

**The influence of selected managerial quality
and board composition variables on the
performance of German cooperative banks –
an analysis of age, gender, education and
experience as well as board size and composition**

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Abstract

Can the age, education, experience and gender of executive board members, as well as the board size and composition, have an influence on the long-term sustainability of German cooperative banks? Due to declining profit margins, German cooperative banks are facing increasing threats to their future existence. However, the disappearance of cooperative banks from the German banking landscape would have serious consequences, as they fulfil important functions in the German financial and economic system. In particular, their dense branch network enables a large part of the population to participate in payment transactions and they are a key employer in many regions. At the same time, German cooperative banks played an important role in supporting the European banking system during the financial crisis in 2007/2008. The success of these cooperative banks is influenced by those leading them. Due to their strategic and operational tasks, these leaders play a decisive role, as these banks tend to be small in terms of their balance sheet and in international comparison.

This thesis aims to find out how the age, education, experience and gender of the executive board members as well as board size and composition influence the performance and thus the sustainability of German cooperative banks. The findings should make an important contribution to the long-term survival of cooperative banks in Germany.

To establish the influence of these factors, empirical data was collected on manager qualities (age, education, gender and experience), board composition, board size, and the Gross Profit Margin over a 5 and a 10-year period. The data was statistically evaluated with the help of regression analyses.

The results reveal correlations between the age of the executive board members, board size and Gross Profit Margin over periods of 5 and 10 years. As the age of a bank's executive board increases, the bank's medium- and long-term performance decreases. Furthermore, a bank's medium- and long-term performance is worsened by employing more than the two executive board members that are required by law. The descriptive interpretations indicate that banks whose executive board members have no education other than a higher education degree perform worse than other banks over the medium and long term, although no correlations could be established

on the basis of the statistical evaluations. Similarly, executive board members who have held more than one previous board position also have a negative impact on the bank's performance. No correlations were found between the bank's performance and the gender of the executive board members or the executive board being led by two or more CEOs with equal rights (dual leadership).

The correlations found in this research will serve as a basis for further in-depth investigations. The thesis fills gaps in the literature and contributes to Signalling Theory, Screening Theory, Principal Agent Theory, Upper Echelon Theory and several managerial competencies theories. At the same time, the results provide a basis for formulating practical decision-making criteria for supervisory boards to consider when selecting new executive board members.

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Translations

The current work investigates German cooperative banks. The author is a native German speaker, but this thesis is written in English. Unless otherwise stated, summaries, original sources and legal texts have been translated from German into English by the author of this thesis. Despite the greatest possible care, distortions and deviations might have been introduced in the translation process. German technical terms are explained in the relevant places in the text and original German words are included where necessary.

Text matches

The author of this thesis has disclosed the origin of all sources at the relevant points in the text and has cited them according to Harvard citation guidelines. This also applies to the German literature.

Unless otherwise stated at the relevant place in the work, the facts presented from German sources have been paraphrased by the author or quoted verbatim in the same way as for English-language texts. In the case of verbatim quotations from German, the original meaning may have been distorted by the author when translating the text into English. In order to avoid expanding the text unnecessarily and to facilitate the reading flow, the original German texts have been inserted only where this is essential. This applies in particular to German legal texts.

Several appendices and tables in the work have been reproduced exactly as they appear in the German original. This is indicated at the relevant points and citations are included according to the specifications. Nevertheless, such passages of text may be identified as matches by plagiarism-checking software such as Turnitin.

Abbreviations

The following abbreviations are explained where they first appear in the text, after which the abbreviation is used.

CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIR	Cost Income Ratio
COO	Chief Operating Officer
ECB/EZB	European Central Bank
EQF	European Qualifications Framework
GenG	German Cooperative Societies Act / in German, Genossenschaftsgesetz (GenG)
GQF	German Qualifications Framework for Lifelong Learning
ISCED	International Standard Classification of Education
KWG	German Banking Act / in German, Kreditwesengesetz (KWG)
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investments

Legal texts

The original wording of all German legal texts cited in this thesis can be found at <https://www.gesetze-im-internet.de/aktuell.html>.

For better comprehension and, above all, for ease of reference, the German abbreviations have been retained for German legal texts.

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Chapter 1: Introduction

1.1 Background and overview

Due to declining profit margins (cf. Deutsche Bundesbank, 2020)¹, German cooperative banks are facing increasing threats to their existence. However, the disappearance of cooperative banks from the German banking landscape would have serious consequences. Cooperative banks fulfil important functions in the German financial and economic system. Their dense branch network enables a large part of the population to participate in payment transactions and they are a key employer in many regions (BVR, 2022a, 2021a). Thanks to their unique structure, German cooperative banks also played an important role in supporting the European banking system during the financial crisis in 2007/2008. Their simple and clearly structured business model, restriction to regional markets and cooperative form of organisation, which prevents individual shareholders from achieving majority voting shares, are the factors which made this possible (Böhnke, 2010; Otte, 2010; VR-Bank in Südniedersachsen eG, 2019). The success of these cooperative banks is influenced by those leading them. Because of the strategic and operational roles they play these leaders play a decisive role, as these banks tend to be small in terms of their balance sheet and in international comparison.

Given that the success of a bank depends on its leaders, there is a case for examining the qualities of the board members and the board that might enable that success.

This chapter presents the topic of this thesis and outlines the research context. It then explains the importance of examining German cooperative banks and what significance the sustainability of this banking group has not only for banking in Germany, but also for the wider European banking system. This is followed by a discussion of factors that could potentially have an influence on the sustainability of the German cooperative banks. Reasons are given as to why certain factors have been selected in this thesis, while others are not pursued further. Then the research question is for-

¹ The majority of the sources cited have not explicitly analysed or examined German cooperative banks. However, their content is applied to the current work in the context of German cooperative banks and such references are marked with the prefix “cf.”.

ulated and the research objectives are presented. The theoretical and practical implications of the results are also discussed. The chapter concludes with an overview of the structure of the rest of this thesis.

The next section introduces the subject of the research and the related context, and explains the role played by German cooperative banks in the German economy.

1.2 Research context: German cooperative banks and board members

Banks have always played a critical role in the local and national economy (Baumgartner, 2022; Schmidt, 2021) and a well-functioning banking system has an impact on a variety of stakeholders, including owners, business partners, employees, customers, members, investors, the public and other banks as stated by Theurl and Böttiger (2007, p. 18). Furthermore, the essential task of the financial system and the participating banks is to pass on and bring together funds from providers and consumers. The funds collected are converted into loans in the form of cash or deposits (Deutsche Bundesbank, 2017). The explanations outlined above can be applied to different banks in different countries. However, this thesis investigates cooperative banks in the context of the German banking system.

Furthermore, the specific focus of this thesis is on executive board members of cooperative banks and the qualities of these executive board members. In this context, it is the executive board members in a cooperative bank who make the decisions in the day-to-day business (supervised by the supervisory board, which only participates in strategic decisions (cf. Ziechhaus, 2020; DG Verlag, 2018a) and is not active in the day-to-day business). The decisions taken by the board members have an impact on the banks' success (Hall and Pedace, 2016; Bertrand and Schoar, 2003), which in turn ensures the sustainability of the bank. By law, the executive board of a German cooperative bank (§ 24 (2) GenG) always consists of at least two persons, in contrast to large banks and Anglo-American banks, which often are represented by just a single CEO (cf. Böhm *et al.*, 2012). Having people in management roles who can be expected to perform well due to their qualities is crucial to ensuring the long-term sustainability of cooperative banks. At first, it is not obvious what these qualities actually are, as business leaders have many hidden qualities. The approach of this thesis is

to focus on the objectively measurable qualities of age, gender, experience and education, as well as board size and composition. The measurable qualities can shed some light on the influences of the hidden qualities.

This thesis focuses on German cooperative banks, which constitute 49.16% (844 banks and 9,315 branches) of the German banking landscape (Deutsche Bundesbank, 2021; Arts, 2016). At the end of 2019, there were 1,717 banks in Germany. This total consisted of 275 credit banks, 6 regional banks, 380 savings banks, 10 real estate credit institutions, 19 banks with special functions, 19 building societies, 163 other banks, and 844 cooperative banks (Deutsche Bundesbank, 2021, p. 1).

On the one hand, their high share in the overall German banking system and their dense branch network mean that they play a fundamental role in the German economy. On the other hand, their simple and risk-averse business model makes them resistant to crises (Fechtner, 2022; Otte, 2010, p. 89).² During the financial crisis of 2007/2008, the German cooperative banks not only supported the banking system in Germany, but in the whole of Europe³.

Furthermore, “rural areas often only have cooperative and savings banks, which secure access to the banking system for all regions and population groups” (Fischer, 2011, p. 33). This means that these banks are crucial for the local ecosystem (cf. Klein, 2020).

It is therefore all the more important that they can continue to perform this function sustainably in the future. However, various developments over the years have made this more difficult.

Firstly, cooperative banks, like other banking groups, are struggling with declining interest margins (cf. Deutsche Bundesbank, 2020)⁴. This is because the main source of income for banks is the difference between their lending rates and their deposit rates: the *interest margin*. Due to their low-risk business model (cf. Barkey, 2018), which mainly consists of collecting funds and granting loans, cooperative banks are

² According to Otte (2010), the advantage of the cooperative banking structure is that the banks are diversified; for example, they do not focus solely on risky investment banking but on ensuring that they have sufficient capital resources and are mostly active in local markets that are familiar to them. Otte (2010, p. 95) states that this advantage also applies to the savings banks, which operate a similarly simple and clearly structured business model.

³ A comparison of the German cooperative banking system with other European countries, especially with regard to size, structure and importance in the respective country, is presented in Appendix 4 on page 279.

⁴ Due to several significant key interest rate increases by the ECB (triggered by various factors such as the war in Ukraine, inflation, etc.), the situation is currently changing, i.e. the interest rate level is gradually rising again (cf. Otte, 2022; Fölsche, 2022).

dependent on adequate interest margins. However, due to the ECB's long-term policy of low interest rates, this interest margin has been decreasing for years, and the existence of some banks is now under threat (Geißdörfer, 2012a, p. 4). Furthermore, Geißdörfer (2012b, p. 4) states, that "The euro crisis and the budget crises of the southerners make it even more difficult to generate income. In the customer business too, margins continue to decline (due to the high level of competition between banks), which is also attributable to tighter investor protection guidelines in the securities business and high market volatility".

Secondly, cooperative banks are under additional pressure from the increasing digitalisation of the banking business (Kolak, 2022). In principle, digitalisation affects all banking groups, but it has a particular effect on cooperative banks, as they maintain denser branch networks than other banking groups due to their history (BVR, 2022e, 2022a). Both in the past and now, these dense branch networks have ensured the provision of banking services to the population (cf. Klein, 2020). Due to increasing digitalisation and the resulting decline in the number of branches, the cooperative banks are faced with a dilemma. The dense branch networks continue to be a key differentiating factor of cooperative banks (BVR, 2022a; Deutsche Bundesbank, 2021), but maintaining these dense branch networks incurs higher costs.

Furthermore, increasing regulation, which is primarily geared to the business models of large international banks (cf. Holtermann and Osman, 2020), affects cooperative banks disproportionately compared to other banking groups (cf. Genossenschaftsverband and Verband der Regionen, 2017). In terms of number, cooperative banks represent the largest share of all banks in Germany. In terms of size (expressed in terms of total assets), however, they are much smaller than the big banks and savings banks and thus play only a subordinate role nationally and internationally (cf. Deutsche Bundesbank, 2021). Nevertheless, all regulations apply equally to cooperative banks. Large banks maintain central teams of specialist employees who implement the regulations for the entire group. Each cooperative bank is legally independent and acts for itself. Consequently, each individual cooperative bank must train and maintain the appropriate staff to implement the regulations. This represents an organisational and personnel challenge for the cooperative banks (cf. Krüger, 2022).

However, for the financial system to function and to continue to exercise its functions of trust⁵, price stabilisation and payment processing, it is essential that banks can sustain in the long term (cf. Gleber, 2020); in other words, they must generate sufficient profit. Cooperative banks therefore play an important role in the ecosystem of the German economy and its banking system, especially in the respective business area in which these banks are locally present, i.e. in the local ecosystem. They ensure the German population's access to essential financial services: processing of payment transactions, supply of cash, advice on financial investments and financing, etc.. It is crucial that they remain viable businesses in order to be able to operate independently (cf. Gleber, 2020).

Due to the reasons mentioned, it is therefore important to identify the influencing factors which can contribute to making German cooperative banks sustainable in the long term.

However, before discussing this in detail, the importance of cooperative banks to the German financial system must further be examined.

As previously stated, German cooperative banks played an important role during the financial crisis. Due to their low-risk business model, German cooperative banks provided support and stability during the 2007/2008 financial crisis and ensured international payment flows (cf. Jungmeister *et al.*, 2015). In this respect, it is reasonable to assume that German cooperative banks could have a similar stabilising influence in future financial crises.

Furthermore, the stability described above is also evident in the fact that for more than 200 years, German cooperative banks ensured the "local supply" of financial services for the normal population and small and medium-sized enterprises, i.e. they secured the local financial ecosystem by providing financial services (cf. Matt and

⁵ In Germany, the financial system is mainly bank-based, i.e. capital is not invested directly in companies as funds, but provided to banks, which in turn finance companies. This is true for *Mittelstand*⁵ financing in particular. Because there is a large volume of long-term financing in this sector, it is essential that providers and buyers can trust in the stability of the financial system. The financial system therefore has a trust function. The German banking system consists of the individual banks and the central banks (the Deutsche Bundesbank and the European Central Bank [ECB]). The central banks are mainly responsible for price stability, which is ensured by the issue of legal tender, among other things. In addition, the central bank supplies the individual banks with liquid funds. In this way, the financial system functions as a payment processor and ensures price stability (cf. Deutsche Bundesbank, 2017).

