend, L., & Hofmann, J. (2018):** *Digitalisierung in Industrie-, Handels- und Dienstleistungsunternehmen: Konzepte - Lösungen - Beispiele*. Springer-Verlag.
- Fischer, M. (2012):** *Handbuch Wertmanagement in Banken und Versicherungen*. Gabler Verlag.
- Fleig, J. (2023, December 30):** *SWOT-Analyse: So wird eine SWOT-Analyse erstellt*. business-wissen.de. Retrieved September 15, 2024, from <https://www.business-wissen.de/artikel/swot-analyse-so-wird-eine-swot-analyse-erstellt/>
- Focus. (2018, May 29):** *Wettbewerbsdruck und Niedrigzinsen prägen LBBW-Geschäft*. Retrieved September 15, 2024, from https://www.focus.de/finanzen/borse/wirtschaftsticker/unternehmen-wettbewerbsdruck-und-niedrigzinsen-praegen-lbbw-geschaeft_id_9001893.html
- Fonds professionell. (2024, July 29):** *FONDS professionell*. FONDS Professionell. Retrieved September 15, 2024, from <https://www.fondsprofessionell.de/news/unternehmen/headline/helaba-startet-chatgpt-samt-AI-fuehrerschein-234467/>
- FörderMarkt. (n.d.):** *Was sind Privatbanken?* Retrieved September 12, 2024, from <https://www.foerdermarkt.de/index.php/foerderlandschaft/62-privatbanken>
- Frien, B., & Karkowski, B. (2024, July 10):** *Der Weg zur Nachhaltigkeit*. Deutsche Bank. Retrieved September 15, 2024, from <https://www.deutsche-bank.de/ms/results-finanzwissen-fuer-unternehmen/international/der-weg-zur-nachhaltigkeit.html>
- Fürst Fugger Privatbank. (2022, July 4):** *Unsere Geschichte mit Zukunft | Fürst Fugger Privatbank*. Retrieved September 15, 2024, from <https://www.fuggerbank.de/ihre-bank/tradition/>

- Gabler. (2018, February 14):** *SWOT-Analyse*. Gabler Wirtschaftslexikon. Retrieved September 15, 2024, from <https://wirtschaftslexikon.gabler.de/definition/swot-analyse-52664/version-275782>
- Gaisdörfer, I. (2023, March 28):** *DZ BANK erweitert ESG-Ziele*. Retrieved September 15, 2024, from <https://www.dzbank.de/content/dzbank/de/home/die-dz-bank/presse/pressemitteilungen/2023/dz-bank-erweitertesgziele.html>
- Gartner, B. (2017, November 9):** *Gut 350 Jahre lang beeinflussten die Medici die Geschichte Europas. Sie waren skrupellos, kunstsinnig, erfolgreich. Forscher bringen nun Licht in den glanzvoll-düsteren Mythos*. National Geographic. Retrieved September 15, 2024, from <https://www.nationalgeographic.de/geschichte-und-kultur/die-medici-geld-macht-mord>
- Geno Crowd GmbH. (2024, July 3):** *FinTech-Unternehmen, die große Konkurrenz traditioneller Banken*. GenoCrowd. Retrieved September 12, 2024, from <https://www.genocrowd.de/wissen/fintech-unternehmen/>
- Gerhard, A., & Schweikert, U. (2013):** *Verdi-Handbuch*. Springer-Verlag.
- German Centres. (2023, June 2):** *Deutscher Akademischer Austauschdienst - German Centres*. Retrieved September 15, 2024, from <https://www.germancentre.com/kunden/deutscher-akademischer-austauschdienst/>
- Germany Population. (n.d.):** *Germany Population 2024 (Live)*. Retrieved September 13, 2024, from <https://worldpopulationreview.com/countries/germany>
- Gieseler, J. (2022, July 1).** *Die Sparkassenorganisation in Italien*. Sparkassen International. Retrieved September 24, 2024, from <http://www.dsgv.de/de/sparkassen-finanzgruppe/sparkassen-international/index.html>
- Göck, M. (n.d.):** *Die passenden Leistungen hat die LBBW: Unternehmensfinanzierung nach ESG-Kriterien*. LBBW Webpace. Retrieved September 14, 2024, from https://www.lbbw.de/konzern/lbbw/nachhaltigkeit/unternehmensfinanzierung/unternehmensfinanzierung_adsexpgtow_d.html
- Goddard, J., Molyneux, P., Wilson, J. O., & Tavakoli, M. (2007):** *European banking: An overview*. *Journal of Banking & Finance*, 31(7), 1911–1935. <https://doi.org/10.1016/j.jbankfin.2007.01.002>
- Groß, K., Heck, L. J., & Hartmann, M.-M. (n.d.):** *Damit gelingen auch große Vorhaben leicht: Konsortialkredite*. LBBW Webpace. Retrieved September 13, 2024, from https://www.lbbw.de/leistungen/unsere-loesungen/finanzierung/kapitalmarktfinanzierung/konsortialkredite_aimqft6gnc_d.html

- Habdank, P. (2021, September 10):** *Deutsche Banken verlieren massiv im Firmenkundengeschäft.* FINANCE. Retrieved September 15, 2024, from <https://www.finance-magazin.de/banAIng-berater/firmenkundengeschaeft/deutsche-banken-verlieren-massiv-im-firmenkundengeschaeft-32729/>
- Handelsblatt. (n.d.):** *Handelsblatt.* Retrieved September 12, 2024, from <https://www.handelsblatt.com/finanzen/banken-versicherungen/banken/unicredit-italienische-gross-bank-schuettet-gesamten-gewinn-an-investoren-aus/100012816.html>
- Handelszeitung. (2019a, November 12):** *Handelszeitung.* Retrieved September 15, 2024, from <https://www.handelszeitung.ch/finanzlexikon/private-bankIng>
- Handelszeitung. (2019b, November 20):** *Handelszeitung.* Retrieved September 15, 2024, from <https://www.handelszeitung.ch/finanzlexikon/sparkasse>
- Harke, M. (n.d.):** *Die LBBW, eine gute Arbeitgeberin – vielfältige Vorteile und Angebote für Mitarbeitende.* LBBW Webpace. Retrieved September 14, 2024, from https://www.lbbw.de/menschen/karriere/benefits/benefits_7wo376iw8_d.html
- Hartmann, U., & Sohn, J. (2022, December 12):** *Die zunehmende Bedeutung von Sustainable Finance im Finanzsektor.* Zebra-Magazin. Retrieved September 15, 2024, from <https://zebramagazin.de/die-zunehmende-bedeutung-von-sustainable-finance-im-finanzsektor-8166/>
- Harwardt, M. (2022):** *Management der Digitalen Transformation: Eine Praxisorientierte Einführung.* Springer Gabler Wiesbaden.
- Hassan, F. (2014, March 20):** *Ein Blick nach Deutschland I – Wie das Drei-Säulen-Modell des deutschen Bankenmarkts durch die Krise kam.* Finance Watch. Retrieved September 15, 2024, from <https://www.finance-watch.org/blog/ein-blick-nach-deutschland-1-wie-das-drei-saulen-modell-des-deutschen-bankenmarkts-durch-die-krise-kam/>
- Hastenteufel, J., & Ganster, F. (2021):** *Einflussfaktoren auf die Akzeptanz von Robo Advisors: Digitale Kommunikation in der Anlageberatung.* Springer Gabler.
- Haumann, T. (2023, September 22):** *Dr. Neckel Unternehmensberatung - Best Practice Beispiel: Das Ideenmanagement bei der LBBW.* Retrieved September 15, 2024, from <https://www.hartmut-neckel.de/blog/best-practice-beispiel-das-ideenmanagement-bei-der-lbbw.html>

- Helaba Annual Report 2023. (2024):** *Vielfalt stärkt uns - Geschäftsbericht 2023*. In Helaba. Retrieved September 15, 2024, from <https://www.helaba.com/media/docs/de/investor-relations/veroeffentlichungen/geschaeftsberichte/geschaeftsberichte-2023/geschaeftsbericht-2023.pdf>
- Helaba Green Finance. (n.d.):** *Helaba - Green Bonds*. Retrieved September 14, 2024, from <https://www.helaba.com/de/investor-relations/greenbonds.php>
- Helaba Group ESG. (n.d.):** *ESG-Ziele für Helaba Gruppe*. Retrieved September 14, 2024, from <https://www.helaba.com/media/docs/de/nachhaltigkeit/esg-information/esg-ziele.pdf>
- Helaba Nachhaltigkeit. (n.d.):** *Helaba - ESG-Information für Analysten*. Retrieved September 14, 2024, from <https://www.helaba.com/de/nachhaltigkeit/esg-information/esg-information.php>
- Helaba Profil. (n.d.):** *Helaba - unser Profil*. Retrieved September 14, 2024, from <https://www.helaba.com/de/ueber-uns/profil/>
- Helaba Purpose. (n.d.):** *Helaba - Unsere Kernwerte*. Retrieved September 14, 2024, from <https://www.helaba.com/de/werte-die-bewegen/unsere-kernwerte.php>
- Helaba Sustainability. (n.d.):** *Helaba - Nachhaltigkeit auf einen Blick*. Retrieved September 14, 2024, from <https://www.helaba.com/de/nachhaltigkeit/>
- Helaba. (n.d.):** *Helaba - Träger, Stammkapital, Organe*. Retrieved September 14, 2024, from <https://www.helaba.com/de/ueber-uns/profil/traeger-stammkapital-organe.php>
- Helgi Library. (2022, March 28):** *Herfindahl-Hirschman Index (Total Assets) in Italy*. Retrieved September 15, 2024, from <https://www.helgilibrary.com/indicators/herfindahl-hirschman-index-total-assets/italy/>
- Hellenkamp, D. (2023):** *Bankwesen im Zeitalter von Disruptionen: Wie Digitalisierung, Demografie und Kundenfokussierung Die Branche Revolutionieren*. Springer Gabler.
- Herbert, F. (2023, March 7):** *DEBTVISION unterstützte Porsches €2,7 Mrd. Rekord-Schuldscheintransaktion*. DEBTVISION. Retrieved September 15, 2024, from <https://www.debtvision.de/debtvision/debtvision-unterstuetzte-porsches-e27-mrd-rekord-schuldscheintransaktion/>
- Hisolutions. (2016, April 10):** *LBBW: BCM Systeme ausgerichtet an internationalen Anforderungen (ISO 22301)*. Retrieved September 15, 2024, from <https://www.hisolutions.com/detail/lbbw-bcm-systeme-ausgerichtet-an-internationalen-anforderungen-iso-22301/>