Mocha, 2021). This was achieved by their small-scale nature, with a branch of a cooperative bank in almost every small town (and city). While large commercial banks have always concentrated on the middle class or even large industrial companies as customers, cooperative banks have always been banks for workers, employees, farmers and craftsmen (cf. BVR, 2022e). In principle, the cooperative banks still perform all these tasks and services today. Due to the challenges mentioned above, however, the pressure on the cooperative banks has increased considerably in recent years. To meet these challenges, many cooperative banks have merged into larger units and reduced their branch network considerably (cf. BVR, 2019a). If this development were to continue and a further withdrawal from the countryside were to take place, it may become more difficult to provide financial services to rural communities.

Another reason why German cooperative banks are important is that the older population⁶, which does not always have access to or make use of modern services such as online banking, benefits from the dense branch networks of cooperative banks (cf. Benkelberg, 2020). The reason for the dense branch network lies in the historical development of cooperative banks, which itself was influenced by farmers and craftsmen organising themselves into small village communities. The resulting promotional mission, with the motto "help people to help themselves", showed how small savers could accumulate assets through savings (cf. Otto, 2020). In this context, it should be mentioned that the cooperative structure also enables small savers to even become owners of "their" bank with modest financial means (through membership). At the same time, they influence the decisions of "their" bank, but not according to the number of shares they hold, as is the case with joint-stock companies. In cooperative banks, each member has one vote (cf. BVR, 2022c). If cooperative banks no longer existed, it may be more difficult for small savers to accumulate assets. Larger commercial banks are unlikely to be able (or willing) to close this gap, as they usually have a different target group, for example wealthy private customers or SMEs, which helps them generate corresponding returns (cf. Wischmeyer, 2022).

The long-term sustainability of German cooperative banks is also important because another key feature of cooperative banks is the advice they provide to their members

⁶ The demographic development in Germany is characterised by an increasingly ageing population (cf. Statistisches Bundesamt, 2019).

in the deposit and lending business. The advisors of the cooperative banks have always been close to the customer and on site, with some building up relationships with customers over several decades (cf. Knappkötter and Schönau, 2022). Good customer relations also exist at commercial banks, however, they employ a different business model (cf. Mayer, 2022). In addition, the branches of cooperative banks also serve as a point of social contact and mutual exchange. Due to the decades-long relationships they have with customers, it is common for children to open an account at the local cooperative bank. Children are slowly introduced to financial topics, for example through contact with their parents and the bank, with cooperative banks providing financial education outside of school education (cf. Schulz, 2021). A withdrawal or elimination of cooperative banks may mean a reduction in the financial education and advice available to certain parts of the population.

Another critical reason for German cooperative banks being sustainable is that many savers have placed deposits with cooperative banks due to the better deposit guarantees at cooperative banks. German cooperative banks have a unique institutional guarantee (cf. BVR, 2014). Unlike other (European) banking systems, they not only guarantee deposits up to the amount of 100 thousand euros, but to an unlimited amount. Cooperative banks have always had their own deposit guarantee fund, which intervenes in the event of bank defaults. This means security for depositors, especially in times of crisis (cf. Gleber, 2020). The continued existence of cooperative banks is therefore important because small savers benefit from their deposit guarantee.

Finally, German cooperative banks are important because they employ many thousands of people. Although the focus of this thesis is not primarily on cooperative banks as employers, the high number of jobs German cooperative banks provide is significant from a macroeconomic perspective. As of 31 December 2021, they employed more than 135,000 people and are thus an important employer and taxpayer (cf. BVR, 2022d). It is therefore critical that these banks continue to exist in the long term, providing a large number of people with a secure job, often close to home.

1.3 Factors influencing the sustainability of German cooperative banks

There are numerous factors that could have a greater or lesser influence on the sustainability of German cooperative banks. In order to examine these factors in more detail, it is necessary to identify the factors which could affect sustainability over which the bank⁷ has no direct influence and, in contrast, factors over which the bank has a degree of influence.

1.3.1 Factors over which the bank⁸ has no direct influence

As a result of the financial crisis of 2007/2008, international policy-makers felt compelled to regulate banks more strongly, since it was mainly large international banks that caused the financial crisis (cf. Marx and Bender, 2020). In the following years, banking regulations were tightened considerably. For example, capital requirements were strongly increased. Even though the financial crisis was caused by big banks with a completely different business model, the stricter regulations also apply to German cooperative banks (cf. Gianfagna *et al.*, 2021), which operate a low-risk business model (Fechtner, 2022; Barkey, 2018) and are considerably smaller (in terms of their balance sheet) than big banks (Deutsche Bundesbank, 2021). Thus, further regulations could create further difficulties for German cooperative banks. However, German cooperative banks have no direct influence on regulation.

In addition to regulation, German cooperative banks are also subject to laws introduced to protect customers. This has occurred several times in recent years. These laws aim to strengthen consumer rights and hold banks accountable. Such changes in the law have often been made retroactively, i.e. banks were obliged to repay amounts that had been found to be wrongly collected (cf. Trares, 2021). The loss of future income and retroactive refunds to customers put banks under additional pressure and makes their business survival harder.

In this context, the interest rate policy of the ECB is an important factor that strongly affects the sustainability of cooperative banks. Due to European and global events

⁷ Note: when "the bank" is referred to in the following sections, it always means the persons acting on its behalf, i.e. the bank's executive board members.

⁸ "The bank" always means the persons acting on behalf of the bank, i.e. the executive board members.

(inflation, national debt, distortions of financial markets, etc.), the ECB's interest rate policy has been geared towards low interest rates for several years (cf. Berner and Wilkens, 2022). This has had serious consequences for banks, as the difference between lending and deposit interest rates has been their primary source of income. Due to the long period of low interest rates, the (interest) spread continually declined over the years. Besides the big banks, it is mainly the cooperative banks that have suffered from this development, since the deposit and lending business is their traditional source of income (cf. Leichsenring, 2018). The big banks adapted their business models many years ago by expanding or even shifting their sources of income to investment banking, commission business or other areas (cf. Seiwert and Welp, 2022). This historical background of cooperative banks means that they cannot adapt their low-risk business models so quickly. Due to their success over two centuries, it may be the case that they do not wish to adapt them at all. As a result, their ability to counteract the reduction in interest income is limited. The continued decline in interest income means that some cooperative banks are struggling to survive, with cooperative banks powerless to influence this.

Digitalisation is becoming increasingly important and is having a growing influence on the success of cooperative banks. Features such as online banking, self-service devices, video consulting, product transactions via the internet are permanently changing the way banking is done (cf. Kauer and Lehmann, 2022). At the same time as many typical banking transactions are shifting to the digital world, customer footfall in branches decreasing (cf. von Stillfried, 2018). In addition, online services provide increased transparency, enabling potential customers to conduct their banking transactions when and where it is most convenient for them. Although increasing digitalisation is affecting all economic sectors and banks, it is having a disproportionate effect on cooperative banks due to their dense branch network (cf. Deutsche Bundesbank, 2021). This may make maintaining the same number of branches too expensive.

As already mentioned, cooperative banks have historically operated a low-risk business model (cf. Barkey, 2018), which consists of accepting deposits and granting loans. Due to the long-lasting low interest rate policy of the ECB (cf. Berner and Wilkens, 2022) and the associated introduction of negative interest rates within German banks, it is important for customers to at least place their deposits "safely" with the bank. This creates liquidity surpluses at the banks. Either the surplus deposits are

also invested with the central bank at negative interest rates, or the banks try to invest their money on the capital market at the best possible interest rates. If there are disruptions on the capital market and on the stock exchanges due to, for example, wars, natural disasters or Covid-19, banks are also directly affected by such developments, nowadays more than ever, since events that occur in distant countries also have an impact on the financial markets. Therefore, even unpredictable events can have a significant impact on the sustainability of cooperative banks.

Another potential influence on the sustainability of cooperative banks can be the competitive situation in the region in which the bank operates (cf. Ruh and Spachmann, 2021). The number, strategy and size of the competitors can have positive or negative effects on the sustainability of cooperative banks. In this context, the market share of the cooperative bank is in the respective region and thus the market power of the bank is also important.

In the broader context, factors directly related to the particular region in which the bank operates could have an impact on its business performance. These include, for example, the unemployment rate and insolvency rate in the region as well as the gross value added, i.e. the purchasing power of the population. If the unemployment rate is high, it may be difficult to do profitable business with customers due to a lack of income. Similarly, it may be difficult to do good business with companies in regions with high insolvency rates. Gross value added is also a measure of the purchasing power and the potential that the inhabitants of a region have.

Although it can be assumed that good leaders will try to steer their banks prudently and strategically through these challenges, the banks themselves have no influence on these circumstances (cf. Achtelek and Hofmann, 2021). On the other hand, there are influences over which the bank can have a degree of influence. These are examined in more detail below.

1.3.2 Factors over which the bank has a direct influence

An essential factor influencing the sustainability of a cooperative bank is the profit expectation that the executive board has (cf. Macke, 2011). High profit expectations are more likely to provide a secure reserve cushion for future years. This has a positive

effect, especially in years when earnings are declining (for various reasons). High reserves can help a bank withstand tough years. On the other hand, lower profit claims would be conceivable, analogous to the idea of profit satisficing rather than profit maximisation (cf. Broberg and Egüez, 2018). This would be in line with the ideals of Friedrich Wilhelm Raiffeisen (1818-1888) and Hermann Schultze-Delitzsch (1808-1883) and would guarantee the sustainability of the bank. Surplus profits are distributed to the members in the form of dividends (§19 (1) GenG) or donated to charitable institutions. However, especially in recent decades, it has become apparent that such a strategy tends to have disadvantages, as the aim to promote members has increasingly receded into the background and are nowadays a mere part of the mission statement as with many other companies. In addition, such a strategy makes sustainability much more difficult, as there are fewer reserves for bad years. Also related to the issue of earning power and profit entitlement is the ability to generate and retain sufficient equity capital for future operations. The ECB, the supervisory authority, obliges banks to retain a certain percentage of their deposits and, above all, loans as reserves in the form of equity capital (cf. Georgiou and Sobczynski, 2022). This can only be achieved with sufficient earning power and simultaneously indicates and ensures the sustainability of a cooperative bank. In any case, the profit expectation is something that the bank and thus the acting board members can determine themselves. Moreover, management's profit expectations can influence key strategic decisions as well as the way in which employees are managed. Therefore, it is important for the bank to recruit executive board members with the appropriate competencies and qualities, and to choose the right board composition.

The strategic future orientation also has an impact on bank sustainability and is something that the board members of a cooperative bank can largely determine themselves (according to §7 of the rules of procedure of the executive board). If the bank's focus is on preserving its own independence, this can be a good long-term strategy, as shown by the successful historical development of cooperative banks and their sustainability for more than 200 years (cf. BVR, 2022e). On the other hand, the factors of influence mentioned above (ECB interest rate policy, Covid19, digitalisation, etc.) can, in their interaction, have a negative influence on the success of the cooperative bank, meaning that the decision-making bodies (supervisory boards and executive boards) may have to re-think their strategy. In the worst case, if the bank

develops in a very negative manner, it may be forced to merge with another cooperative bank as it is no longer sustainable on its own (cf. Neubauer, 2020). The opposite approach would be a growth strategy that not only does not exclude mergers with other cooperative banks, but deliberately pursues them, as supported by Hanker (2021). This would be done with the aim of ensuring the long-term sustainability of the cooperative bank. Here, too, there are certain dangers, since in the case of high growth and mergers, the risks taken and new organisational structures to be created must not be neglected and may also possibly endanger sustainability (cf. Gindele, 2019).

Furthermore, the risk strategy chosen for the bank and the actual risk situation is a decisive factor for the economic stability and sustainability of a bank and lies within the decision-making power of the board members (cf. Kalhöfer and Kübler, 2020). The risk appetite of the bank's executive board is of great importance to the chosen risk strategy, i.e. the extent to which the managers are prepared, for example, to engage in speculative investment transactions or to grant risky loans with the intention of achieving higher returns. On the other hand, the risk appetite of the management is of decisive importance, especially in the long term, because any positive or negative effects of the decisions they make usually only come to light in later years. Furthermore, developments and factors mentioned above, such as the ECB's interest rate policy or political decisions, have an impact on the actual risk situation. For example, there may be defaults on loans that were not granted on a profit-making basis but have developed negatively due to certain developments or events. The chosen risk strategy and the actual risk situation can therefore have a decisive influence on the sustainability of the cooperative bank (cf. Jürgenschellert and Kleine, 2022).

The management style of the board members can also play a decisive role in ensuring the sustainability of the bank. Decisions made by managers and board members not only have material impacts, but also affect their employees (cf. Burkhart, 2020). A participative, democratic style of leadership may have a different impact on employees and thus on the results of their work than an authoritarian style of leadership (cf. Matira and Awolusi, 2020). The effects of any leadership style are difficult to predict, as the context, the leader, the employee(s) all play a role, as do other factors. In this respect, the same leadership style can have different effects in different situations.

However, the management style of superiors always has an impact on the productivity of the employees and thus on the success of the company, in this case the cooperative bank, and thus ultimately contributes to its sustainability or downfall.

In addition to the managers in a bank, the employees themselves also play an important role within the bank. They are the ones who implement the instructions and guidelines of the managers and the executive board. Consequently, it is important to have qualified and well-trained employees. However, this alone is not sufficient. It is a decisive advantage for a company to have motivated employees who feel a sense of purpose and, accordingly, perceive a positive future in their work. In order to be an attractive employer and to promote work-life balance among employees, companies today need to offer flexible working hours and other social benefits (cf. Burkhart, 2020).

Closely related to the board members and their characteristics is the composition of the executive board, which can be influenced directly by the bank, i.e. by the supervisory board⁹. Since the executive board of a German cooperative bank always consists of at least two persons by law (§ 24 (2) GenG), this means that two or more persons with the characteristics described above come together, which can influence the success of the bank in different ways. At the same time, the number of board members and the composition of the board (i.e. whether one of them acts as chairman of the board) may also have different effects on the success of the bank and thus on the sustainability of the bank (cf. Lu and Lee, 2021; Huu Nguyen *et al.*, 2020). As a result, each board member can have a different risk appetite, different views on the strategic direction of the bank, different leadership styles and other characteristics that differentiate the individual board member from the other board members. All of these characteristics can have an overall impact on the sustainability of the bank.

In summary, the executive board members make a range of decisions which have an impact on the banks' success, which in turn ensures the sustainability of the bank. These decisions are influenced by the board members' qualities, which will be evaluated in this thesis.

⁹ § 18 (1) of the statutes (cf. DG Verlag, 2018c) gives the supervisory board the authority to appoint the executive board. The executive board requires at least two members. The number of executive board members usually depends on the size of the institution, the business policy of the supervisory board, succession arrangements or other necessities and bank-specific features.

The following sections will outline the reasons for selecting factors for analysis in this thesis.

1.4 Reasons for the selection of specific factors

This section considers which of the factors mentioned that could potentially have an influence on the sustainability of a cooperative bank should be further investigated in the current work. The reasons for selecting certain factors and omitting others are also explained.

One approach could be to examine the influence that the bank or third parties have on the factors under investigation. Political decisions, new legislation (which may be enacted as a result of political decisions) and unforeseen events such as wars, natural disasters and pandemics such as Covid-19 are events that are certain to affect banks, their performance and thus sustainability. However, the timing and extent of the impact of such events are always uncertain. As a result, the bank has little or, at worst, no influence on such influencing factors. Therefore, it is difficult to select these factors as variables to be studied and they will not be pursued further in this work.

1.4.1 Possible new insights

Another criterion is the extent to which the factor under investigation has already been examined in other research and what new insights (not only theoretical but also practical) can possibly be expected in the context of the current work. The impact of ECB policies on different banking systems has already been investigated in numerous research articles, especially in the context of the Japanese banking system (cf. Schnabl and Sepp, 2021; Latsos and Schnabl, 2021; Israel *et al.*, 2021). It is possible that further insights could be gained with regard to the impact of central bank policies on German cooperative banks, but this impact is rather minor and is therefore not investigated further. Likewise, the effects of digitalisation have already been sufficiently investigated across a range of corporate sectors and banking systems (e.g. Crazius and Jantos, 2022; Pertl, 2019; Jovanović and Voigt, 2016). This also applies to factors relating to the competitive situation and market share in the banking sector (cf. Gerhard Walther and Richard Reichel, 2019; Maurer, 2016).

1.4.2 Selection criterion: availability and collectability of data

One factor which must be taken into account for the current work is the amount of data available for statistical analysis. Equally important are the effort required to collect the data and the amount of data to be collected (sample size). The subject of this thesis is German cooperative banks and their management. Since there are 844 cooperative banks in Germany (as of 31 December 2018; BVR, 2022a) and each cooperative bank employs at least two board members by law (at least 1,688 board members or more in total), it is clear that the thesis requires a large sample and thus a quantitative analysis (cf. Brüsemeister, 2008).

In order to analyse the research topic from as many perspectives as possible, qualitative methods were also considered. In principle, qualitative methods such as surveys, interviews, case studies, etc. can also be used to collect data that is not quantifiable or difficult to quantify at first, such as risk appetite, risk strategy, leadership style, etc.. However, a qualitative research design makes comparability potentially difficult and, moreover, there is the risk that the data changes, i.e. is no longer reproducible (cf. Kokolakakis and Lera-Lopez, 2020; Lamnek, 2005; Wilson, 1982). Furthermore, data collection in the form of interviews and the like is time-consuming, both for the interviewer and the interviewee. Rather, the aim of the current work is to collect large amounts of accessible data and to use objective and measurable variables which can also be used in selection processes (cf. Heinze, 1995). These measurable variables can also represent more hidden qualities.

However, in order to substantiate the results obtained by means of quantitative methods and to enrich them with further insights (cf. Lamnek, 2005), an additional qualitative data collection is carried out by means of questionnaires. This approach corresponds to a triangulation of data, i.e. the combination of several data sources and methods to investigate a phenomenon from several perspectives (cf. Goodman *et al.*, 2021).

1.4.3 Selection criterion: factors with direct influence

The focus of this thesis is on those factors and parameters that cooperative banks themselves can influence. Consequently, the factors and variables suitable for investigation will be those factors that are measurable, objective and comparable. Ideally, these will be factors that are easily observable, and for which data is easily collectable and available and can, for example, be taken into account in selection procedures, by the supervisory board when hiring new board members, for example. Furthermore, they should be factors that remain constant and provide the same values for each measurement and only change over time. For example, the date of birth always remains constant, but the variable "age" changes, as does "experience". Furthermore, the investigations should produce a theoretical and, ideally, a practical added value.

In this context, the topic of bank performance has been studied in relation to various aspects, including ownership, regionality, merger effects and optimal bank size (cf. Gorton and Schmid, 1999; Manetti and Bagnoli, 2013; Kring, 2002; Maurer, 2016). However, bank performance has not been thoroughly examined in terms of manager quality. Executives who run a business typically have a significant impact on business policy and, as a consequence, on the success of the company – expressed as performance and explained as “profit” by Stegorean and Gavrea (2010, p. 202) and Gupta *et al.* (2014, p. 163).

Zhang (2017, p. 544), in line with Hambrick and Mason (1984), points out “that organizational outcomes – strategic choices and performance levels – can be viewed as reflections of the values and cognitive bases of top executives in the organization and the demographic characteristics of executives can be used as valid proxies for their cognitions, values, skills and knowledge base”. The personal traits of CEOs can influence a company’s performance (see also Kaplan *et al.*, 2012, p. 974, Fee *et al.*, 2013, p. 567 Graham *et al.*, 2013, p. 104, King *et al.*, 2016, p. 287, Malmendier *et al.*, 2011, p. 1690). Similarly, the number of top managers and their organisation have a decisive influence on the performance of a company. Therefore, great importance is attached to the individuals who run a company, because their behaviour (which in turn is influenced by their personal qualities) is linked to the company’s performance. In this sense, it is crucial that the management (including the CEO) perform well because this in turn affects the performance of the company (Aij *et al.*, 2015, p. 200).

1.4.3.1 Manager quality variables

In this respect, managers play an important role in the bank; by definition and by law, they have the most important function in the company. Executive decisions have a decisive effect on the staff that implement them, the results achieved and thus the economic success of the bank. Ultimately, this determines their sustainability or failure. The decisions made are in turn influenced by certain characteristics of the executive board member.

It is executives who make the essential decisions in the day-to-day business of cooperative banks (the supervisory board is involved in essential strategic decisions, but not in the day-to-day business), as stated by Ziechhaus (2020). If bank boards have already managed to achieve successful performance in the past despite adverse circumstances (low interest rate policy, regulations, digitalisation, etc.), there is a high probability that these boards could also succeed in the future. It is therefore important to identify the factors that lead to this successful performance and the “hidden” qualities of managers.

Therefore, for the purposes of the current work, the following manager quality variables have been chosen. The variable age was chosen because age is usually positively associated with increasing life experience and knowledge. However, these are only anecdotal observations. The current work will examine the extent to which age has a positive or negative association with performance. The board composition in German cooperative banks is strongly male-dominated. Several approaches like the biological and sociocultural model (cf. Ali, 2019; Galli *et al.*, 2019) suggest that women’s decision-making process is different to that of men. Therefore, the variable gender was chosen to shed light on whether women on cooperative bank boards have a positive or negative influence on performance, and if so, to what extent. The variable education was chosen for this hypothesis because § 25 c of the KWG clearly requires that the executive board members of a bank must have the appropriate professional qualifications. The variable (leadership) experience was chosen as a hypothesis because § 25c KWG requires that board members have several years of professional experience.

1.4.3.2 Board-related variables

In addition, factors that are directly related to the person or persons on the board are considered to be important influencing factors. Board size and board composition are considered here. The variable board size was chosen to better understand whether a board with two members performs better than boards with more than two members. The variable board composition was chosen to better understand the performance impact of a two-person board; especially when there is no CEO or when there are two CEOs. As with the explanations on manager characteristics, this data is readily available and collectable, unambiguous and thus quantifiable and statistically evaluable.

1.4.3.3 Control variables

Control variables are fixed variables that are deliberately kept constant in order to avoid an influence on a dependent variable (cf. Eckey *et al.*, 2002), which is in this case the Gross Profit Margin. Unemployment rate, insolvency rate and gross value added were chosen as variables because they reflect specific characteristics of the regions where the cooperative banks operate. Historically, German cooperative banks have maintained a high number of branches in many small (and large) places and therefore play a significant role for the regional market. Therefore, it is considered useful to select factors that are directly related to the region and could also have an influence on the performance of the cooperative bank operating in the respective region. Furthermore, it is important that the necessary data is available and can be collected. The unemployment rate of a region can be assumed to influence the enterprises active in that region. A high unemployment rate weakens the purchasing power in the region and thus makes it more difficult for the local bank to do profitable business with customers. The use of the unemployment rate as a control variable is also supported by Ademmer and Jannsen (2018) and Maurer (2016). Another selected regional factor is the insolvency rate, which is closely related to the success and failure of companies. Again, if the insolvency rate is high in the region, it can be assumed that business with corporate clients may be below average. Insolvency rate is also used as a control variable by Buch *et al.* (2013). As explained earlier, these two variables may have an impact on the purchasing power in a region, making it easier or harder for the cooperative bank to do profitable business with customers.

Purchasing power can be expressed using the variable gross value added. The use of the gross value added as a control variable is supported by Di Bartolomeo and Marchetti (2016) and Maurer (2016). All three variables are to be used as control variables in the statistical evaluations. The variables are relevant because they reflect regionality, which is a key feature of cooperative banks.

Due to the fact that German cooperative banks are legally independent and autonomous banks and that a data set with around 844 banks (as of 31 December 2018) and more than 1,900 board members is available, the decision to adopt a quantitative research design was made at a relatively early stage of the research work. A quantitative research design requires that the variables be measurable, available, comparable and objective, and ideally available or collectable in large numbers to provide a solid basis for predictions. The variables manager qualities and board characteristics can be said to largely fulfil these criteria. There is a limit to the number of variables this work can examine. As a result, some variables which could have an impact on performance are not examined in detail since the primary focus of the current work is on manager qualities.

1.4.4 Ethical, legal and practical aspects

Selecting variables for a research can have contrasting ethical and moral implications. The intent is to select variables that will help the research establish findings that contribute to the sustainability of cooperative banks. However, the results of the current work may lead to a supervisory board selecting applicants based on certain criteria in a manner which may disadvantage certain candidates, i.e. may lead to supervisory boards acting in a discriminatory manner towards potential candidates.

From an ethical and legal point of view, however, it must be critically questioned whether the selection of a candidate is legally permitted and, if so, under what conditions. In the worst case, a candidate who does not have the desired qualities (from the bank's point of view) because they are too old, for example, could be disadvantaged. In the best case, on the other hand, the results of the current work could help a bank identify a candidate who has the best characteristics (e.g. due to age, education, gender, etc.) to ensure the sustainability of the bank. In this context, the (ethical)

question arises as to the basis on which the bank, i.e. the supervisory board, can make a correct decision.

In Germany, there are laws intended to prevent discrimination in employment. The General Equal Treatment Act¹⁰, for example, states that no one may be discriminated against on the basis of gender or age. It is based on Article 3 of the Basic Law¹¹, according to which the state must treat all citizens equally. The extent to which the legal requirements on discrimination in recruitment are observed cannot be clearly determined, especially since there is room for flexibility, i.e. the distinction between what is permitted and what is not is not always clear. However, the annual report of the Federal Anti-Discrimination Agency¹² confirms that employment discrimination does take place (cf. Antidiskriminierungsstelle des Bundes, 2021).

It is doubtful whether all legal regulations are observed in selection procedures, as the persons involved (in the context of this thesis: the supervisory board of a cooperative bank) in the selection procedure are prone to violating legal regulations as they may not fully understand where those regulations are relevant (cf. Reichle, 2019).

One can therefore conclude that the essential possibility exists that the conclusions of the current thesis may be applied to the detriment of certain candidates, in possible breach of employment and recruitment law. At the same time, however, it is reasonable to assume that most executives will observe the relevant legal requirements in the application of findings from this thesis.

¹⁰ In German: Allgemeines Gleichbehandlungsgesetz (AGG)

¹¹ In German: Grundgesetz (GG)

¹² In German: Antidiskriminierungsstelle des Bundes

1.5 Research question, research aim and research objectives

1.5.1 The research question

The current work attempts to answer the questions raised in the previous paragraphs. The individual points can be summarised in terms of one central research question:

How do the qualities of age, gender, experience and education of board members as well as board size and composition influence the sustainability of German cooperative banks?

To answer this research question, the factors age, gender, experience and education as well as board size and composition are examined in more detail in the literature review. Subsequently, hypotheses based on this are developed and empirically examined.

In order to answer the research question, the current work evaluates the economic performance of more than 800 German cooperative banks (as at the end of 2018) (cf. Deutsche Bundesbank, 2021) on the basis of data gathered over a period of 10 years (2009–2018)¹³ from the BISNODE database and the Federal Gazette¹⁴.

1.5.2 The research aim

The primary aim of this research is to better understand how the selected variables influence the performance and sustainability of German cooperative banks.

¹³ The reasons for selecting the data collection period 2009–2018 are explained in more detail in *Section 5.4.2* on page 126.

¹⁴ In German, Bundesanzeiger.