- Hock, M., Mußler, H., & Siedenbiedel, C. (2024, April 15):** *Irans Angriff auf Israel sorgt für Unsicherheit an den Börsen.* FAZ.NET. <https://www.faz.net/aktuell/finanzen/irans-angriff-auf-israel-sorgt-fuer-unsicherheit-an-den-boersen-19655607.html>
- Hoffmann, B. N. (2023, June 19):** *ESG-Kriterien: Definition und Erklärung des Nachhaltigkeits-Ratings.* FOCUS.de. Retrieved September 15, 2024, from https://praxistipps.focus.de/esg-kriterien-definition-und-erklaerung-des-nachhaltigkeits-ratings_125412
- Hopf, A. (n.d.):** *Nachhaltige Transformation im Blick: das ESG-Team der LBBW.* LBBW Webservice. Retrieved September 14, 2024, from https://www.lbbw.de/artikelseite/teams-der-lbbw/team-esg_aih5fxw2g6_d.html
- Horch, P. (2023, November 22):** *Vor Bitcoin: Wer hat die Blockchain erfunden?* BTC-ECHO. <https://www.btc-echo.de/news/vor-bitcoin-wer-hat-die-blockchain-erfunden-rp1-166515/>
- Hufeland, F. (2023, May 14):** *Online-Banking: Das sind die Vor- und Nachteile.* CHIP. Retrieved September 15, 2024, from https://praxistipps.chip.de/online-banking-das-sind-die-vor-und-nachteile_161041
- Hütten, M. (2022, May 10):** *Kryptowährungen und ihre Bedeutung im Finanzsystem.* bpb.de. Retrieved September 15, 2024, from <https://www.bpb.de/shop/zeitschriften/apuz/geldpolitik-2022/507737/kryptowaehrungen-und-ihre-bedeutung-im-finanzsystem/>
- Hüttmann, M. G. (2021, October 7):** *Eurokrise.* bpb.de. Retrieved September 15, 2024, from <https://www.bpb.de/kurz-knapp/lexika/das-europalexikon/176846/eurokrise/>
- HypoVereinsbank. (n.d.-a):** *HypoVereinsbank Unternehmensgeschichte seit 1869 | HypoVereinsbank (HVB).* Retrieved September 14, 2024, from <https://www.hypovereinsbank.de/hvb/ueber-uns/das-unternehmen/geschichte>
- HypoVereinsbank. (n.d.-b):** *Unternehmensprofil: Wir stellen uns vor | HypoVereinsbank (HVB).* Retrieved September 14, 2024, from <https://www.hypovereinsbank.de/hvb/ueber-uns/das-unternehmen>
- HZ Banking. (2024, June 17):** *HZ Banking.* Handelszeitung. Retrieved September 15, 2024, from <https://www.handelszeitung.ch/banking/landesbanken-deka-und-dz-bank-holen-uber-1000-neue-mitarbeiter-721939>
- ICS. (2019, February 21):** *Blockchain-Technologie – Sind Banken bald überflüssig?* ICS Adminservice. Retrieved September 15, 2024, from <https://www.ics-adminservice.de/finance-accounting/blockchain-werden-banken-kuenftig-ueberfluessig/>

- Imam, P. (2013):** *Demographic shift and the financial sector stability: the case of Japan.* Journal of Population Ageing, 6(4), 269–303. <https://doi.org/10.1007/s12062-013-9089-9>
- Ingelfinger, R. (n.d.):** *Mehr als Banking: Die LBBW überzeugt durch ihr gesellschaftliches Engagement.* LBBW Webpage. Retrieved September 13, 2024, from https://www.lbbw.de/konzern/lbbw/verantwortung/engagement/gesellschaftliches-engagement_7vpu2vryc_d.html
- IT Finanzmagazin. (2021, March 29):** *Commerzbank vertieft mit Google-Cloud und Azure ihre Multi-Cloud-Strategie.* Retrieved September 15, 2024, from <https://www.it-finanzmagazin.de/commerzbank-google-cloud-azure-119052/>
- IT Finanzmagazin. (2024, April 17):** *FinTech Bitpanda vereinbart Krypto-Partnerschaft mit der Landesbank Baden-Württemberg.* Retrieved September 15, 2024, from <https://www.it-finanzmagazin.de/fintech-bitpanda-vereinbart-krypto-partnerschaft-mit-der-lbbw-209176/>
- Italian Commercial Banks. (n.d.):** *Italian Commercial Banks.* Retrieved September 13, 2024, from <http://www.commercialbanksguide.com/italian+commercial+banks/>
- Jerzy, N. (2023, January 25):** *Das sind Deutschlands älteste Privatbanken.* capital.de. <https://www.capital.de/geld-versicherungen/das-sind-deutschlands-aelteste-privatbanken>
- Jhaxell. (2023, December 5):** *UniCredit enhances digital capabilities with strategic investment in German FinTech Banxware.* FinTech Global. Retrieved September 15, 2024, from <https://fintech.global/2023/12/05/unicredit-enhances-digital-capabilities-with-strategic-investment-in-german-fintech-banxware/>
- Joos, T. (2024, August 28):** *Nachteile und Gefahren der Blockchain.* Security-Insider. <https://www.security-insider.de/nachteile-und-gefahren-der-blockchain-a-25ee1da32be79b6f41a73a89b93d4390/>
- Jugend und Finanzen. (n.d.):** *Das Bankensystem in Deutschland. Jugend Und Finanzen - Alle - Finanzthemen.* Retrieved September 12, 2024, from <https://www.jugend-und-finanzen.de/alle/finanzthemen/wirtschaft-und-banken/das-bankensystem-in-deutschland>
- Kahl, S. (2024a, March 6):** *LBBW macht Milliarden Gewinn trotz Vorsorge wegen Immobilien.* Retrieved September 15, 2024, from <https://www.bloomberg.com/news/articles/2024-03-06/lbbw-macht-milliardengewinn-trotz-vorsorge-wegen-immobilien>

- Kahl, S. (2024b, July 8):** *LBBW meldet neun Vergütungsmillionäre in den eigenen Reihen.* Retrieved September 15, 2024, from <https://www.bloomberg.com/news/articles/2024-07-08/lbbw-meldet-neun-vergutungsmillionare-in-den-eigenen-reihen>
- Karioth, V. (2024):** *BayernLB – Factbook.* https://www.bayernlb.com/internet/media/en/ir/downloads_1/investor_relations_3/ir_praesentation/aktuell_5/bayernlb_factbook.pdf#:~:text=URL%3A%20https%3A%2F%2Fwww.bayernlb.com%2Finternet%2Fmedi-a%2Fen%2Fir%2Fdownloads_1%2Finvestor_relations_3%2Fir_praesentation%2Faktuell_5%2Fbayernlb_factbook.pdf%0AVisible%3A%200%25%20
- Kimmel, E. (2021, June 23):** *Der Marshallplan in Europa.* bpb.de. Retrieved September 15, 2024, from <https://www.bpb.de/themen/nachkriegszeit/marshallplan/40036/der-marshallplan-in-europa/>
- Kneer, E. (n.d.):** *Das ESG-Dashboard für nachhaltiges Wirtschaften.* LBBW Webpace. Retrieved September 14, 2024, from https://www.lbbw.de/konzern/lbbw/nachhaltigkeit/esg-dashboard/dashboard_ah98sa54c6_d.html
- Konto. (n.d.):** *Nachteile Online Kontoführung.* Retrieved September 13, 2024, from <https://www.konto.org/ratgeber/allgemein/online-banking/nachteile-online-kontofuehrung/>
- Kraft, I. (2022, September 14):** *Ab in die Cloud: Warum die Berechnung von Handelsrisiken umziehen sollte* › *Innovation LAB der DZ BANK Gruppe.* Retrieved September 15, 2024, from <https://innovationlab.dzbank.de/2022/09/14/ab-in-die-cloud-berechnung-der-handelsrisiken-der-dz-bank-zieht-um/>
- Krause, D. (2004):** *Die Commerz- und Disconto-Bank 1870-1920/23: Bankgeschichte als Systemgeschichte.* Franz Steiner Verlag.
- Kremer, S., Mas, G., & Zimmermann, G. (2024):** *KI und Nachhaltigkeit Chancen und Risiken in Zeiten der Ressourcenknappheit.* https://www.lbbw-am.de/fileadmin/Studien/2024-06-14_Blickpunkt_KI_und_Nachhaltigkeit.pdf
- Kröner, A. (2024, July 2):** *Unicredit wehrt sich gegen EZB-Forderung zum Russland-Geschäft.* *Handelsblatt.* Retrieved September 15, 2024, from <https://www.handelsblatt.com/finanzen/banken-versicherungen/banken/ukraine-krieg-unicredit-wehrt-sich-gegen-ezb-forderung-zum-russland-geschaeft/100049661.html>
- Landesbanken. (n.d.):** *Landesbanken.* Retrieved September 15, 2024, from https://www.bezahlen.de/lexikon/landesbanken_525.html