1.5.3 The research objectives

The following objectives support the primary research aim:

- i) Examination of the extent to which the variables related to managerial qualities, as well as board size and composition, influence performance and thus contribute to the sustainability of the cooperative banks.
- ii) Making a theoretical contribution to existing knowledge by filling existing research gaps on the basis of identified research gaps, under consideration of underlying theories in the context of the research question, followed by the derivation and development of suitable hypotheses.
- iii) Making a practical contribution to cooperative bank sustainability by providing guidelines for supervisory boards for the recruitment of new executive board members

With the results of this thesis, the supervisory boards of German cooperative banks will be given practical tools to optimise the appointment of new executive board members.

1.5.4 The unique theoretical and practical contributions of the current work

A key motivation of the current work is to answer the research question, to make a theoretical contribution to knowledge and to make a practical contribution to the sustainability of German cooperative banks, as outlined in the following paragraphs.

The results and findings of this thesis will fill existing knowledge gaps and generate new knowledge. Existing research (e.g. Liargovas and Skandalis, 2010; Lim *et al.*, 2008) in the area of manager qualities focuses mainly on industrial companies (cf. Liargovas and Skandalis, 2010) and local government bodies with a single CEO (cf. Carmeli, 2006). Furthermore, existing research mainly refers to other European countries or countries outside Europe (cf. Carmeli, 2006; Lim *et al.*, 2008), but not explicitly to Germany or German cooperative banks. Furthermore, existing research predominantly looks at individual components. While Berger *et al.* (2012) examine a combination of several factors, the current work examines a different combination. Similarly, the factors of board size and composition have predominantly been researched for individual CEOs and larger boards in other European countries, but not

in the environment of German cooperative banks, which must have at least two executive board members as required by law. Furthermore, the issue of sustainability is not considered by any of the above research papers, while this thesis examines the sustainability of cooperative banks as a key area of focus.

In this respect, the current work is unique in that the factors it examines have not been explored in this combination before. Furthermore, the current work differs from previous research in that it looks at German cooperative banks in isolation, and thus has a different context. This means that there is no linkage with other banking sectors, which would complicate the interpretation of the results. While various influences on performance such as regionality, merger effects and optimal bank size (cf. Maurer, 2016), Cost-Income-Ratio (cf. Richter, 2014), age, education, gender, board composition and risk appetite (cf. Berger *et al.*, 2012) have already been investigated within German cooperative banks, the special feature of the current work is to explicitly use the Gross Profit Margin as a recognised and important indicator of performance within cooperative banks.

Another distinguishing feature of this research is that the results of the current work can contribute to the long-term sustainability of cooperative banks.

This thesis will indicate the specific features of the education and training paths that executive board members of German cooperative banks have taken. In this context, the current work develops a classification and an evaluation standard that has not existed in this form before.

Furthermore, this thesis applies existing theories (Principal Agent Theory, Signalling Theory, Screening Theory, Upper Echelon Theory, trait theory, social cognitive theory, the manager theories of Fayol and Mintzberg and Boyatzis' manager competencies) in the context of German cooperative banks and their executive board members. Principal Agent Theory concerns the contractual relationship between the members of the cooperative bank and the executive board members and highlights the central theoretical problem of asymmetric information that can arise in the application process. Signalling Theory is relevant to this thesis because it shows the agent's options to reduce information asymmetries. Screening Theory takes the opposite approach to Signalling Theory, i.e. the principal (the supervisory board in the context of this thesis) obtains information on its own initiative in order to reduce information asymmetries. Upper Echelon Theory shows how the variables under investigation

can be used to predict strategic actions and resulting company performance. Further theories like trait theory, social cognitive theory (SCT), the manager theories of Fayol and Mintzberg and Boyatzis' manager competencies serve as a predictor of bank performance based on specific competencies or behaviours of the applicants. The thesis therefore supplements these theories with new findings from the environment of German cooperative banks and their boards. This contributes to new theoretical and academic knowledge and closes existing knowledge gaps.

There is another respect in which this work differs from previous research. It not only generates new theoretical knowledge, but also practical guidelines for supervisory boards to apply when appointing new board members. In this context, the current work may contribute to providing solutions that help overcome two major issues for German cooperative banks highlighted by Principal Agent Theory: by lowering agency costs and by reducing information deficits. Optimising board member appointment processes can help keep agency costs low. The results of the current work can be used to identify in advance the candidate with the best prospects of success. Information deficits can be eliminated by being able to identify from the outset which candidates have the highest potential to succeed. The results and findings of the current work can be used to provide supervisory boards with concrete guidance supported by evidence. Therefore, the results of this research could make an important contribution to the long-term sustainability of cooperative banks.

1.6 The structure of this thesis

The following paragraphs provide an overview of the structure of the current work. The content of each chapter is briefly explained.

Chapter 1 began by introducing the topic and presenting the importance of the research. This was followed by a discussion of factors that could potentially have an influence on the sustainability of German cooperative banks. Subsequently, reasons were given as to why certain factors have been selected in this thesis and others have not. The research aim, objectives and research question were then presented. Furthermore, the theoretical and practical contributions of the current work were explained. The chapter concludes by outlining the structure of the thesis.

Chapter 2 focuses on German cooperative banks and why these are the subject of this research. It explains the role these banks play in the German banking market and how they differ from other types of bank. The chapter starts by providing a brief overview of the German banking system and the bank groups operating within it. This is followed by an explanation of how the cooperative banks have developed from their origins to the present day and the ideas that were important to the founders. This is followed by a description of the various organs of a cooperative bank and their respective responsibilities. The chapter provides the necessary background for understanding the context in which German cooperative banks operate.

Chapter 3 discusses Principal Agent Theory, Signalling Theory, Screening Theory, Upper Echelon Theory and various management and personality theories, including Boyatzis' manager competencies. The theories put the current work in context in relation to the literature review and make the relevance of the research clear. The ways in which the theories described in this chapter influence each other and their contribution to answering the central research question are also explained. Furthermore, the concepts of success, performance and performance measurement are discussed, particularly in relation to German cooperative banks. A discussion on executive specialisation concludes the chapter.

Chapter 4 deals with the extent to which the factors examined in this thesis have already been covered in the existing literature. The characteristics of boards, especially board size and board composition, are discussed on the basis of the existing literature. The first two hypotheses are then developed and formulated. Subsequently, the characteristics of age, gender, education and experience are examined in more detail and a hypothesis is developed and formulated for each of them.

Chapter 5 begins with an examination of the different research philosophies that exist and their influence on the current work. The ethical principles associated with the current work are then presented and considered. Following this, the thesis describes the data that was collected for each of the variables (dependent, independent and control), how the data was collected and from what sources it was gathered. In addition, the individual variables are described in more detail. An explanation is offered as to what is included in an profit and loss account, what function it has in a company, and

how the Gross Profit Margin is calculated – all of which are relevant for the methodology used in the current work. The chapter also describes the statistical procedures utilised for testing each hypothesis.

Chapter 6 presents the results of the empirical analysis, along with figures and explanations.

In Chapter 7, the results of the empirical analysis are discussed. First, an interpretation of the results and discussion of the implications is presented. The conclusion section highlights the limitations of the current work and provides recommendations for potential future research topics. Practical applications of the findings are also suggested. Thereafter, the extent to which the results answer the research question is considered, with a summary of the most important findings rounding off the chapter.

Chapter 2: German cooperative banks

2.1 Introduction

The following chapter will discuss the context of this thesis and explain why German cooperative banks are the subject of this thesis, the main differences between cooperative banks and other types of bank in Germany, and why the research question is posed in the context of Germany. The chapter starts by providing a brief overview of the German banking system and the bank groups operating within it. This is followed by an explanation of how the cooperative banks have developed from their origins to the present day and the ideas that were important to the founders. There then follows a discussion regarding the differences between German cooperative banks and other banking systems. This is followed by a description of the various organs of a cooperative bank and their respective responsibilities. The chapter closes with a summary.

First, the design and structure of the German banking system is explained.

2.2 The German banking landscape

The German banking sector is characterised by three different types of bank: private banks,¹⁵ banks run by public authorities (including savings banks) and cooperative banks (cf. Deutsche Bundesbank, 2016; Eim, 2004, pp. 14–15). This banking system is also referred to as the three-pillar system (cf. Schmidt and Zwick, 2018). Most of the private banks are incorporated and are therefore commercial banks. The banks run by public authorities are regulated by public law, in a similar manner to the system for regulating universities (cf. Arts, 2016). Cooperative banks are registered co-operatives (§1 GenG).

The three-pillar system developed gradually over time. The first public savings banks in Germany were founded in the eighteenth century. The aim was to promote saving and improve the supply of credit to the population in the business region (cf. Moeckel, 2022; DSGV Deutscher Sparkassen- und Giroverband, 2022). The first cooperatives emerged in the mid-nineteenth century (cf. BVR, 2022e). Many of these aimed to

¹⁵ For example, Donner & Reuschel (www.donner-reuschel.de), Merck, Finck & Co. (www.merckfinck.de), and Sal. Oppenheim Jr. & Cie (www.oppenheim.de).

help farmers and artisans to support themselves, as explained in further detail in the next section. The middle of the nineteenth century also saw the emergence of Germany's first major private banks, as the growing industry could no longer be financed by individual private bankers alone (cf. BANKINGCLUB, 2020). In other words, individual private bankers could no longer provide the increasingly large loans required by industrial companies. As a result, different legal forms, liability structures and equity capitalisation developed over time. This is still the case today.

The German banking system consists mainly of universal banks. As a result, in contrast to the separation banking system, universal banks can perform all types of banking transactions and offer all essential financial services in the areas of assets and liabilities (cf. Deutsche Bundesbank, 2021).

2.3 A brief overview of the historical development of cooperatives

This section provides a brief overview of how cooperatives developed, how the idea of member promotion arose and what significance it still has today.

At the beginning of the nineteenth century, the industrialisation and liberalisation of the economy caused competitive pressures which created major economic difficulties in cities and rural areas alike. A shortage of capital made it difficult for small-scale craftspeople, buyers and farmers to acquire resources and machines (cf. Hüttl, 2008). In addition, the banking system was not as developed as it is today. Although there were savings banks and joint-stock companies, these tended to cater to the needs of industry and large companies (cf. Hüttl, 2008). These banks also considered the income generated by small businesses to be too low in comparison to their expenses; at the same time, small businesses had insufficient securities to satisfy the banks. The majority of the middle-class population, therefore, had no access to credit (Fischer, 2011, p. 21). This meant that craftspeople, merchants and farmers depended on local moneylenders, who exploited this dependence by charging extremely high interest rates.

Hermann Schulze-Delitzsch (1808–1883) and Friedrich Wilhelm Raiffeisen (1818–1888) recognised the underlying problem and established alternatives to the existing credit facilities by grouping local loan-seekers into credit unions. Such associations had the ability to provide short-term loans of working capital to members. One group

of members deposited savings so that the overall group (i.e. the cooperative) could grant loans to other members. By coming together as a large group, artisans, farmers and small businesses were able to provide loans on acceptable terms that were previously impossible due to their poor market position (cf. Grosskopf, 1990; Dullenkopf, 2001). They were able to make decisions on offering loans by relying on local information from their members and by limiting membership to people with a good reputation in the local area. Furthermore, it was possible for the members to each be fully and mutually liable for their own cooperative (Gorton and Schmid, 1999, p. 127).

This approach was unusual for the time. In principle, credit decisions were made by individuals, i.e. bank managers or capital owners like Jakob Fugger, a famous merchant and banker who lived in the 16th century (cf. Nickels, 2015). The approach of distributing credit decisions among many individuals (the cooperative) was fundamentally different (cf. Hüttl, 2008). Parallels can be made with our business world today. In larger financial institutions that are run as joint-stock companies, a few shareholders (with high shareholdings) may not only have a say in a bank's development, but largely determine it (cf. Kallifatides and Nachemson-Ekwall, 2016). In cooperative banks, on the other hand, the principle of democracy still applies, i.e. each member has one vote (cf. BVR, 2022b). In the case of larger loans, these voting rights are still exercised by members of the supervisory board (according to §3 of the rules of procedure of the supervisory board; DG Verlag, 2018a). The supervisory board, in turn, is authorised to exercise these voting rights by the general assembly, i.e. the individual members. In addition, each individual member has the opportunity to participate in various decisions, such as a merger (§ 43 GenG). In this respect, the continued existence of cooperative banks in Germany is crucial to maintaining democratic decision making in banks and preventing banks from being dominated by a small number of rich shareholders.

The original idea of the founders of the cooperative was to help people to help themselves, commonly referred to as the promotional mission (cf. Hüttl, 2008). In the early years and for a long time afterwards, this principle functioned well. However, in recent decades, the economic landscape has changed dramatically, with the financial situation of households, small businesses and farmers improving significantly. This also means that the business practices of cooperative banks have changed; they have been adapted to ensure the future sustainability of cooperative banks, which is

also evident in the changes in cooperative law over the decades (cf. Liebig, 2021). One example of this is that, for many years, they have also been doing business with non-members, something which was originally excluded by the statutes¹⁶ (§2 (4); DG Verlag, 2018c). Based on §1 GenG and §1 of the Rules of Procedure of the executive board, the promotional mission still plays an important role for German cooperative banks today. This importance is reflected in the fact that cooperative banks are predominantly focused on the regional economy (cf. Hüttl, 2008). Furthermore, cooperative banks still maintain dense branch networks (cf. Deutsche Bundesbank, 2021). However, due to the developments outlined above¹⁷, the original promotional mission has almost no practical relevance today and has receded into the background over the decades (cf. Schäfer, 2019). Monetary aspects, measured in terms of performance, are much more important in ensuring the long-term sustainability of cooperative banks. Therefore, the promotional mission is nowadays no more than a mission statement, as is the case for many other companies as well.

2.4 The unique nature of cooperative banks in the German banking landscape

This section provides an overview of how German cooperative banks differ from other bank types and the reasons for this.

2.4.1 Ownership structures

A key distinguishing feature of cooperative banks is that their members are also their owners (cf. Hüttl, 2008). This is particularly unique in the banking world. In concrete

¹⁶ German cooperative banks use a so-called model statute which is identical in its basic features for all cooperative banks. Only nuances can be individually adapted by each cooperative bank (cf. DG Verlag, 2018c).

¹⁷ The improvement in the financial situation of traditional cooperative bank consumers and the provision of cooperative banks services to non-members.

terms, this means that members of cooperative banks each have one vote in the general assembly, regardless of the size of their shareholding (§ 43 GenG) and can thus participate in major decisions at "their" bank.¹⁸

In comparison, savings banks are owned by the respective region, so there is no co-ownership by individuals and no possibility of participating in decision-making (cf. Mußler, 2016). In the case of large banks in the form of joint-stock companies, there is a clear imbalance between small investors and large shareholders, i.e. large shareholders can exert greater influence than small savers (cf. Kallifatides and Nachemson-Ekwall, 2016).

At cooperative banks, each member has an equal vote at the general assembly and the opportunity to influence the composition of the supervisory board and the executive board; political influence is largely excluded (§ 43 GenG; Hüttl, 2008). Moreover, supervisory board members are also elected by the general assembly. These are individuals who are elected from among the members (according to § 24 of the statute; DG Verlag, 2018c) and who do not receive these positions due to political manoeuvring.

In comparison, savings banks, which have similar structures and similarly dense branch networks, differ in essential points. The owners of the savings banks are the respective administrative regions in which the savings banks have their headquarters (cf. Mußler, 2016). The supervisory body that oversees the savings bank executive boards is the administrative board (§ 13 Savings Banks Act¹⁹). This in turn is composed of the respective region administrator and for the most part by the mayors of the larger municipalities in the region (§ 13–15 Savings Banks Act). This means that the executive board can have political influence, while at the same time, the members of the administrative board can change more frequently (due to regular elections of mayors and region administrators). It also means that a customer has no means influencing the business policy of a savings bank.

¹⁸ This is also relevant today. On the one hand, the results of votes are usually announced immediately, i.e. every member is immediately informed of vote results. At the same time, there are no intervening hierarchies that can delay decisions. Furthermore, each individual member not only has a right to vote, but can also express their opinion during votes. In the case of merger votes in particular, individual requests to speak can be decisive as to whether or not the merger takes place.

¹⁹ In German: Sparkassengesetz - SpkG

2.4.2 Number of head offices and branches

A distinctive feature of cooperative banks is their dense network of head offices and branches and thus comprehensive provision of financial services, i.e. maintenance of the local ecosystem (cf. Deutsche Bundesbank, 2021). This is due to the fact that, during their emergence over 200 years ago, cooperative banks were established in almost every village (cf. Hüttl, 2008). Only in the course of the following decades did any consolidation take place; although there were fewer cooperative banks overall, branches were still present in many local areas (cf. Deutsche Bundesbank, 2021; Hüttl, 2008). Because the large banks were mainly focused on large customers such as industrial enterprises due to their business model, there was no need to build up dense branch networks. For the reasons already mentioned in *Section 1.2*, cooperative banks also have to close cost-intensive branches in order to survive economically. This in turn has a significant impact on the local ecosystem that these cooperative banks have provided over the past decades. In concrete terms, this could result in larger parts of the population no longer being able to participate in payment transactions and the loss of cooperative banks as employers in the region.

2.4.3 Business model

Cooperative banks also stand out due to their low-risk business model and the small-scale nature of their business (cf. BVR, 2020; Barkey, 2018). Influenced by their historical development, the business model of cooperative banks has always been to receive deposits and issue loans (cf. Hüttl, 2008). An essential basis for this low-risk business model is the small-scale nature of the transactions, especially in the lending business (cf. BVR, 2020). This means that, instead of providing loans to a small number of large borrowers, cooperative banks usually provide loans in smaller amounts to many different borrowers²⁰. This keeps the risk to the bank manageable. This risk diversification strategy, which makes cooperative banks resilient to financial crises, could be a reason why they have been sustainable for more than 200 years.

Large banks have always taken greater risks because of their focus on industry and large companies. Savings banks, on the other hand, operate the same business

²⁰ Depending on the region in which the bank operates and the economic structures there, there are different weightings and distributions with regard to the number of borrowers and size ratios.

model as cooperative banks, but because of the size of their operations (due to mergers in recent years and decades) they now operate more like large banks, i.e. they can and do extend loans to larger companies that were previously provided by large banks (cf. Deutsche Bundesbank, 2021). In addition, savings banks are only accountable to their region for the business done and risks taken. In case of losses or other difficulties, the region and thus the citizens of the respective region are liable (cf. Mußler, 2016). In this respect, it is now the cooperative banks that mainly pursue low-risk business models.

2.4.4 Other distinguishing features of cooperative banks

One other distinguishing feature of cooperative banks is that their members have the right to a dividend (§ 19 GenG (1)). Neither the large commercial banks nor the savings banks offer this right. Furthermore, by statute (§ 9; DG Verlag, 2018c), members are obliged to conduct business²¹ with the bank, which is not the case with other types of bank. In addition, the cooperative banks, although very small in size and number, with more than 800 cooperative banks existing in Germany as of 31 December 2018 (cf. Deutsche Bundesbank, 2020), are legally independent. Savings banks, in contrast, are not legally independent, as the owners are the respective regions and thus have co-determination rights (cf. Mußler, 2016).

Another special feature is that cooperative banks pay into their own security fund (cf. BVR, 2014), which guarantees members and customers an unlimited payout in the event of difficulties at the bank, whereas with other banking groups and in German companies in general, this is only limited to deposits of up to 100,000 euros (cf. Deutsche Bundesbank, 2015).

While Germany's large banks have always done business beyond Germany's national borders, cooperative banks have historically followed the regional principle, i.e. they only do business with customers from the region, within a known environment. This involves close engagement with the local ecosystem, something which local banks have done successfully for decades (Hüttl, 2008).

²¹ This is intended to prevent one-sided business relationships, i.e. where the member benefits from favourable conditions in lending, for example, but performs payment transactions on more favourable terms at another bank. The fact that all members are obliged to carry out all types of banking transaction with their cooperative bank ensures that the bank's business operations are sustainable.

2.5 Bodies of German cooperative banks

First, there is an explanation of the differences between German and Anglo-American executive boards. After that information about the individual organs that make up a cooperative bank are provided. In addition, the competences and responsibilities of the individual boards are delineated from each other. This section begins by explaining the differences between the boards of German banks and those of Anglo-American banks. The individual organs making up a German cooperative bank are then discussed, followed by the competencies and responsibilities of the individual bodies.

Up to this point, the thesis has used the term *executive board member* and cited Anglo-American sources as well as German sources. However, a board member in Germany is not necessarily the same as a board member in America or in the UK. The composition of boards in companies and cooperative banks in Germany is only partially comparable with the composition of boards in the Anglo-American region (e.g. Jensen, 1993a). This is due to the fact that, in the Anglo-American region, the management and control functions of a company, which rest with the board of directors, are often performed by one entity; the board of directors (Böhm *et al.*, 2012, p. 139). In the Anglo-American model, members of the board of directors are usually divided into executive and non-executive members. The executive members are responsible for the operational management of the company, while the non-executive members mostly have an advisory and control function. Their function is comparable to that of a member of the supervisory board of a German stock corporation. In many German companies, the executive board and supervisory board are separate.

German cooperative banks have an executive board with operational activities and a supervisory board with non-operational activities. Furthermore, § 37 (1) GenG excludes any dual function of executive board and supervisory board.

The GenG specifies which organs are required in a cooperative bank: “The cooperative must have an executive board and a supervisory board. Cooperatives with no more than 20 members may be waived by appointing a supervisory board. In this case, the General Meeting shall exercise the rights and duties of the supervisory board, unless otherwise specified in this Act” (§ 9 GenG).

The three decision-making bodies in German cooperative banks are the executive board, the supervisory board and the general meeting.

2.5.1 The executive board (members)

Given their central role to this thesis, this section focuses on the executive board members of a cooperative bank and their responsibilities.

The executive board members of a cooperative bank are its legal representatives. They (at least two members) are solely responsible for managing and representing the cooperative bank in accordance with the GenG (§ 24 Paragraph 1 and § 27 Paragraph 1 Sentence 1). In addition, the executive board members fulfil the business leadership function and implement the business strategy (Fischer, 2011, p. 120).

Furthermore, according to § 1 GenG, the executive board is the body responsible for pursuing the purpose of the cooperative; that is, pursuing the promotion of the members. The executive board consists of two persons and is elected and dismissed by the general meeting. The statute may determine a higher number of persons as well as a different method of appointment and dismissal (§ 24 GenG).

At this point, the question arises as to why a cooperative bank requires two executive board members while a joint-stock company can have just one. A question also arises as to why the executive boards of large banks are often significantly larger. The need for two board members at cooperative banks is justified by the four-eye principle, i.e. there is a mutual monitoring and control function. This monitoring and control function extends to the entire construct of a cooperative, i.e. the executive board members, as the executive body, monitor each other and are simultaneously monitored and controlled by the supervisory board (cf. § 38 GenG). This structure means there is no need to employ additional staff to carry out such a control function.

In comparison, banks that are run as stock corporations only require one executive board member (CEO) by law (§ 76 Stock Corporation Act²²). Usually, these are large banks with several thousand employees, which are difficult to manage for one person alone. Therefore, the position of CEO is often supplemented by divisional board members like CFO, CTO, CIO²³, as is the case at Deutsche Bank, for example (cf.

²² In German: Aktiengesetz - AktG

²³ These roles do not exist in cooperative banks but are expected to be carried out by the two CEOs.

Deutsche Bank, 2022a). In fact, companies like Deutsche Bank have much larger executive boards, with each board member heading a specific department. Such a structure often brings with it higher costs.

With regard to the requirements for members of executive boards, § 25c KWG states that the executive board members must be technically qualified and sufficiently competent to manage an institution and must devote sufficient time to performing their duties. Professional aptitude is the combination theoretical and practical knowledge of the relevant business as well as leadership experience. It is assumed that individuals who have three years of leadership experience at an institution of comparable size and business activity have the professional aptitude to be an executive board member.

Peemöller (2017, pp. 65–66) suggests that a code of conduct based on the thirteenth-century concept of the “honourable merchant” would be desirable for members of the executive board of a cooperative bank. Aside from general values, such as honesty, fairness, integrity, sincerity, reliability, foresight, diligence and decency, however, he does not answer the question of what tangible – and, above all, measurable – qualities this could encompass.

Other qualities or requirements, such as age, education and experience, are not defined by law. This raises the question of which personal qualities or characteristics influence the performance of a cooperative bank.

2.5.2 The supervisory board

“Unless the statute stipulates a higher number, the supervisory board consists of three persons to be elected by the General Meeting. The number required for a resolution shall be determined by the statute” (§ 36 GenG). The supervisory board must supervise the executive board in its function. For this purpose, it may at any time demand information from the executive board on all cooperative affairs and examine and audit the books and documents of the cooperative, as well as the cooperative fund and the stocks of securities and goods (§ 38 GenG).

According to § 38 GenG, the supervisory board is responsible for controlling and monitoring the activities of the executive board members (Fischer, 2011, p. 122). Usually, the supervisory board is a committee consisting of lay persons, without in-depth business or bank-specific knowledge (Münkner, 2007, p. 32).²⁴ This may seem peculiar at first, yet makes sense on closer inspection. For historical reasons, the supervisory board consisted of members of the cooperative, often farmers and craftsmen, i.e. laymen from the cooperative's own ranks. This is still largely the case today. The requirements for knowledge and qualities of supervisory board members have increased over the years (cf. Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin, 2020b), but it is essentially sufficient for a supervisory board member to be able to supervise the business of the executive board (cf. Picker, 2019). For this purpose, the supervisory board members can also make use of external experts. In parallel, the monitoring and control function of the supervisory board is supplemented by the annual statutory audit by audit firms (cf. Picker, 2019). Supervisory board participation is voluntary, typically only remunerated with low expense allowances (§ 36 GenG). This means that here, too, the cooperative principle of helping people to help themselves comes into play, helping to avoid costs and unnecessary effort. Furthermore, such a regulation ensures that no economic dependencies arise between the controlling body and the executive board.

There are further measures to ensure that the appointment of laypersons to the supervisory body does not have any negative effects. According to the statutes of each individual cooperative bank (cf. DG Verlag, 2018c), each supervisory board member must leave the board every three years (cf. § 24 (3); DG Verlag, 2018c). This regulation is intended to ensure that supervisory board members are capable of fulfilling their control and monitoring function and do not allow their performance to decline as a result of being on the board for too long. In addition, it is important to prevent close relationships between the supervisory board and the executive board. Additionally, new members with different professional backgrounds should have the opportunity to participate in the board. In practice, however, such a regulation is undermined by the fact that individuals who leave the supervisory board may be re-elected (according to

²⁴ There are no regulations on the demographic composition of the supervisory board. Traditionally, farmers and craftspeople were often represented on supervisory boards. It is only in recent decades, and especially in larger cooperative banks, that increasing numbers of businesspeople with business knowledge have been found on supervisory boards. The management reports at www.bundesanzeiger.de confirm this (the professions of members of the supervisory board are named).

§ 24 (3) of the statute) and this happens regularly (cf. Nordthüringer Volksbank eG, 2022).

Furthermore, the supervisory board is responsible for appointing the members of the executive board and while it is not the primary object of research of the current work, it is the main addressee of the results of the empirical investigation of this thesis. Supervisory board members will likely find the outcomes of this research very useful as they will help them appoint the right candidates to the executive board.