- Landesbanken DSGVO. (n.d.):** *Landesbanken: regionale Spitzeninstitute.* DSGVO_De. Retrieved September 13, 2024, from <https://www.dsgv.de/sparkassen-finanzzgruppe/organisation/landesbanken.html>
- Lange, R. (2023, November 2):** *Gemeinsam stark: Strategische Partnerschaften zwischen Banken und FinTechs.* BankingHub. Retrieved September 15, 2024, from <https://bankinghub.de/blog/banken-fintechs-partnerschaften>
- Laschewski, A. (2024, December 9):** *Science-Fiction fürs Portfolio: Welche Risiken und Chancen birgt künstliche Intelligenz?* LBBW Webpage. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/maerkte-verstehen/kuenstliche-intelligenz-portfolio_6854dsmhr_d.html
- LBBW. (n.d.):** *LBBW mit Vorsteuergewinn von über 1,3 Milliarden Euro.* LBBW Webpage. Retrieved September 12, 2024, from https://www.lbbw.de/artikelseite/pressemittteilung/lbbw-vorsteuergewinn-von-ueber-1-milliarden-euro_ahyzx4zbh8_d.html
- LBBW Annual Report 2017. (2018):** *LBBW Annual Report 2017.*
https://www.lbbw.de/group/news-and-service/investor-relations/financial-reports/financial-reports_7u12dygoe_e.html
- LBBW Annual Report 2018. (2019):** *LBBW Annual Report 2018.*
https://www.lbbw.de/group/news-and-service/investor-relations/financial-reports/financial-reports_7u12dygoe_e.html
- LBBW Annual Report 2019. (2020):** *LBBW Annual Report 2019.*
https://www.lbbw.de/group/news-and-service/investor-relations/financial-reports/financial-reports_7u12dygoe_e.html
- LBBW Annual Report 2021. (2022):** *LBBW Annual Report 2021.*
https://www.lbbw.de/group/news-and-service/investor-relations/financial-reports/financial-reports_7u12dygoe_e.html
- LBBW Annual Report 2022. (2023):** *LBBW Annual Report 2022.*
https://www.lbbw.de/group/news-and-service/investor-relations/financial-reports/financial-reports_7u12dygoe_e.html
- LBBW Annual Report 2023. (2024):** *LBBW Annual Report 2023.*
https://www.lbbw.de/group/news-and-service/investor-relations/financial-reports/financial-reports_7u12dygoe_e.html
- LBBW Aufsichtsrat. (n.d.):** *Bereit für Neues: der Aufsichtsrat der LBBW.* LBBW Webpage. Retrieved September 13, 2024, from https://www.lbbw.de/konzern/lbbw/aufsichtsrat/aufsichtsrat_7v4kzduaq_d.html

- LBBW Blockchain. (2024, December 9):** *Blockchain: Best Practices aus Wirtschaft und Finanzbranche*. LBBW Webspaces. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/maerkte-verstehen/blockchain-nimmt-in-deutschland-fahrt-auf_7dsvrzbff_d.html
- LBBW Clients. (n.d.):** *Unsere Kunden*. LBBW Webspaces. Retrieved September 14, 2024, from https://www.lbbw.de/leistungen/unsere-kunden/unsere-kunden_7wudx3fyh_d.html
- LBBW Code of Conduct. (2024):** *LBBW Code of Conduct*. https://www.lbbw.de/rechts-und-kundeninformationen/lbbw-code-of-conduct-en_7v4a6ctuj_m.pdf
- LBBW Compliance. (n.d.):** *Compliance im LBBW Konzern*. LBBW Webspaces. Retrieved September 14, 2024, from https://www.lbbw.de/konzern/lbbw/compliance/compliance_agzs75orip_d.html
- LBBW Corporate Finance. (n.d.):** *Corporate Finance bei der LBBW: Expertise für passgenaue Lösungen*. LBBW Webspaces. Retrieved September 13, 2024, from https://www.lbbw.de/leistungen/unsere-loesungen/corporate-finance/corporate-finance_afcdyhjkn_d.html
- LBBW Cybersecurity. (2023, December 6):** *Cybersecurity - Banking braucht Sicherheit*. LBBW Webspaces. Retrieved September 15, 2024, from https://www.lbbw.de/perspektiven/themenspecials/cybersecurity/cybersecurity_agbzx55t3i_d.html
- LBBW Cybersecurity. (n.d.):** *Jede Woche eine Cyberattacke*. LBBW Webspaces. Retrieved September 13, 2024, from https://www.lbbw.de/artikelseite/maerkte-verstehen/jede-woche-eine-cyberattacke_afov763vpj_d.html
- LBBW Deutschland. (n.d.):** *Hier finden Sie uns: die Standorte der LBBW*. LBBW Webspaces. Retrieved September 14, 2024, from https://www.lbbw.de/konzern/news-and-service/standorte/standorte_7v4kzdubn_d.html
- LBBW Electronic Banking. (n.d.):** *Electronic banking with LBBW*. LBBW Webspaces. Retrieved September 13, 2024, from https://www.lbbw.de/services/our-solutions/cash-management/electronic-banking/electronic-banking_7v6tavf3c_e.html
- LBBW Financial Reports. (n.d.):** *LBBW financial and annual reports*. LBBW Webspaces. Retrieved September 13, 2024, from https://www.lbbw.de/group/news-and-service/investor-relations/financial-reports/financial-reports_7u12dygoe_e.html
- LBBW Finanzierung. (n.d.):** *Lösungen für die Kunden finden: Finanzierung bei der LBBW*. LBBW Webspaces. Retrieved September 13, 2024, from https://www.lbbw.de/leistungen/unsere-loesungen/finanzierung/finanzierung/finanzierung_7vjzjmvci_d.html

- LBBW Fit for 55. (2021, November 23):** *Fit for 55 – Wie erreicht Europa seine Klimaziele?* LBBW Webpace. Retrieved September 15, 2024, from https://www.lbbw.de/perspektiven/themenspecials/fit-for-55/fit-for-55/fit-for-55_adyymwda9e_d.html
- LBBW Geschäfts- und Privatkunden. (n.d.):** *Individueller Service und Beratung nach Maß für Geschäfts- und Privatkunden.* LBBW Webpace. Retrieved September 13, 2024, from https://www.lbbw.de/leistungen/unsere-kunden/geschaefts-und-privat-kunden/geschaefts-und-privatkunden_7uj7n6acp_d.html
- LBBW Green Finance. (n.d.):** *So geht Green Finance.* LBBW Webpace. Retrieved September 14, 2024, from https://www.lbbw.de/perspektiven/themenspecials/green-finance/green-finance_9ucdstmno_d.html
- LBBW Innovation Lab. (n.d.):** *Das Innovation Lab der LBBW: die Zukunft des Bankings gestalten.* LBBW Webpace. Retrieved September 13, 2024, from https://www.lbbw.de/konzern/lbbw/innovation/innovation/innovation-lab_ageq5ehyck_d.html
- LBBW International Business. (n.d.):** *16 Standorte in 15 Ländern: Das internationale Netzwerk der LBBW!* LBBW Webpace. Retrieved September 13, 2024, from https://www.lbbw.de/leistungen/unsere-loesungen/international-business/auslandsnetzwerk/auslandsnetzwerk_7vjzjmvcm_d.html
- LBBW Investor Relations. (n.d.):** *LBBW investor relations reports.* LBBW Webpace. Retrieved September 13, 2024, from https://www.lbbw.de/group/news-and-service/investor-relations/presentations-ir-reports/presentations-ir-reports_7u12dygor_e.html
- LBBW Konzern. (n.d.):** *Der LBBW Konzern – alle wichtigen Informationen.* LBBW Webpace. Retrieved September 13, 2024, from https://www.lbbw.de/konzern/lbbw/landesbank-baden-wuerttemberg_7vpbte8hs_d.html
- LBBW New York. (n.d.):** *Point of contact in the US: the LBBW branch in New York.* LBBW Webpace. Retrieved September 13, 2024, from https://www.lbbw.de/services/our-solutions/international-business/international-network/office-new-york_ab4h1kqq3u_e.html
- LBBW Satzung. (2022):** *Satzung der Landesbank Baden-Württemberg.* https://www.lbbw.de/rechts-und-kundeninformationen/satzung-der-landesbank-baden-wuerttemberg_7xuk17wej_md.pdf
- LBBW SFirm. (n.d.):** *Sie benötigen eine moderne Software für Ihr Finanzmanagement? SFirm ist die einfache Electronic.* LBBW Webpace. Retrieved September 13,

2024, from https://www.lbbw.de/services/our-solutions/cash-management/electronic-banking/sfirm_aigftkriak_e.html

LBBW Singapore. (n.d.): *Point of contact for Asia/Pacific: the LBBW branch in Singapore.*

LBBW Webpage. Retrieved September 13, 2024, from https://www.lbbw.de/services/our-solutions/international-business/international-network/office-singapore_ab4h1kstnb_e.html

LBBW Standorte. (n.d.): *LBBW: unsere Standorte in Deutschland.* LBBW Webpage. Re-

trieved September 13, 2024, from https://www.lbbw.de/konzern/news-and-service/standorte/lbbw-in-deutschland_7ychek4b2_d.html

LBBW subsidiaries. (n.d.): *The subsidiaries of LBBW.* LBBW Webpage. Retrieved Sep-

tember 13, 2024, from https://www.lbbw.de/group/lbbw/subsidiaries/subsidiaries_7wong3s3u_e.html

LBBW Sustainability Advisory. (n.d.): *Sustainability Advisory: Ihre Beratungsteams für*

nachhaltige Strategien und Finanzierungen. LBBW Webpage. Retrieved September 13, 2024, from https://www.lbbw.de/leistungen/unsere-loesungen/corporate-finance/sustainability-advisory-expertise_aim83gdgkk_d.html

LBBW Transformation. (n.d.): *Wie sich die LBBW für nachhaltiges Wirtschaften einsetzt.*

LBBW Webpage. Retrieved September 14, 2024, from https://www.lbbw.de/konzern/lbbw/nachhaltigkeit/transformation-gestalten/nachhaltigkeit_7vz24r4gy_d.html

LBBW Über uns. (n.d.): *Über Uns - Was die LBBW so besonders macht.* LBBW Webpage.

Retrieved September 12, 2024, from https://www.lbbw.de/konzern/lbbw/ueber-uns/ueber-uns_7v4kzduc3_d.html

LBBW Verantwortung. (n.d.): *Nachhaltig wirtschaften für eine bessere Zukunft: worauf es*

der LBBW ankommt. LBBW Webpage. Retrieved September 14, 2024, from https://www.lbbw.de/konzern/lbbw/verantwortung/verantwortung/verantwortung_7vpbte8ja_d.html

LBBW Vorstand. (n.d.): *Bereit für Neues: der Vorstand der LBBW.* LBBW Webpage. Re-

trieved September 13, 2024, from https://www.lbbw.de/konzern/lbbw/vorstand/vorstand_7v4kzducq_d.html

LBBW Halbjahresgewinn. (n.d.): *Halbjahresgewinn erhöht: Starkes Ergebnis bestätigt*

strategische Ausrichtung. LBBW Webpage. Retrieved September 12, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/lbbw-ergebnis-halbjahr-2024_aitgbkw7e6_d.html

- LBS. (n.d.):** *Die Landesbausparkassen in der Übersicht | LBS.de*. Retrieved September 13, 2024, from <https://www.lbs.de/unternehmen/bausparkassen.html>
- Lebrun, M., Unsplash, Kolak, M., Martin, A., & Quinten, D. (2021):** *Transformation aus Tradition: Stabilität durch genossenschaftliche Banken. In Die Finanzmarktpolitischen Positionen Der Deutschen Genossenschaftsbanken Für Die Laufende Legislaturperiode Des Deutschen Bundestags (2021-2025)*.
[https://www.bvr.de/p.nsf/0/F9CE9A90E9D6F5E5C12588950034D8CE/\\$file/BVR-Positionspapier20.%20Wahlperiode.pdf](https://www.bvr.de/p.nsf/0/F9CE9A90E9D6F5E5C12588950034D8CE/$file/BVR-Positionspapier20.%20Wahlperiode.pdf)
- Leja, W. (2024, April 16):** *LBBW bietet Unternehmenskunden Zugang zu Kryptowährungen*. Staatsanzeiger BW. Retrieved September 15, 2024, from <https://www.staatsanzeiger.de/nachrichten/wirtschaft/lbbw-bietet-unternehmenskunden-zugang-zu-kryptowaehrungen/>
- Lohmüller, M. (2024, July 5):** *Nachhaltiges Anlegen für Unternehmens- und institutionelle Kunden – mit der LBBW*. LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/konzern/lbbw/nachhaltigkeit/uk-ik/uk-institutionelle_adsexpg2jc_d.html
- LPB Brexit. (n.d.):** *Der Brexit und seine Folgen - Aktueller Stand 2024 - Austritt Großbritanniens aus der EU - Aktuelle Lage Brexit Einigung: Das neue Handels- und Partnerschaftsabkommen*. Lpb-bw. Retrieved September 13, 2024, from <https://www.lpb-bw.de/brexit>
- LPB Euro-Krise. (n.d.):** *Euro-Krise*. Lpb-bw. Retrieved September 13, 2024, from <https://www.lpb-bw.de/euro-krise>
- LPB Ukraine Krieg. (n.d.):** *Ukraine Krieg aktuell - Verlauf 2022-2024 - Russland Ukraine Konflikt erklärt - tägliche Zusammenfassung liveblog Ukraine aktuell - Lage Karte Hintergrund Analyse Chronik - LpB BW*. Lpb-bw. Retrieved September 13, 2024, from <https://www.lpb-bw.de/ukrainekonflikt>
- Lütke-Uhlenbrock, C. (2007):** *Bewertung öffentlich-rechtlicher Sparkassen*. Springer-Verlag.
- Manager. (2009, February 18):** *LBBW macht 2,1 Milliarden Euro Verlust*. Manager, Hamburg, Germany. <https://www.manager-magazin.de/finanzen/artikel/a-608430.html>
- Manager. (2017, February 24):** *Unicredit bekommt 13 Milliarden*. Manager, Hamburg, Germany. <https://www.manager-magazin.de/unternehmen/banken/unicredit-13-milliarden-euro-hohe-kapitalerhoehung-gelungen-a-1136091.html>

- Mändle, E. (2018, February 19):** *Raiffeisenbanken*. Gabler Wirtschaftslexikon. Retrieved September 15, 2024, from <https://wirtschaftslexikon.gabler.de/definition/raiffeisenbanken-43048>
- Mang, T., & Pilwarsch, P. (2022, September 19):** *MeisterTask Webinar: So steigert die LBBW Agilität und Produktivität* [Video]. YouTube. <https://www.youtube.com/watch?v=HTX62XUV0lg>
- Manger, J. (2018, March 10):** *Definition: öffentlich-rechtliche Sparkasse*. Gabler Banklexikon. Retrieved September 15, 2024, from <https://www.gabler-banklexikon.de/definition/oeffentlich-rechtliche-sparkasse-60225>
- Marbet. (n.d.):** *marbet | LBBW Führungskräftetagung 2022*. Retrieved September 14, 2024, from <https://www.marbet.com/de/cases/lbbw-fuehrungskraeftetagung-2022/>
- Marten, J. (2022, March 10):** *LBBW steigert Gewinn vor Steuern deutlich auf 817 Millionen Euro*. LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/lbbw-steigert-gewinn-vor-steuern-auf-817-millionen-euro_aegez3k5m5_d.html
- Matthes, J. (2022):** *Italiens Bankensystem und die Coronakrise*. Wirtschaftsdienst. Retrieved September 15, 2024, from <https://www.wirtschaftsdienst.eu/inhalt/jahr/2022/heft/2/beitrag/italiens-bankensystem-und-die-coronakrise.html>
- McBride, J. (2018, October 18):** *Does Italy threaten a new European debt crisis?* Council on Foreign Relations. <https://www.cfr.org/in-brief/does-italy-threaten-new-european-debt-crisis>
- Meinecke, C., & Streim, A. (2023, December 7):** *Digitalisierte Unternehmen ziehen im Wettbewerb davon*. Bitkom. <https://www.bitkom.org/Presse/Presseinformation/Digitalisierte-Unternehmen-ziehen-im-Wettbewerb-davon>
- Mencin, J. (2024, February 2):** *EZB-Zinspolitik: Die Geldpolitik der Eurozone | finanzen.net. Ratgeber: Wissenswertes Rund Um Die Geldanlage* | finanzen.net. Retrieved September 15, 2024, from <https://www.finanzen.net/ratgeber/ezb-zinspolitik/>
- Meyer, K., & Wolter, P. (2024, April 15):** *LBBW schließt Krypto-Partnerschaft mit Bitpanda*. LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/lbbw-krypto-partnerschaft-bitpanda_ah6j8nxxnx_d.html