2.5.3 The general meeting

“The members exercise their rights in the affairs of the cooperative in the general meeting, unless the law provides otherwise. The general meeting adopts resolutions by a majority of votes cast (a simple majority vote), unless the law or the statute provide for a greater majority or further requirements. For elections, the statutes may have different rules. Each member has one vote” (§ 43 GenG). The general meeting is by far the most powerful organ in a cooperative bank. It consists of members of the cooperative and always takes decisions by vote. According to § 48 GenG, the following business policy decisions, among others, fall within the scope of the general meeting: the appointment, dismissal and discharge of the executive board and the supervisory board; the use of the annual surplus; the dissolution of the cooperative; and amendments to the statutes. However, it should be noted that the general meeting does not usually have a direct influence on the bank’s day-to-day business or its strategic decisions (cf. Wiegner, 2021).

2.6 Summary

There are special features and distinguishing characteristics of cooperative banks in comparison to savings banks and large banks, which have their roots in their historical development and are still valid today. Due to the important role cooperative banks play for the local ecosystem, based on a dense branch network and their low-risk business model, the continued existence of cooperative banks is important. Savings banks, which have similar structures, are not ideally suited as a research object, as

they operate significantly fewer branches, tend to be large banks due to their size ratios and produce a smaller data sample due to their smaller number.

Furthermore, the environment of German cooperative banks is particularly well-suited to investigating executive characteristics because the interaction between the selected manager qualities and the performance of banks can be investigated as precisely as possible. This can be optimally realised in an environment where members can directly elect "their" supervisory board and "their" executive board. Political influence, which could possibly "undermine" managerial qualities and related decisions, can be largely excluded in the environment of cooperative banks. In savings banks, on the other hand, the political component is present per se, and an influence on the management cannot be ruled out.

Because there is still a large number of cooperative banks, and a large number of executive board members associated with them, cooperative banks are the ideal environment for the current work since the results of the empirical survey are expected to yield meaningful findings that may be applicable in similar contexts (e.g. savings banks).

Chapter 3: Theoretical background

3.1 Introduction

At the beginning of this thesis, it was explained why it is important that German cooperative banks continue to be sustainable in the long term. In addition, the variables to be examined in more detail with regard to their influence on the performance of these banks were identified. In the following chapter, the topic will be examined against a theoretical background and fundamental relationships will be discussed. The relationship between the potential executive board member and the bank is explained, the potential problems that can arise from this are identified and the existing solution mechanisms are discussed. A particular focus is placed on the extent to which the variables to be examined can be helpful in finding solutions. In concrete terms, the theories are examined in such a way that they contribute to a better understanding of how information asymmetries that can arise between a potential applicant and the bank can be reduced with the help of the variables to be examined. As a result, agency costs can be reduced.

This chapter discusses governance theories, namely Principal Agent Theory, Signaling Theory, Screening Theory, and Upper Echelon Theory, as well as various management and personality theories. The theories put the central question of the current work in context in relation to the literature review and make the relevance of the research clear. The chapter also explains how the theories influence each other.

Since performance is a central element of the thesis question, a more theoretical and conceptual literature review is carried out on success, performance and performance measurement in German cooperative banks in the further course of the chapter. Therefore, the term *success* is defined, and *performance* is explained as a measure of success. Then, several approaches to measuring performance are illustrated. After that, measurements of financial performance in general and for banks in particular are introduced. Furthermore, there is a definition and explanation of what exactly is meant by sustainable performance.

The chapter concludes with a discussion of the concept of manager specialisation and its treatment in the literature.

The next section looks in detail at Principal Agent Theory, which, in the current work, can be applied to the relationship between the owners of a cooperative, its members, and its chief decision-makers, the executive board members and primarily points out the theoretical problem.

3.2 Governance theories

3.2.1 Principal Agent Theory

Principal Agent Theory (also called Agency Theory) examines the contractual arrangements of at least two contracting parties in a business (e.g. sales contracts or employment contracts) where one party, the so-called principal, delegates some decision-making authority to the other party, the so-called agent (cf. Feng and Horta, 2021; Niklaus, 2015). The agent, in turn, is responsible for maximising the principal's investment in exchange for an incentive, such as an annual salary (cf. Liu *et al.*, 2021a).

The ideal state of such contractual situations is an environment in which information can be freely obtained and in which any asymmetric distribution of information does not cause any economic disadvantage to the principal or the agent (cf. Feng and Horta, 2021; Niklaus, 2015, p. 7). There is no incentive for the acting parties to behave in a manner that is contrary to the contract (cf. Liu *et al.*, 2021a).

However, reality does not conform perfectly to this ideal: in delegation relationships (in contractual relationships with dependencies between the two contracting parties, i.e. between principal and agent), the asymmetric distribution of information, environmental uncertainties and the differing risk appetites of the numerous actors involved (i.e. the principal and the agent) can lead to agency problems (cf. Damayanti *et al.*, 2021).

Information asymmetries arise when one contracting party (here: the agent) has a knowledge advantage over the other contracting party (here: the principal). Due to information being unequally distributed, opportunistic behaviour can occur as a result (cf. Ugwu *et al.*, 2020; Finishtya *et al.*, 2021; Raimo *et al.*, 2021). This means that the

agent could exploit its knowledge advantage to the detriment of the principal. According to Jensen and Meckling (1976), asymmetrically distributed information can be further divided into the following categories:²⁵ hidden characteristics, hidden action, hidden information, hidden intentions (cf. Preindl, 2022).

In the case of agency problems, a distinction is made between adverse selection, moral hazard and hold-up problems (cf. Tang, 2017). Adverse selection means that the principal makes a negative selection based on characteristics or qualities of the agent of which the principal was not aware but were present before the contract was concluded, i.e. the principal could have chosen the wrong applicant due to a lack of knowledge of his or her characteristics. Moral hazard occurs after the contract has been concluded and means that the agent exploits their professional freedom without the principal being able to intervene. A hold-up problem arises when the principal does not know the agent's intentions after the contract has been concluded, despite being able to observe the agent's actions (cf. Tang, 2017). All three agency problems are caused by information asymmetries, i.e. the agent has an information advantage over the principal (cf. Damayanti *et al.*, 2021). In order to compensate for this information advantage (on the side of the agent), the principal has to incur so-called agency costs for e.g. more elaborate monitoring of the agent (cf. Eka Berlianti *et al.*, 2022). Due to the agent's information advantage over the principal, further agency costs can arise because the principal does not hire the best agent, but only the second-best agent (cf. Jiao *et al.*, 2019).

Föhr (1991, p. 127) explains these so-called agency costs as the difference between "the solving of a given problem whereby the principal has full information and is able to make a decision quickly (first-best-solution) and the best possible solution involving one or more agents". In other words, agency costs are the difference between "first-best" and "second-best" solutions, with "first-best" solutions being the ideal scenario (cf. Jiao *et al.*, 2019; Spremann, 1988, p. 617). Agency costs are simply the

²⁵ Hidden characteristics refers to information that only the agent has about their qualities and characteristics. The agent could conceal this from the principal before signing the contract in order to increase their benefit. Hidden action refers to the fact that the principal cannot observe or control the agent's actions after the conclusion of the contract. The agent could exploit this through opportunistic behaviour to increase their benefit at the expense of the principal. Hidden information refers to the fact that the principal can observe the agent's actions after the contract has been concluded but cannot judge their quality. The agent can exploit this knowledge advantage to maximise their own benefit through opportunistic behaviour. Hidden intentions refers to any intentions hidden by one of the two parties to the contract about the business to be conducted from the other. A hold-up problem arises in the course of the business relationship.

costs that the principal has to face as a result of delegating the work in a world of informational challenges (cf. Kabwe *et al.*, 2021; Spremann, 1988, pp. 617–622).

The underlying assumption here is that decision-makers employed by a company do not behave as if they were the company's owners, i.e. there is opportunistic behaviour by the agent. As a result, agency costs are incurred to ensure that the decision-makers act in the interests of the company owners and not in their own interest (cf. Faisal and Challen, 2021; Kandemir, 2019)²⁶.

However, what does such a contractual relationship essentially look like in the environment of German cooperative banks? Where do information asymmetries exist? Which agency costs arise and why? In the context of the current work, Principal Agent Theory describes the contractual relationship between the members of the cooperative bank (the principal) and the executive board (the agent). In the broader sense, there is, at least internally, another principal–agent relationship, because according to § 24 of the statutes (cf. DG Verlag, 2018c), the members of the cooperative bank (the principal) elect the supervisory board (the agent) at the general meeting. Thus, the supervisory board acts as an agent on behalf of the members; in turn, it acts as the principal when appointing members of the executive board. In general, agency costs represent the costs incurred by the separation of company ownership (members of the cooperative bank) and corporate governance (executive board members).

According to the literature (cf. Ugwu *et al.*, 2020; Finishtya *et al.*, 2021; Raimo *et al.*, 2021), it may occur that, during the appointment process in cooperative banks, the candidates (i.e. potential future agents) applying for a position on the executive board have an information advantage (cf. Feng and Horta, 2021) over the supervisory board (principal), because the potential candidates know their own qualities better than the supervisory board. Information asymmetries could occur because a potential candidate could conceal certain (negative) characteristics and qualities (hidden qualities) about themselves in order to increase his or her benefit (cf. Damayanti *et al.*, 2021), i.e. to obtain the advertised position. Furthermore, it cannot be excluded that, after the conclusion of the contract (and despite the supervisory board's monitoring

²⁶ Stewardship Theory (Chrisman (2019); Henssen *et al.* (2014)) takes the opposite view, i.e. the executive board member acts for the good of the company. In this respect, opportunistic behaviour can be viewed critically.

and control function), information asymmetries occur due to hidden action, hidden information and hidden intentions (cf. Preindl, 2022).

In this context, the question arises as to what specific qualities and characteristics the agent might be withholding from the principal. In addition to various information (e.g. personal and professional background), application documents typically contain²⁷ information about the age, gender, education and professional experience of the candidate (cf. Schüttler-hansper, 2019). In addition, some information is already available in advance (e.g. from the job advertisement or website) and is more enlightening for the applicant, such as the size and composition of the executive board (cf. BI Bankinformation, 2022). In the selection process, the data provided by the applicant can serve the supervisory board as a proxy for underlying competencies and qualities (hidden qualities) of the executive board candidate. The supervisory board has the task of assessing the information provided in order to select the best candidate(s). The criteria used by the supervisory board to select a board candidate are likely to depend on various contextual factors that are not considered in detail here. Furthermore, only the variables that are also examined in the current work are discussed here, as there are numerous pieces of information that can influence candidate selection in an application process.

There is evidence in the literature that there is a negative correlation between increasing age and information processing speed, which is subsequently associated with lower competencies in e.g. decision-making (cf. McHutchison *et al.*, 2019; Békés *et al.*, 2021). Other studies (cf. Oztimurlenk, 2021; Kanfer and Ackerman, 2004) support the claim that older managers have more social networks and experience. These correlations might be used as proxies for competences like “decision making” as well as “social competences”.

There are differences in the way men and women work. Nugraha and Widyaningsih (2022) and Singh *et al.* (2002) show that women analyse issues more thoroughly than men before making a decision, while men can identify problems more quickly and precisely than women. Consequently, when a problem has been identified and a suitable solution is available, women take more time to delegate and explain work tasks. Men, on the other hand, often prefer a single solution, even though alternative

²⁷ Due to the fact that application processes may involve varying stages and require different amounts of information, the process is outlined here in simplified form.

solutions may be available (cf. Nugraha and Widyaningsih, 2022; Singh *et al.*, 2002). These findings could be relevant to competencies such as “problem solving ability”, “analytical thinking” as well as “leadership qualities”.

In several research papers (e.g. Buczyłowska and Petermann, 2018), education is seen as an indicator of a person’s cognitive ability. Accordingly, correlations are seen between a person’s cognitive ability, level of education and decision-making ability (cf. Petrocchi *et al.*, 2021; King *et al.*, 2016; Lubinski and Humphreys, 1997). Higher educational attainment is also associated with higher levels of patience and higher irritability thresholds (cf. Warner *et al.*, 2020; Funder and Block, 1989). In the Upper Echelon Theory literature, education is also used as a measure of an individual’s knowledge (cf. Hambrick and Mason, 1984). The characteristics involved here could be described as “decision-making”, “patience” and “knowledge”.

Prastiwi *et al.* (2019) and Acquaah (2012) state that senior manager competencies are based on knowledge, skills and expertise. As confirmed by Acquaah and Chi (2007), these enable a person to handle difficult and complex tasks and, based on the information available, make informed decisions that are specific to particular industries. The characteristics involved could be summarised as “knowledge”, “expertise”, “handling difficult and complex tasks” and “decision-making”.

Board size and board composition are factors that can be important for both the applicant and the supervisory board.

In terms of board size, the standard argument (cf. Lu and Lee, 2021; Adams *et al.*, 2010; Jensen, 1993a) is that the larger the board, the less effective it is in supervising the management of an organisation. This is attributed to higher agency costs, particularly with regard to (relationship) problems between executive board members, communication and coordination difficulties, and protracted decision-making. From the applicant’s point of view, a board having more than two members could be an indication that there might be difficulties within the board. From the perspective of the supervisory board, an applicant who has been a member of a board with more than two members could have the competence “teamwork ability”.

One of the foundations of dual (or shared) leadership theory is that complex organisations can be successful when led by a team as opposed to a single individual (cf.

Eseryel *et al.*, 2021; Pearce and Conger, 2003). The theory of dual (shared) leadership also implies that an influencing, interactive and dynamic mechanism between the team members may help the team achieve its goals and organisational aims. The key factors involved here could be summarised as “teamwork ability”, “flexibility” and “dynamism”.

Regardless of whether the respective variables (age, gender, education, experience, board size and board composition) and information have a positive or negative impact on performance, in which is the focus of the current work, they can be interpreted by the supervisory board (which in turn is composed of several individual persons having different views and interpretations of the information) in a variety of ways and used as a proxy for the qualities and competencies of the potential applicant. The competencies listed above, which are considered to be proxies for underlying qualities, serve only as examples and are subject to individual interpretation. This means that on the basis of the variables, different conclusions can be drawn about the associated competencies and qualities and their interpretation, i.e. whether they are interpreted as positive or negative.