- Miketta, E. (n.d.):** *Mit besten Kontakten, also der LBBW, unterwegs im Kapitalmarkt.* LBBW Webespace. Retrieved September 13, 2024, from https://www.lbbw.de/leistungen/unsere-loesungen/finanzierung/kapitalmarktfinanzierung/kapitalmarktfinanzierung_7wz39ut14_d.html
- Ministerium des Inneren. (n.d.):** *Sparkassen.* Baden-Württemberg.de. Retrieved September 13, 2024, from <https://im.baden-wuerttemberg.de/de/land-kommunen/starke-kommunen/sparkassen>
- Moczarski, M. (2022, March 24):** *So geht die Bayerische Landesbank in die digitale Zukunft.* Der Bank Blog. <https://www.der-bank-blog.de/bayerische-landesbank-digitale-zukunft/digital-banking/37686699/>
- Moormann, J. (2023, January 17):** *Banken auf dem Weg in die „Digital Society“.* Der Bank Blog. <https://www.der-bank-blog.de/bankenstrategie-ausblick2023/strategie/37694652/>
- Mordorintelligence. (n.d.):** *Markt für digitale Bankplattformen Insights.* Retrieved September 14, 2024, from <https://www.mordorintelligence.com/de/industry-reports/digital-banking-platform-market>
- MSCI Rating. (n.d.):** *ESG ratings.* MSCI. Retrieved September 14, 2024, from <https://www.msci.com/web/msci/esg-ratings>
- MSCI. (n.d.):** *MSCI app.* Retrieved September 14, 2024, from <https://www.msci.com/msci-app>
- Müller, J. (2024, July 5).** *Grüne Kredite: So lohnt sich Green Finance.* LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/banking-erleben/kredit-green-loans_9uz7816wn_d.html
- Mummenhoff, M., & Hard, T. (n.d.):** *So unterstützt die LBBW die Unternehmen im Emissionshandel.* LBBW Webespace. Retrieved September 14, 2024, from https://www.lbbw.de/perspektiven/themenspecials/emissionshandel/service/emissionshandel-service_aeyds5bpat_d.html
- Mußler, H. (2023a, June 27):** *Blockchain: Helaba steigt beim Fintech Cashlink ein.* FAZ.NET. <https://www.faz.net/aktuell/finanzen/blockchain-helaba-steigt-beim-fintech-cashlink-ein-18994341.html>
- Mußler, H. (2023b, November 15):** *Commerzbank erhält als erste Großbank in Deutschland Kryptoverwahrlizenz.* FAZ.NET. <https://www.faz.net/aktuell/finanzen/commerzbank-erhaelt-als-erste-grossbank-in-deutschland-kryptoverwahrlizenz-19315666.html>

- Nagel, J. (2023, November 11):** *Zur Rolle der Banken im deutschen Finanzsystem*. Retrieved September 15, 2024, from <https://www.bundesbank.de/de/presse/reden/zur-rolle-der-banken-im-deutschen-finanzsystem-890198>
- Nickels, L. (2024, January 24):** *Wirtschaft: Banken*. *Planet Wissen*. Retrieved September 15, 2024, from <https://www.planet-wissen.de/gesellschaft/wirtschaft/banken/index.html>
- Offenhuber, M. (2019, January 8):** *Green Bonds: grüne Anleihen für ein besseres Klima*. LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/banking-erleben/anleihe-green-bond_9uz8bsi4y_d.html
- Orcel, A. (n.d.):** *Letter from the Unicredit Chief Executive Officer*. Retrieved September 14, 2024, from <https://financialreports.unicredit.eu/en/annual-report/letter-from-the-chief-executive-officer/>
- Pachl, N. (2023, July 13):** *Es geht um Mitarbeiter-Benefit-Modelle*. LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/maerkte-verstehen/es-geht-um-mitarbeiter-benefit-modelle_agtvi1sizp_d.html
- Paulus, S. (2022, October 20):** *Blockchain-Plattform We.Trade beendet Aktivität*. *DerTreasurer*. Retrieved September 15, 2024, from <https://www.dertreasurer.de/news/risikomanagement/blockchain-plattform-wetrade-beendet-aktivitaet-16400/>
- Paxmann, S. (n.d.):** *Mehr als Digital Banking*. LBBW Webespace. Retrieved September 13, 2024, from https://www.lbbw.de/artikelseite/maerkte-verstehen/mehr-als-digital-banAIng_af7ukzw23r_d.html
- Peaks, N. (2020, March 3):** *Die Geschichte von Banken*. *Peaks*. Retrieved September 15, 2024, from <https://www.peaks.com/de/de/blog/geld/die-geschichte-von-banken/>
- Pehl, K. (2022, August 12):** *Sicher in die Cloud: LBBW setzt auf IBM-Verschlüsselungskompetenz*. *IBM DACH Newsroom*. Retrieved September 15, 2024, from <https://de.newsroom.ibm.com/2022-08-12-Sicher-in-die-Cloud-LBBW-setzt-auf-IBM-Verschlusselungskompetenz>
- Pick, A. (2021, October 26):** *Lexikon: Banco di gyro d'affrancatione*. *geldscheine-online*. <https://www.geldscheine-online.com/post/lexikon-banco-di-gyro-d-affrancatione>
- Piller, T. (2010, May 21):** *Euro-Krise: Der italienische Schuldenberg*. *FAZ.NET*. <https://www.faz.net/aktuell/wirtschaft/euro-krise-der-italienische-schuldenberg-16090.html>
- Pohlen, H. (2024, June 3):** *Helaba - News: Helaba beteiligt sich an EZB-Trials*. Retrieved September 15, 2024, from

<https://www.helaba.com/de/presse/news/meldungen/2024/helaba-beteiligt-sich-an-ezb-trials.php>

- Potthoff, C. (2013, August 28):** *LBBW sourct Teile ihrer IT an die Finanz Informatik (FI) aus.* LBBW Webspaces. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/lbbw-sourct-teile-ihrer-it-an-die-finanz-informatik-aus_8zvhyvqvj_d.html
- PricewaterhouseCoopers. (n.d.):** *Cloud Computing im Bankensektor.* PwC. Retrieved September 15, 2024, from <https://www.pwc.de/de/finanzdienstleistungen/cloud-computing-im-bankensektor.html>
- Private Geschaeftsbanken. (n.d.):** *Sparkasse_De.* Retrieved September 12, 2024, from <https://www.sparkasse.de/pk/ratgeber/finanzglossar/private-geschaefsbanken.html>
- Rahn, C., & Wagner, B. (2018, January 11):** *Telefónica Deutschland und LBBW demonstrieren Leistungsfähigkeit der Blockchain.* LBBW Webspaces. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/schuldschein-transaktion-blockchain_8iqqkdtat_d.html
- Raiffeisen. (n.d.):** *Raiffeisen – Eine Idee erobert die Welt | Raiffeisen Magazin.* Retrieved September 15, 2024, from <https://magazin.raiffeisen.it/raiffeisen-eine-idee-erobert-die-welt/>
- Raisin. (n.d.):** *Niedrigzinspolitik einfach erklärt im Finanzlexikon | ZINSPILOT.de.* Retrieved September 13, 2024, from <https://www.zinspilot.de/finanzlexikon/niedrigzinspolitik/>
- Raspels, P. (2016):** *Demografischer Wandel: In Deutschland werden Arbeitskräfte rar.* In www.pwc.de (p. www.pwc.de). <https://www.wifor.com/uploads/2020/05/Ostwald-et-al.-2016-Demografischer-Wandel-In-Deutschland-werden-Arbei.pdf>
- Ray, M. (2011, October 5):** *Euro-zone debt crisis | Causes, Impact & Solutions.* Encyclopedia Britannica. Retrieved September 15, 2024, from <https://www.britannica.com/topic/euro-zone-debt-crisis>
- Reder, B. (2022, October 11):** *LBBW etabliert mehrstufiges Sicherheitskonzept.* Cio. <https://www.cio.de/a/lbbw-etabliert-mehrstufiges-sicherheitskonzept,3694539>
- Rees, M. (2017, December 22):** *Lots of climate questions, one podcast, all the answers.* Eib. Retrieved September 15, 2024, from <https://www.eib.org/en/stories/green-finance>
- Rehne, J. (2024, April 15):** *LBBW bietet Firmenkunden künftig Krypto an.* FINANCE. Retrieved September 15, 2024, from <https://www.finance-magazin.de/banAIng->

berater/firmenkundengeschaeft/lbbw-bietet-firmenkunden-kuenftig-krypto-an-180642/

Reichert, H. (2023, November 2): *LBBW startet digitale Employer Branding-Kampagne.*

LBBW Webspaces. Retrieved September 13, 2024, from

https://www.lbbw.de/artikelseite/pressemitteilung/lbbw-ebk-katharina_ahdf77ye1r_d.html

Reichwein, M. (2018, October 22): *Italiener und Araber haben das Bankwesen erfunden.*

DIE WELT. <https://www.welt.de/kultur/article182538040/Italiener-und-Araber-haben-das-Bankwesen-erfunden.html>

Reinstädler, G. (2018a, November 15): *Definition: genossenschaftliche Zentralbank.*

Gabler Banklexikon. Retrieved September 15, 2024, from <https://www.gabler-banklexikon.de/definition/genossenschaftliche-zentralbank-58311>

Reinstädler, G. (2018b, November 15): *Definition: Kreditinstitute mit Sonderaufgaben.*

Gabler Banklexikon. Retrieved September 15, 2024, from <https://www.gabler-banklexikon.de/definition/kreditinstitute-mit-sonderaufgaben-59402>

Remer, S. (2020, March 4): *Definition: green bond.*

Gabler Banklexikon. Retrieved September 15, 2024, from <https://www.gabler-banklexikon.de/definition/green-bond-99719>

Research, L. (n.d.): *LBBW Mittelstandsradar 2024: Herausforderungen im deutschen Mittelstand.*

LBBW Research2Go – Der Unternehmens-Podcast Der Landesbank Baden-Württemberg. Retrieved September 12, 2024, from <https://lbbwresearch2go.podigee.io/47-lbbw-mittelstandsradar-2024-herausforderungen-im-deutschen-mittelstand>

Reuters. (2024, July 24): *UniCredit kauft digitale Bank und Cloud-IT-Plattform in Aion-Vodeno-Deal.*

MarketScreener. <https://de.marketscreener.com/kurs/aktie/UNICREDIT-S-P-A-33364083/news/UniCredit-kauft-digitale-Bank-und-Cloud-IT-Plattform-in-Aion-Vodeno-Deal-47450462/>

Riedel, D. (2023, September 28): *Germany: EIB Group and LBBW join forces to support renewable energy investment.*

Eib. Retrieved September 15, 2024, from <https://www.eib.org/en/press/all/2023-353-germany-eib-group-and-lbbw-join-forces-to-support-renewable-energy-investment>

Röse, C. (2024, January 25): *EZB lässt Leitzinsen im Euroraum unverändert.*

tagesschau.de. <https://www.tagesschau.de/wirtschaft/finanzen/ezb-ratssitzung-leitzinsen-euro-raum-100.html>

- Rottwilm, C. (2019, December 3):** *Vom Fallschirmjäger zum Bank-CEO*. Manager, Hamburg, Germany. <https://www.manager-magazin.de/unternehmen/banken/unicredit-sanierer-jean-pierre-mustier-traum-aller-bankaktionaeere-a-1299455.html>
- Rudolph, H. (2024, April 30):** *LBBW setzt künstliche Intelligenz im Kundengeschäft ein*. Retrieved September 15, 2024, from <https://finanzbusiness.de/nachrichten/banken/article17065595.ece>
- Sachverständigenrat. (2022):** *Inflation und Geldpolitik*. In Jahresgutachten 2022/23. https://www.sachverstaendigenrat-wirtschaft.de/fileadmin/dateiablage/gutachten/jg202223/JG202223_Kapitel_2.pdf
- Sackmann, H., & Wagner, B. (2017, June 28):** *Daimler und LBBW setzen erfolgreich Blockchain bei Schuldschein-Transaktion ein*. LBBW Webpage. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/daimler-und-lbbw-setzen-blockchain-bei-schuldschein-transaktion-ein_8zvetwhio_d.html
- Sanna, M. (2024, January 23):** *Italian Banks Outlook 2024: Sound margins Shield against higher credit losses*. S&P Global Ratings. Retrieved September 15, 2024, from <https://www.spglobal.com/ratings/en/research/articles/240123-italian-banks-outlook-2024-sound-margins-shield-against-higher-credit-losses-12971540>
- Scand. (2022, February 9):** *Die wichtigsten Möglichkeiten, wie Banken von der Blockchain-Technologie profitieren*. SCAND (DE). Retrieved September 15, 2024, from <https://scand.de/unternehmen/blog/vorteile-der-blockchain-technologie-im-bankwesen/>
- Scherer, K. (2022, March 11):** *EZB hebt Leitzins an - Was bedeutet die Zinserhöhung für Verbraucher?* Deutschlandfunk. Retrieved September 15, 2024, from <https://www.deutschlandfunk.de/leitzins-ezb-verbraucher-zinserhoehung-100.html>
- Schlesische Landschaft – Kulturstiftung. (n.d.):** *Schlesische Landschaft*. Kulturstiftung. Retrieved September 15, 2024, from <https://kulturstiftung.org/zeitstrahl/schlesische-landschaft>
- Schmid, C. (2022, February 9):** *Welche Rolle spielt Nachhaltigkeit in der Finanzwirtschaft?* B-GROUP AG. Retrieved September 15, 2024, from <https://www.b-groupag.com/b-group-ag/news-blog/welche-rolle-spielt-nachhaltigkeit-in-der-finanzwirtschaft>
- Schmitt, M., & Zimmer, J. (2023, November 17):** *Banking Avatar KI - Konzern-Webseite*. Konzern-Webseite. Retrieved September 15, 2024, from <https://www.commerzbank.de/konzern/newsroom/pressemitteilungen/banking-avatar-ki.html>

- Schneider, C. T. G. (2023, March 30):** *EU-Rettungsschirm*. bpb.de. Retrieved September 15, 2024, from <https://www.bpb.de/kurz-knapp/lexika/das-junge-politik-lexikon/320141/eu-rettungsschirm/>
- Schöning, H. S. (2018a, February 19):** *Landesbanken*. Gabler Wirtschaftslexikon. Retrieved September 15, 2024, from <https://wirtschaftslexikon.gabler.de/definition/landesbanken-38424>
- Schöning, H. S. (2018b, February 19):** *öffentliche Kreditinstitute*. Gabler Wirtschaftslexikon. Retrieved September 15, 2024, from <https://wirtschaftslexikon.gabler.de/definition/oeffentliche-kreditinstitute-43522>
- Schöning, H. S. (2018c, February 19):** *Regionalbanken*. Gabler Wirtschaftslexikon. Retrieved September 15, 2024, from <https://wirtschaftslexikon.gabler.de/definition/regionalbanken-44031>
- Schröder, T. (2024, April 2):** *Exklusiv: LBBW peilt 30 neue Kooperationen mit Start-ups pro Jahr an*. Retrieved September 15, 2024, from <https://finanzbusiness.de/nachrichten/banken/article16981130.ece>
- Schubert, C. (2024, September 12):** *Monte dei Paschi di Siena: News der FAZ zur Krisenbank*. Retrieved September 15, 2024, from <https://www.faz.net/aktuell/wirtschaft/thema/monte-paschi-di-siena>
- Schulte-Holtey, G. (n.d.):** *Brexit und Finanzmarkt*. Retrieved September 13, 2024, from <https://www.ihk-muenchen.de/de/Service/Internationalisierung/BREXIT/Brexit-und-Finanzmarkt/>
- Schwerdtfeger, T. (2024, April 29):** *LBBW startet mit eigener generativer KI-Lösung durch*. LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/lbbw-startet-mit-eigener-generativer-ki-loesung-durch_ah8wecz4u8_d.html
- Seliger, F. (2023, November 2):** *Kryptoassets: DZ BANK startet eigene Digitalverwahrplattform*. Retrieved September 15, 2024, from <https://www.dzbank.de/content/dzbank/de/home/die-dz-bank/presse/pressemitteilungen/2023/kryptoassets--dz-bank-startet-eigene-digitalverwahrplattform-.html>
- Sinß, F. (n.d.):** *Deutsche Bank setzt bei Kreditvergabe auf Künstliche Intelligenz*. Finanzmagazin. Retrieved December 7, 2022, from <https://www.finance-magazin.de/banking-berater/digitalisierung/deutsche-bank-setzt-bei-kreditvergabe-auf-kuenstliche-intelligenz-139255/>

- Sörensen, D. (2023, August 24):** *Was ist eine Genossenschaftsbank?* Retrieved September 15, 2024, from <https://www.hanseaticbank.de/klarmacher/wissen/was-ist-eine-genossenschaftsbank>
- Sparkasse Genossenschaftsbank. (n.d.):** *Genossenschaftsbank.* Sparkasse_De. Retrieved September 13, 2024, from <https://www.sparkasse.de/pk/ratgeber/finanzglossar/genossenschaftsbank.html>
- Sparkasse. (n.d.):** *Private Geschaeftsbanken.* Sparkasse_De. Retrieved September 13, 2024, from <https://www.sparkasse.de/pk/ratgeber/finanzglossar/private-geschaeftsbanken.html>
- Sparkassen DSGVO. (n.d.).** *Sparkassen: Nah am Kunden - DSGVO.de.* DSGVO_De. Retrieved September 13, 2024, from <https://www.dsgv.de/sparkassen-finanzgruppe/organisation/sparkassen.html>
- Srinivas, V., Tomlinson, N., & Wade, M. (2023, October 25):** *2024 banking and capital markets outlook.* Deloitte Insights. Retrieved September 15, 2024, from <https://www2.deloitte.com/us/en/insights/industry/financial-services/financial-services-industry-outlooks/banking-industry-outlook.html>
- Stäfe-Anderka, S. (n.d.):** *LBBW – die verlässliche Bank für Unternehmen mit Mut.* LBBW Webpace. Retrieved September 14, 2024, from https://www.lbbw.de/perspektiven/nur-mut/nur-mut/nur-mut_ah6kvknpvx_d.html
- Statista Research Department. (2024):** *Topic: Fintech.* Statista. Retrieved September 15, 2024, from <https://www.statista.com/topics/2404/fintech/#editorsPicks>
- Statista. (2024, June 12):** *Themenseite: Online-Banking.* Retrieved September 15, 2024, from <https://de.statista.com/themen/872/online-banAIng/#topicOverview>
- Staub-Ney, N. (2020, March 12):** *Definition: Landesbanken/Girozentralen.* Gabler Banklexikon. Retrieved September 15, 2024, from <https://www.gabler-banklexikon.de/definition/landesbankengirozentralen-59518>
- Steffes, S. (2024, February 8):** *Helaba - News: Helaba und vc trade erreichen erstmalig vollständige Digitalisierung des Schuldscheinmarktes.* Retrieved September 15, 2024, from <https://www.helaba.com/de/presse/news/meldungen/2024/helaba-und-vc-trade-digitalisieren-schuldscheinmarkt.php>
- Stol.it. (2024, April 13):** *Italien rechnet in 10 Jahren mit 3 Millionen weniger Arbeitnehmern.* stol.it. <https://www.stol.it/artikel/chronik/italien-rechnet-in-10-jahren-mit-3-millionen-weniger-arbeitnehmern>