The extent to which the individual pieces of information listed above can be used to make a recruitment decision depends on the respective context. Overall, the applicant information could act as a signal for both the applicant and the supervisory board and thus balance out information asymmetries. How this principle works in detail is presented in the following chapter.

Principal Agent Theory has highlighted the theoretical problem (of asymmetric information distribution). The next section discusses how Signalling Theory and Screening Theory can provide possible remedies.

3.2.2 Signalling vs. Screening Theory

Signalling Theory describes a solving mechanism. It attempts to solve the problems of Principal Agent Theory and considers how an exchange of information between two parties with different interests can be successful (cf. Song *et al.*, 2020; Bangerter *et al.*, 2012). The initiative to reduce information asymmetries rests with the agent, because the agent has an interest in concluding a contract with the principal. Reducing any information asymmetries, therefore, is seen as one of the central objectives

of Signalling Theory (cf. Fan and Zhang, 2020). Signalling theory assumes that one party to a contract (the agent) is better informed about an issue than the other party (the principal) (cf. Liedong and Rajwani, 2022). To reduce the uncertainty of the principal, the agent tries to send signals (which serve the principal as proxies for certain qualities and competences of the agent) in order to induce the principal to conclude a contract (cf. Fernando *et al.*)²⁸.

The emergence of Signalling Theory goes back to Spence (1973), who studied information economics. He investigated markets where buyers and sellers are confronted by asymmetric information. Using the labour market as a model, he developed a theory to explain these information asymmetries, as already illustrated in the previous section. He claimed that this theory could help minimise information deficits and ensure that the employer hired the best candidate for the position.

In the context of a job application, personal characteristics such as name, age, work experience, gender and education constitute signals (cf. Spence, 1973) and can serve as proxies for certain underlying qualities and competencies. In the job application process, the applicants, who occupy the role of an agent, send important information (signals) in the form of credentials and certificates to the principal, the prospective employer (cf. Spence, 1973; 1974; 2002). The information which the employer gains from the signals can help them hire the best applicant for the business by interpreting the associated competencies and qualities accordingly.

Due to the information asymmetries that arise when deciding between two alternatives, a so-called *adverse selection* may occur. Akerlof (1970) describes this in his well-known essay “The market for ‘lemons’: quality uncertainty and the market mechanism”²⁹. Adverse selection can occur in the credit market as well as in the labour

²⁸ In order to compensate for this information advantage and to encourage the principal to conclude a contract, a potential candidate can send signals to the supervisory board on the basis of their application documents, which the supervisory board must interpret in order to select the best candidate. Selecting the second-best candidate can potentially result in several negative consequences, i.e. agency costs. For instance, the bank may not select the most suitable candidate (cf. Jiao *et al.*, 2019), i.e. an adverse selection occurs. Secondly, a higher salary may have to be paid for the candidate, even though the candidate is only the second-best (cf. Föhr, 1991). Third, higher monitoring costs can arise due to the selection of the second-best candidate.

²⁹ The essay describes how a market can collapse if there is an asymmetrical distribution of information about product quality. Akerlof (1970) illustrates this with the example of the used car market. In his model, he refers to cars of poorer quality as “lemons” and to used cars of good quality as “peaches”.

market (cf. Mallick, 2019). Akerlof (1970) describes solutions for reducing information asymmetries. One approach is to create *information balancing*. In simple terms, certain signals indicate certain candidate qualities.

In the context of German cooperative banks, Signalling Theory (cf. Spence, 1973) plays a role when it comes to the appointment of new executive board members as explained in the last section. When German cooperative banks start the process of appointing executive board members, applicants send signals in the form of application documents that mention characteristics such as age, education, experience and gender (cf. Spence, 1973; Spence, 1974; Spence, 2002), which can indicate competencies and qualities outlined in the previous section. There is also signalling in the opposite direction (cf. Spence, 1973; Utami and Wahyuni, 2018), the potential candidate (agent) can receive signals from the principal (here: the supervisory board); in other words: the principal sends signals, for example in the form of a job advertisement or website, which provide essential information about the employer, such as board size and board composition (cf. BI Bankinformation, 2022). This information, in turn, can be crucial for the applicant, as they also interpret the available information (on board size and board composition) and base their approach to the application process on it.

In the next step, when all the necessary information is available, the supervisory board can then choose the candidate who best meets the executive board's requirements by using the information received from those signals. In other words, a candidate selection can take place on the basis of certain signals, which are representative of certain competencies and qualities of the candidate, and the importance that the supervisory board attaches to the signals of the candidate. Candidate selection might be made on the basis of a desired competence profile (cf. BI Bankinformation, 2022). However, the variables examined in the current work can help to identify suitable

It is explained that consumers who want to buy a car only know the average quality of all used cars. This means that a quality assessment for each individual car is not possible and the cost of obtaining this information would be too high. On the other side, car owners or used car dealers know the precise quality of their cars. In spite of this, customers will only be willing to pay the price for a car of average quality, as they cannot determine the quality of a car in advance.

The direct consequence of this is that cars of above-average quality are objectively undervalued on the market, while cars of below-average quality are overvalued. As a result, only those car owners who own a car of below-average quality ("lemons") sell their car; the owners of high-quality cars keep their car. As a result, cars of above-average quality are no longer traded because they can only command the price for a car of average quality. Thus, the number of cars traded and the average quality of those cars will decrease. This is due to the mismatch between different information sources. According to Akerlof (1970), this can cause a market to stagnate or even come to a complete standstill.

candidates in the application process, as these variables are not only examined in terms of their relationship with performance, but can also serve as a proxy for certain competencies and qualities of the potential executive board candidate.

Another solution to information asymmetries is provided by Screening Theory (cf. Stiglitz, 1975). Here, the initiative to reduce information asymmetries is taken by the principal. Stiglitz's Screening Theory (Stiglitz, 1975) provides an approach to counteracting information asymmetries and tries to solve the principal-agent problem. After Spence's (1973) Signalling Theory, Stiglitz (1975) developed Screening Theory on the basis of the work of Akerlof (1970) and Spence (1973). According to this theory, the party which is less informed (the principal) takes steps to improve their level of information. The principal tries to reduce the information gap to the agent by systematically checking the agent (screening). Therefore, Screening Theory is the opposite of Signalling Theory (cf. Cornacchione and Daugherty, 2013; Riley, 2001; Stiglitz, 1975). Stiglitz (1975) states that there are many important differences in the qualities of goods, individuals, brands and other items. He defines screening as the identification of these qualities. Screening Theory explains, for instance, how an uninformed buyer with incomplete information about a seller makes decisions to avoid adverse selection and avoid hazards associated with false information (cf. Bergh *et al.*, 2020).

According to Spence (1973), employees in the market select the signals they want to transmit in order to obtain appropriate remuneration (cf. Hinrichs and Bundtzen, 2021). In contrast, Joseph Stiglitz (1975) explores whether signals could be used by the employer to screen applicants and put them into categories (which can be, for example, demographic qualities) that reflect their productivity or some other capability which could benefit the company or organisation hiring them (cf. Stiglitz, 1975).

Stiglitz (1975) develops Screening Theory using a simple model (cf. Yu and Yezer, 2016). Each individual has certain characteristics which directly indicates his or her positive impact on company performance. Without screening, each worker will receive a salary proportional to the mean productivity of employees. If those employees with higher productivity can be identified by means of screening, they will receive higher wages. The high-productive individuals thus have an economic incentive to be identified. For simplicity, the model assumes that there are only two kinds of individu-

als, with either high or low productivities (cf. Stiglitz, 1975). Using education as an example, it can be explained how the variables can be used in the current work as signals (which in turn can represent certain qualities and competencies of the applicant). Education acts as a screening mechanism that signals an individual's capabilities (cf. Foo *et al.*, 2016). Completion of education and training programmes are often requirements or prerequisites to recruitment, promotion, and other decisions (cf. Cooper and Davis, 2017). Degrees and diplomas indicate employee productivity potential (cf. Chevaillier and Duru-Bellat, 2020). Organisations can obtain education information to use in hiring decisions at minimal expense (cf. Cooper and Davis, 2017). Stiglitz (1975) focuses on education as an important screening device when it comes to the recruitment of new employees. He considers the function that education plays in communicating necessary information to organisations and assumes that employers first establish the required education levels with which they can classify job applicants (cf. Benda *et al.*, 2019; Spence, 2002; Riley, 2001).

Spence's (1973) concept of signalling can, in Stiglitz's (1975) terminology, be seen as a screening device. Conversely, screening aims at levelling information asymmetries between parties in the market, so screening could also be labelled an instance of signalling.

As outlined earlier in this section, Signalling Theory and Screening Theory try to solve the problems identified by Principal Agent Theory. However, the selection of a suitable agent can save the principal control and monitoring costs (cf. Zainuldin *et al.*, 2018).

Stiglitz's (1975) Screening Theory helps prevent information asymmetries from occurring in the executive board member appointment process of German cooperative banks. The supervisory board can look for signals (which can indicate certain competencies and qualities of candidates) in advance of receiving an application that allow them to pre-select the most suitable candidates. The supervisory board searches in advance (before the job advertisement is placed) for suitable candidates who match the desired competence profile. This could be done, for example, by personally and directly contacting a suitable candidate or by appointing a specialist service provider with an appropriate pool of candidates. Screening can also be used if, for example, several applications are received after a job advertisement and a suitable candidate

is to be selected on the basis of the desired competence profiles. In order for this to succeed, the supervisory board must select the correct signals to separate suitable candidates from unsuitable ones. Essentially, these are the signals which are examined as variables in the current work and can be proxies of the competencies and qualities of the applicant.

3.2.3 Upper Echelon Theory

Upper Echelon Theory is used in the current work to explain how managerial characteristics can be used as predictors of strategic actions and resulting company performance.

Upper Echelon Theory was first outlined by Hambrick and Mason (1984). The theory proposes that the decisions of senior managers are influenced by observable characteristics, such as gender, education and age, together with psychological parameters. In turn, the decisions made by senior managers have a strong influence on the company's results and therefore contribute to company sustainability. The company, therefore, is seen as a mirror image of its senior management: the "upper echelons" (cf. Saci *et al.*, 2021; Ting *et al.*, 2015; Hambrick, 2007). Upper Echelon Theory can be used to identify and explain the correlations between the factors education, age and experience and company performance (cf. Orazalin and Baydauletov, 2020; Gang Wang *et al.*, 2016, p. 775). The theory claims that it is the managers who ultimately shape the strategy of a company (cf. Zeng, 2020; Hambrick and Mason, 1984). "Organizational outcomes – both strategies and effectiveness – are viewed as reflections of the values and cognitive bases of powerful actors in the organization" (cf. Hambrick and Mason, 1984).

In the Upper Echelon Theory decision model, decision-makers are influenced by their cognitive abilities³⁰ and the related values³¹ (cf. Silva and Banda, 2022). The assumption is that decision makers process only limited information, which they select and interpret according to intellectual characteristics such as awareness, perception and creativity. They then use this filtered and evaluated information as the basis for making a decision (cf. Wu *et al.*, 2021; Ma *et al.*, 2021; Hambrick and Mason, 1984). In its entirety, this is perceived as a multi-level process. At the beginning of the process, the actor is confronted with various intra-organisational and external stimuli in a decision-making situation. Because of the actor's own cognitive limitations, he or she processes certain information only before selecting and producing interpretations. Therefore, cognitive bases and the respective values influence the actor's interpretation of the respective information. The cognitive base describes the actor's knowledge of future events, potential alternatives and their consequences. This knowledge and certain values are indicated by the demographic and psychological characteristics of each person (cf. Hambrick and Mason, 1984; Niklaus, 2015, pp. 109–110).

Hashim *et al.* (2022) and Niklaus (2015) explain that psychological characteristics are difficult to measure. Instead, demographic characteristics, such as the age, education and experience of managers, serve as reliable supporting variables to measure psychological characteristics. Niklaus (2015) further argues that managers' decisions and behaviour are influenced by these demographic characteristics.

Upper Echelon Theory forms an essential theoretical basis for the research and assumptions of the current work. The theory establishes a relationship between the characteristics (qualities) of executive board members, the composition of the executive board and the performance of the cooperative bank. Therefore, every decision-making behaviour of an executive board member is based on their individual values

³⁰ Two approaches to analysing senior managers' cognitive skills can be identified in the Upper Echelon literature: one is based on demographics and the other is based on cognition (cf. Ye *et al.*, 2021; Kilduff *et al.*, 2000). The demographic approach uses characteristics (such as education, gender and age) as indicators of the manager's cognitive behaviour (cf. Schwarz *et al.*, 2020). In contrast, the cognition approach attempts to measure cognitive characteristics directly through surveys (cf. Tempelaar *et al.*, 2018). The demographic approach is taken into account in the current work.

³¹ Values are preferences for human behaviour that are relatively stable. The knowledge base, i.e. cognitive base of the decision maker consists of knowledge or assumptions about future events and knowledge about alternative actions and their consequences.

and cognitive characteristics (cf. Silva and Banda, 2022), which in turn are shaped by their psychological and demographic attributes and characteristics.

The theory proposes that individual executive board members strongly influence business results (performance) through their decisions (cf. Saci *et al.*, 2021), which in turn are influenced by the board members' qualities. Because psychological categories are difficult to measure or access, the current work relies on demographic and, thus, measurable characteristics, which are regarded as reliable variables for psychological constructions (cf. Hashim *et al.*, 2022). Age, experience, education and gender are considered to be relevant demographic characteristics for executive board members and can help to predict the performance of German cooperative banks, since these factors influence decisions.