- Tagesschau. (2022, January 27):** *Chronik zum Coronavirus: Der Ausbruch einer Pandemie.* tagesschau.de. <https://www.tagesschau.de/faktenfinder/corona-chronik-pandemie-101.html>
- Tenner, T. (2024, February 14):** *Einsatz von KI in Banken – Chancen & Herausforderungen.* Retrieved September 15, 2024, from <https://bankenverband.de/kuenstliche-intelligenz/einsatz-von-ki-banken-chancen-herausforderungen/>
- TGR. (2022, December 6):** *Immer weniger Italiener.* RaiNews. <https://www.rainews.it/tgr/tagesschau/articoli/2022/12/tag-Immer-weniger-Italiener-demografischer-Wandel-Italien-Geburtenrueckgang-956f031b-4130-46a1-9717-b4949438d9dd.html>
- TheBanks. (n.d.):** *Compare Countries By Banking Sector.* Retrieved September 13, 2024, from <https://thebanks.eu/compare-countries-by-banking-sector>
- Thomas, D. (2021, January 27):** *Gründung der European Cloud User Coalition (ECUC) - Konzern-Webseite.* Konzern-Webseite. Retrieved September 15, 2024, from <https://www.commerzbank.de/konzern/newsroom/pressemitteilungen/gruendung-ecuc.html>
- Trading Economics. (n.d.):** *Germany inflation rate.* TRADING ECONOMICS. Retrieved September 13, 2024, from <https://tradingeconomics.com/germany/inflation-cpi>
- UniCredit. (n.d.):** *About us.* UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/unicredit-at-a-glance.html>
- UniCredit. (2012, April 16):** *UniCredit: Bank Austria signs agreement to acquire majority shareholding in UkrSotsbank in Ukraine.* UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/press-media/press-releases-price-sensitive/2007/PressRelease0237.html>
- UniCredit. (2023, December 15):** *Our history.* UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/unicredit-at-a-glance/our-history.html>
- UniCredit. (2024, February 20):** *General Company Info.* UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/info/general-company-info.html>
- UniCredit Alpha. (n.d.).** *Alpha Bank and UniCredit: a long-term partnership.* Unicredit. Retrieved September 24, 2024, from <https://financialreports.unicredit.eu/en/annual-report/alpha-bank-and-unicredit-a-long-term-partnership/>
- UniCredit Annual report. (n.d.):** *Annual Report.* UniCredit. Retrieved September 15, 2024, from <https://financialreports.unicredit.eu/en/annual-report/>

- UniCredit Bank AG. (n.d.):** *UniCredit Bank AG.* cio.de. Retrieved September 14, 2024, from <https://www.cio.de/top500/detail/unicredit-bank-ag,551>
- UniCredit Blockchain. (2018, August 2):** *UniCredit completes first transaction via blockchain based trading platform we.trade.* UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/press-media/news/2018/unicredit-esegue-la-prima-operazione-di-trade-finance-tramite-la.html>
- UniCredit Blockchain. (2019, March 21):** *UniCredit successfully completes first transaction in Italy via we.trade blockchain platform.* UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/press-media/press-releases/2019/unicredit-esegue-con-successo-la-prima-transazione-commerciale-s.html>
- UniCredit Clients. (2023, May 19):** *Our clients.* UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/strategy/our-clients.html>
- UniCredit Culture. (2024, May 22):** *Inclusive culture and inclusion at work.* UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/unicredit-at-a-glance/diversity/inclusive-culture.html>
- UniCredit Customers. (n.d.):** *UniCredit Serving customers however – and wherever – they need us.* Retrieved September 14, 2024, from <https://financialreports.unicredit.eu/en/annual-report/serving-customers-however-and-wherever-they-need-us/>
- UniCredit Digital and data. (2024, January 11):** *Our future: Digital & Data.* UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/strategy/our-future-digital-and-data.html>
- UniCredit Digital and data. (n.d.):** *Improving our in-house Digital expertise.* Retrieved September 14, 2024, from <https://financialreports.unicredit.eu/en/annual-report/improving-our-in-house-digital-expertise/>
- UniCredit Diversity. (2024, February 14):** *Diversity, equity and inclusion in the workplace.* UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/unicredit-at-a-glance/diversity.html>
- UniCredit Empowering. (2024, February 16):** *Well-Being.* UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/unicredit-at-a-glance/diversity/well-being.html>

- UniCredit ESG rating. (2024, July 4):** *ESG Sustainability Policies and Ratings*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/esg-and-sustainability/esg-sustainability-policies-and-ratings.html>
- UniCredit ESG. (2023, November 22):** *Our purpose*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/strategy/our-future-esg.html>
- UniCredit GCC. (2024, February 2):** *Looking back on our German Corporate Conference*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/one-unicredit/articles/2024/february/looking-back-on-our-german-corporate-conference.html>
- UniCredit Gender equality. (2024, July 12):** *Gender equality and inclusion in the workplace*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/unicredit-at-a-glance/diversity/progress-highlights.html>
- UniCredit Group results. (2024, August 29):** *Group results*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/investors/financial-reporting/group-results.html>
- UniCredit Locations. (2023, June 8):** *Our worldwide presence*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/worldwide/our-worldwide-presence.html>
- UniCredit Net zero. (2023, August 10):** *Our Net Zero targets*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/one-unicredit/articles/2023/february/our-net-zero-targets.html>
- UniCredit Net zero. (2024, March 22):** *Our path towards Net Zero*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/esg-and-sustainability/net-zero.html>
- UniCredit Organisational structure. (2023, November 22):** *Organisational structure*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/unicredit-at-a-glance/organizational-structure.html>
- UniCredit Purpose. (2023, November 22):** *Our culture, purpose & values*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/unicredit-at-a-glance/our-identity.html>

- UniCredit SIB. (2021, May 4):** *Social Impact Banking*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/de/one-unicredit/commitments/2021/may/social-impact-banking--unicredit-s-commitment.html>
- UniCredit Social. (2024, April 22):** *Social and relationship capital for sustainability*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/esg-and-sustainability/value-creation-for-a-sustainable-business/social-and-relationship-capital.html>
- UniCredit Spa. (2024):** *UniCredit Spa – Company Profile*. <https://www.unicreditgroup.eu/content/dam/unicreditgroup-eu/documents/en/banking-group/at-a-glance/UniCreditGroupCompanyProfile.pdf>
- UniCredit Start Lab. (2022, December 12):** *UniCredit Start Lab turns 10*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/one-unicredit/articles/2022/december/unicredit-start-lab-turns-10.html>
- UniCredit Strategy. (n.d.):** *UniCredit Unlocked strategy*. Retrieved September 14, 2024, from <https://financialreports.unicredit.eu/en/annual-report/our-unicredit-unlocked-strategy>
- UniCredit Sustainability reporting. (2024, April 22):** *Sustainability Reporting*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/esg-and-sustainability/sustainability-reporting.html>
- UniCredit Sustainability Strategy. (2024, May 13):** *Our sustainability strategy*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/esg-and-sustainability/our-sustainability-strategy.html>
- UniCredit Sustainability. (2024, April 23):** *ESG and Sustainability*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/esg-and-sustainability.html>
- UniCredit Unlocked. (2021, December 9):** *UniCredit Unlocked: 2022-2024 Strategic Plan. Empowering communities to progress*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/press-media/press-releases-price-sensitive/2021/unicredit-unlocked--2022-2024-strategic-plan--empowering-communi.html>
- UniCredit Vision. (n.d.):** *Digital and Data*. UniCredit. Retrieved September 14, 2024, from <https://financialreports.unicredit.eu/en/annual-report/our-progress-in-2023/digital-data/>

- UniCredit Women. (2023, November 22):** *Woman in finance*. UnicreditGroup.eu. Retrieved September 15, 2024, from <https://www.unicreditgroup.eu/en/unicredit-at-a-glance/diversity/woman-in-finance.html>
- Valli, M., Lattuga, E., UniCredit Bank AG, & UniCredit Research. (2023):** *The UniCredit Macro & Markets 2024-25 outlook* [Report]. Retrieved September 15, 2024, from https://www.unicreditresearch.eu/fileadmin/Videos/Webcasts/2023/2023-11-23_Webcast_Outlook.pdf
- Van Daatselaar, N., & Wagner, B. (2021, March 31):** *LBBW kooperiert mit niederländischem FinTech TreasurUp im Währungsmanagement*. LBBW WebSpace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/lbbw-kooperiert-mit-fintech-treasurup-im-waehrungsmanagement_acsnzmv4ba_d.html
- Van Rijn, M. (2018, April 19):** *Katharina von Württemberg: Staatliche Schlösser und Gärten Baden-Württemberg*. Retrieved September 15, 2024, from <https://www.grabkapelle-rotenberg.de/wissenswert-amuesant/persoenlichkeiten/katharina-von-wuerttemberg>
- Veitinger, T. (2024, March 6):** *LBBW: Signa-Problem lässt Landesbank kalt*. swp.de. <https://www.swp.de/wirtschaft/lbbw-signa-problem-laesst-landesbank-kalt-73235879.html>
- Venice Insider, K. (2024, June 28):** *The unknown banking history of the Rialto area in Venice*. The Venice Insider. Retrieved September 15, 2024, from <https://www.theveniceinsider.com/the-unknown-banking-history-of-the-rialto-area-in-venice/>
- Vercelli, F. (2022, June 1):** *Bank of Italy - No. 49 - The Italian banking system during the 1907 financial crisis and the role of the Bank of Italy*. (C) Banca D'Italia. Retrieved September 15, 2024, from <https://www.bancaditalia.it/pubblicazioni/quadernistoria/2022-0049/index.html?com.dotmarketing.htmlpage.language=1&dotcache=refresh>
- Vieira, H. (2016, July 14):** *The Italian banking crisis: where it comes from and where it's going*. LSE Business Review. Retrieved September 15, 2024, from <https://blogs.lse.ac.uk/businessreview/2016/07/14/the-italian-banking-crisis-where-it-comes-from-and-where-its-going/>
- Vielhaber, R., & Stadler, V. (2015, July 2):** *ECB expands quantitative easing beyond agencies to corporates*. In unicredit.eu. https://www.research.unicredit.eu/DocsKey/credit_docs_2015_148669.ashx?M=D&R=20259147

- Volksbank Raiffeisenbank. (2023, October 1):** *Bundesverband der Deutschen Volksbanken und Raiffeisenbanken e.V. (BVR)*. Retrieved September 15, 2024, from <https://www.vr.de/privatkunden/was-wir-anders-machen/genossenschaftsbank.html>
- VolksbankRaiffeisenbank Oberbayern Südost eG. (n.d.):** *Die Genossenschaftsidee*. Retrieved September 13, 2024, from <https://www.vrbank-obb-so.de/mitgliedschaft/genossenschaftsbank/genossenschaftsidee.html>
- Wagner, B. (2018, June 29):** *Neuer Nachhaltigkeitsbericht der LBBW erschienen: Nachhaltigkeit als strategische Stoßrichtung*. LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/nachhaltigkeitsbericht_8m17petnm_d.html
- Wagner, B. (2019, August 28):** *Gewinn vor Steuern auf 319 Mio. Euro gesteigert*. LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/lbbw-steigert-gewinn-vor-steuern-im-ersten-halbjahr-um-13-prozent-auf-319-mio_9y83bdsgb_d.html
- Wagner, B. (2022, April 1):** *LBBW Aligns Green Bond Framework with EU Taxonomy*. LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/articpage/press-release/lbbw-green-bond-framework-eu-taxonomy_aej19r55jw_e.html
- Wagner, B., Murray-Leslie, N., & Cooper, C. (2018, November 28):** *LBBW tritt dem Marco Polo-Netzwerk bei*. LBBW Webespace. Retrieved September 15, 2024, from https://www.lbbw.de/artikelseite/pressemitteilung/lbbw-tritt-dem-marco-polo-netzwerk-bei_8oc4bmren_d.html
- Weidinger, S. (n.d.):** *Unsere Strategie ist nachhaltig: wie die LBBW verantwortungsvoll wirtschaftet und handelt*. LBBW Webespace. Retrieved September 13, 2024, from https://www.lbbw.de/konzern/lbbw/nachhaltigkeit/strategie/strategie_7vz24r4io_d.html
- Weidinger, S., & Diesch, N. (n.d.):** *Nachhaltigkeit bei der LBBW*. LBBW Webespace. Retrieved September 13, 2024, from https://www.lbbw.de/konzern/lbbw/nachhaltigkeit/lbbw-nachhaltigkeit/lbbw-nachhaltigkeit_adsexpgc4p_d.html
- Weller, K. (2024, September 11):** *Wandel zum Arbeitnehmermarkt: Definition & Trends*. Wollmilchsau Jobspreader. <https://wollmilchsau.de/personalmarketing/derwandel-zum-arbeitnehmermarkt/>

- Wijffelaars, M. (2020, July 10):** *COVID-19 has a devastating impact on Italy's economy.* Rabobank. Retrieved September 15, 2024, from <https://www.rabobank.com/knowledge/d011309227-covid-19-has-a-devastating-impact-on-italys-economy>
- Wilop, K. (n.d.):** *Cloud Computing im Bankensektor.* PwC. Retrieved September 13, 2024, from <https://www.pwc.de/de/finanzdienstleistungen/cloud-computing-im-bankensektor.html>
- Wirtschaftslexikon24.com. (n.d.-a):** *Grundkreditanstalten - Wirtschaftslexikon.* Wirtschaftslexikon24. Retrieved September 15, 2024, from <https://www.wirtschaftslexikon24.com/d/grundkreditanstalten/grundkreditanstalten.htm>
- Wirtschaftslexikon24.com. (n.d.-b):** *Öffentlich-rechtliche Kreditinstitute - Wirtschaftslexikon.* Wirtschaftslexikon24. Retrieved September 13, 2024, from <https://www.wirtschaftslexikon24.com/d/oeffentlich-rechtliche-kreditinstitute/oeffentlich-rechtliche-kreditinstitute.htm>
- Wissensfabrik. (n.d.):** *School2Start-up - Unternehmergeist in die Schulen.* Retrieved September 13, 2024, from <https://www.unternehmergeist-macht-schule.de/DE/Initiativen/School2Start-up/steckbrief.html>
- World Economic Forum. (2020, May 8):** *Impact of COVID-19 on the global financial system.* Retrieved September 15, 2024, from <https://www.weforum.org/publications/impact-of-covid-19-on-the-global-financial-system/>
- World Population Review. (n.d.):** *Italy Population 2024 (Live).* Retrieved September 13, 2024, from <https://worldpopulationreview.com/countries/italy>
- Wuermeling, J. (2018, January 15):** *Auswirkungen virtueller Währungen auf die Finanzmärkte.* Retrieved September 15, 2024, from <https://www.bundesbank.de/de/presse/reden/auswirkungen-virtueller-waehrungen-auf-die-finanzmaerkte-711074>
- Zieglgruber, S. (2020, August 20):** *Cloud Computing bei Banken.* Retrieved September 13, 2024, from <https://bankenverband.de/cloud/cloud-computing-bei-banken/>
- Zimmermann, G. (2023a, May 5):** *Willkommen im KI-Zeitalter! | LBBW Asset Management.* LBBW Asset Management. Retrieved September 15, 2024, from <https://www.lbbw-am.de/willkommen-im-ki-zeitalter>
- Zimmermann, G. (2023b, August 2):** *Generative KI wird die Organisation von Unternehmen verändern | LBBW Asset Management.* LBBW Asset Management. Retrieved

September 15, 2024, from <https://www.lbbw-am.de/generative-ki-wird-die-organisation-von-unternehmen-veraendern>

Zinnecker, S. (2023, October 5): *EZB erhöht Leitzins auf 4,5 Prozent: Gründe und Folgen.* Forbes Advisor Deutschland. <https://www.forbes.com/advisor/de/geldanlage/was-ist-leitzins/>

Appendix

Declaration

I,

Surname, First name: Mast, Franziska Elisabeth

Matriculation number: University Ca' Foscari Venezia – 899165; University Hohenheim:
976640

declare that I have followed the Principles of Good Scientific Practice while writing the present

I have written the thesis independently and have used no other sources or aids than those given and have marked the passages taken from other works word-for-word or paraphrased.

Supervisor: Prof. Stefano Micelli

Topic of the paper/thesis: Financial Institutions in a Period of Transition: A comparative analysis of the Landesbank Baden-Württemberg (LBBW) and UniCredit Italia

Semester: Autumn session 2024

I furthermore declare that I submitted the thesis as an unencrypted electronic text document. I give my consent to this electronic version being checked for plagiarism with analytical software.

I acknowledge that I will not be able to submit corrections later.



Place, Date, Signature

Stuttgart, 27 September 2024

Declaration on the use of generative AI systems

When writing this paper, I used the following artificial intelligence (AI)-based systems¹:

1. DeepL Write
2. ChatGPT

I further declare that I

- I have actively informed myself about the capabilities and limitations of the above-mentioned AI systems,
- I have marked the passages taken from the AI systems mentioned above,
- I have checked that the content generated and adopted using the above-mentioned AI systems is factually correct,
- I am aware that as the author of this work, I am responsible for the information and statements made in it.

I used the above-mentioned AI systems as shown below.

work step	Deployed AI system(s)	Description of how to use it
Generation of ideas and conception of the work		
Literature search		
Literature analysis		
Literature and citation management		
Selection of methods and models		

¹ If you are unsure whether you have to declare an AI system you have used, please contact your supervisor.

Data collection and analysis		
Generation of programme codes		
Creation of visualisations		
Interpretation and validation		
Structuring the text of the paper		
Formulating the text of the paper		
Translating the text of the paper	DeepWrite ChatGPT	As my thesis is to be submitted in English, the two AI tools helped me with the translation. However, the German text, which was not translated, was completely written by me without any help. The tools helped me to make the thesis sound more academic.
Editing the text		
Preparing the presentation of the text		
Other		



Place, date, signature

Stuttgart, 27 September 2024