Preliminary information on age, experience, education and gender can be helpful in selecting the "right" board candidate. Moreover, Upper Echelon Theory helps to justify the choice of the variables considered in the current work in order to predict performance by means of manager quality variables. In this respect, understanding Upper Echelon Theory also contributes to answering the research question.

3.3 Manager qualities and competencies

This section presents a theoretical discussion of the extent to which manager behaviour and decisions are influenced by manager qualities and the influence that the variables chosen in this study have on company performance.

3.3.1 Trait theory and social cognitive theory

Trait theory and social cognitive theory are used in the current work to examine the correlations between the variables to be investigated and performance from a broader perspective. Trait theory focuses on the characteristics of a manager, which, influenced by socio-economic factors such as age, gender and education, can determine the behaviour of managers and thus have an impact on performance. Similarly, social cognitive theory (SCT) attempts to explain and predict the behaviour of managers based on their personality. In SCT, personality is in turn influenced by biological factors such as age, gender and education, among others.

Trait theory helps examine influences on human behaviour from a broad perspective. Trait theory focuses on describing the traits and characteristics of an individual's personality in order to predict their future behaviour (cf. Sarker *et al.*, 2021). A trait is a consistent way of thinking, feeling, and behaving. Allport was the founder of trait theory (Allport, 1927). He conducted idiographic research that focused on conscious motivation and personal traits. In general, three types of traits are identified by Allport (1960): cardinal traits, central traits and secondary traits. Cardinal traits are fundamental character traits, upon which a person builds their life. Central traits are the general characteristics that form the basis of personality and are used to describe a person. Secondary traits refer to attitudes and preferences and are less relevant. Trait theory posits that the success of managers depends on their personality traits (cf. Antony and Schaps, 2021). Traits such as self-confidence, intelligence, integrity, determination, open-mindedness and charisma are considered to be characteristics that a manager should possess (cf. Jacobs, 2021). The degree to which these traits influence the success of a company depends on how pronounced they are in a manager's personality (Peters and Ghadiri, 2011, pp. 106–107), as these traits can be used to predict certain manager behaviours. Ramírez-Correa *et al.* (2019), Firth *et al.* (2020) and Aggarwal and Mohanty (2022) claim that personality traits that influence a person's behaviour are in turn influenced by socio-demographic factors like age, gender and education.

In contrast to the trait theory explained above, there is another approach followed by social cognitive theory (SCT). The SCT, which is based on social learning theory, focuses on how learning and the environment affect personality (cf. Tudor, 2012) and thus the qualities of an individual. According to this theory, which was first proposed by Albert Bandura (2001)³², human activity can be explained by social conditioning and learning. A person's behaviour influences and is influenced by cognitive, emotional and biological factors and the social environment. The process of an individual simultaneously influencing and being influenced by their environment is called reciprocal determinism (cf. Bandura, 2001). In this context, an individual's personality is influenced by conditioning and positive and negative reinforcement (cf. Oberdörfer *et*

³² and has been influenced by various researchers such as B.F. Skinner and George Kelly (cf. Roberts and Pontrac, 2014; Power *et al.*, 2020).

al., 2021). Furthermore, the influence of social, cognitive and personal factors on learning is emphasised. This theory explains how education can affect personality and subsequently manager behaviour (cf. Leptien, 2012). Furthermore, Weaver and Wichman (2018) point out that SCT explains how people acquire knowledge and maintain certain patterns of behaviour (competencies) as a result of this acquired knowledge.

However, people's behaviour is not only influenced by education. According to SCT, biological factors such as age and gender also have a decisive influence on behaviour (cf. Mars and Ruiz, 2018; Temel Eginli and Ozmelek Tas, 2018; Weaver and Wichman, 2018). Bandura (2001) describes how the experiences someone has in their social environment have a significant influence on their behaviour. Although Bandura (2001) does not explicitly address professional experiences in his explanations, it is not easy to separate professional experiences from the social environment in which they occur (cf. Baird and Vanstone, 2017), that is, in relation to the current work, professional experience can be considered as an appropriate proxy to predict behaviour.

Trait theory and social cognitive theory are considered to be relevant for the current work because personality theories which focus on the characteristics of people (in this case, executive board members) provide indicators of manager behaviour (cf. Sarker *et al.*, 2021; Bandura, 2001). However, if the behaviour can be predicted with the variables under investigation as proxies for certain qualities and competencies, this may subsequently allow conclusions to be drawn about the performance.

3.3.2 Fundamentals of Fayol and Mintzberg

Although further developments have taken place in the field of management theories (e.g. manager competencies according to Boyatzis) in recent decades, the approaches of Fayol and Mintzberg are briefly outlined here. One reason for this is that the work of these two researchers laid the foundations for further research by predicting the success of companies based on certain managerial characteristics and qualities. Furthermore, the findings of Fayol and Mintzberg are important for the current work as they show that certain qualities can be decisive for managers in contributing to positive bank performance.

The work of Henri Fayol (1841-1925) identifies the qualities a manager needs in order to positively contribute to the success of a company by assigning certain functions to management which, when fulfilled, guarantee the company's success: setting goals and tasks (previewer and planner), coordination and guidance (organiser), developing a vision and setting direction (director/leader), and monitoring and controlling (controller) (cf. Fayol, 1917; 1949). He further states that by properly checking that things are going exactly as planned, the company can see clearly whether tasks are being executed in line with the specifications (cf. Peaucelle and Guthrie, 2015; Wren *et al.*, 2002). To be able to fulfil these functions, a manager needs certain qualities. Thus, with regard to personal qualities, Fayol (1949) claims that behaviour and aspects of motivation are highlighted as components of success. In this context, Fayol (1949) cites characteristics such as experience and education as being decisive for leadership success, as he considers them indispensable for assessing group dynamics, communicating clearly, establishing plans and verifying their fulfilment (cf. Howell *et al.*, 2004). Consequently, Fayol (1949) sees a connection between the experience, expertise and training of the manager and the success of a company. Furthermore, he claims that if the prerequisites he lists are met, then this will result in positive business outcomes, which can therefore be predicted. Using the variables education and experience, Fayol's (1949) theory for predicting manager performance in terms of group dynamic assessment, clear communication, and establishing and monitoring planning can be used in the current work.

In contrast, Henry Mintzberg (1973) considers the use of manager functions to be a means of obscuring a lack of knowledge regarding what business managers actually do. He claims that although leadership functions provide some insight into what a manager does, they do not fully describe the work managers do. Mintzberg (1979) proposes a different model of managerial work. He holds that managers do not have the time to fulfil the tasks ascribed to them and that, in reality, their work focuses on three types of task; interpersonal, informational and decisional, in which they play ten roles (cf. Mintzberg, 1979). These roles are as follows: figurehead, coordinator, information gatherer, disseminator, informer to external groups, entrepreneur, crisis manager, resource allocator and negotiator (cf. Mintzberg, 1979). According to Mintzberg (1979), corporate success is achieved when managers fulfil the roles described.

Mintzberg (1979) does not explicitly mention the underlying prerequisites needed to adequately perform all managerial roles. However, it seems reasonable to conclude that a manager needs appropriate qualities and characteristics to be able to perform the roles properly and thus contribute to the success of the company. For example, it is more likely that well-educated managers will be able to fulfil these roles for the success of the company (cf. Zheng *et al.*, 2021; Wang *et al.*, 2019; Williams, 2021). Likewise, a manager's experience is likely to contribute to positive performance (cf. Burke *et al.*, 2018; Staniewski, 2016). Thus, Mintzberg's approach also supports the choice of the variables (especially education and experience) in the current work as a means of being able to predict success (here: performance) accordingly.

Even if Mintzberg (1973) takes a different approach to Fayol, the core statement that performance can be predicted on the basis of manager behaviour remains. Manager behaviour is in turn influenced by various qualities (cf. Bandura, 2001).

In summary, Fayol (1949) claims that the behaviour of managers can be predicted on the basis of certain managerial qualities and that, as a result, the company will achieve success. Fayol's (1949) assumptions that a company's success is achieved by a manager possessing the qualities and performing the functions that, in Fayol's (1949) opinion, make a successful manager, may have been correct at the time.

Mintzberg (1973) takes a similar approach. According to this approach, a company is successful when the manager fulfils certain roles in that company. At the same time, the theories, even by the standards of their time, represent a simplification of a complex business environment with numerous internal and external influences (e.g. political developments, competitive situation, technical developments, etc.) that the manager cannot influence. In today's context, such a simplistic formula for success is probably even less feasible. However, it is primarily a theoretical approach, which is also pursued in the current work. Accordingly, Fayol's (1949) and Mintzberg's (1973) approach is in line with the approach in the current work, according to which it should be possible to predict manager behaviour and subsequently its influence on performance on the basis of certain manager qualities (in the current work: age, education, gender and experience).

3.3.3 Boyatzis' manager competencies

Boyatzis' manager competencies are used in the current work to establish a link between the variables investigated in the current work and how these can serve as proxies for certain qualities and competencies.

Boyatzis' research into managerial competencies is often mentioned in research into factors influencing company success. In "The Competent Manager", Boyatzis (1982) presents a model for discovering managerial qualities, which he refers to as competencies, to enable organisations to achieve greater performance and success. The basic underlying idea is that the success of an organisation depends on the competencies of its managers, which in turn influence company performance (cf. Soebbing *et al.*, 2015). Boyatzis (2011) defined competencies as "the underlying characteristics of a person that lead to, or cause, effective and outstanding performance". Characteristics of competencies include things like motives, traits (e.g., risk orientation), skills, aspects of self-image or social role, or a body of knowledge that a person uses. A person's actions are a "manifestation of a competency in the context of the demands and requirements of a specific job in a particular organizational environment." Competencies, therefore, also refer to personal-oriented and task-oriented skills that are associated with effective leadership and management (cf. Bashir, 2017). There are several definitions of competencies³³. However, the core statement of these definitions is: Competencies are qualities that a manager needs in order to successfully achieve a company's goals, with the aim of increasing company performance (cf. Erensal *et al.*, 2010; Lee *et al.*, 2022; Tanloet and Tuamsuk, 2011; Suleiman and Abahre, 2020; Delgado-Vélez *et al.*, 2019; Ahmed, 2018; Ayu, 2019).

Boyatzis (2011) wanted to find out which manager qualities are linked to effective performance in a variety of management tasks. He also wanted to investigate how competencies influence each other and develop a more comprehensive theoretical model of management. He defines effective job performance as "the attainment of

³³ Drucker (1985) defined competence at the individual level as an ability the employees to offer superior performance in tasks. Managerial competencies are a cluster of similar knowledge, skills and attributes that are essential to effective job performance (cf. Karns and Mena, 1998). Henderson (2000) defines competence as a combination of knowledge and skills required to successfully perform an assignment. According to Kayes *et al.* (2005), managerial competencies involve internally and externally managing the host people and other expatriates in the organisation. Draganidis and Gregoris (2006) define competence as a combination of tacit and explicit knowledge, behaviour and skills that gives someone the potential for effectiveness in task performance. Spencer and Spencer (2008) posited that competences refer to the range of skills which helps in satisfactory performance and competencies refer to the behaviour adopted in competent performance.

specific results (i.e. outcomes) required by the job through specific actions while maintaining or being consistent with policies, procedures, and conditions of the organizational environment” (Boyatzis, 1982, p. 12).

Boyatzis (2011) identifies three factors influencing overall performance: individual competencies, the demands of the specific job, and the organisational environment. If two of these factors are constant, there is a higher probability of effective performance, while optimum performance is achieved when all three factors are constant. He identifies vision, values, philosophy, knowledge, competencies or abilities, life/career stages, style and interests as competencies. The individual competencies are similar to the personal factors and personality traits considered in SCT (cf. Bandura, 2001) and trait theory (cf. Antony and Schaps, 2021). By extension, this means that socio-demographic factors (such as age, education and gender, but also experience) can have an influence on these “personal” factors (cf. Ramírez-Correa *et al.*, 2019; Firth *et al.*, 2020; Aggarwal and Mohanty, 2022; Mars and Ruiz, 2018; Temel Eginli and Ozmelek Tas, 2018; Weaver and Wichman, 2018).

Furthermore, Boyatzis (2011) distinguishes competencies from skills. “Skill is the ability to demonstrate a system and sequence of behavior that are functionally related to attaining a performance goal. Using a skill is not a single action. Since a skill is the ability to demonstrate a system or sequence of behavior, it must result in something observable, something that someone in the person’s environment can ‘see’” (Boyatzis, 1982). Again, there is a link to theories like SCT and trait theory, according to which certain qualities can have an influence on the behaviour of an individual and consequently influence performance.

Boyatzis (2011) states that possession of a characteristic leads to effective and superior performance in a job. In his research, he identifies 21 competencies which are required for effective managerial performance. Among other things, he lists expertise, experience and knowledge as necessary competencies that offer potential for success (cf. Boyatzis, 2011). Thus, Boyatzis’ work supports the selection of education and experience as variables for investigating the central question of the current work.

Moreover, Boyatzis (1982, 2011) illustrates that company performance can be predicted according to certain manager competencies. On the one hand, Boyatzis (1982) explicitly lists expertise and knowledge, which could be used synonymously for education (cf. Sartori *et al.*, 2015), and experience as competencies required for

achieving effective managerial performance. On the other hand, although not explicitly listed, Boyatzis (1982) explains that individual competencies are important prerequisites for success. However, according to the personal factors and personality traits mentioned within SCT (cf. Bandura, 2001) and trait theory (cf. Antony and Schaps, 2021), the individual competencies are similar and, by extension, they also include socio-demographic factors such as age and gender.

Trait Theory, SCT and Upper Echelon Theory assume that certain managerial qualities and competencies (for which the selected variables can stand as proxies) influence the manager's behaviour and subsequently can have an impact on the company performance.

In contrast to this, Boyatzis' (Boyatzis, 1982, 2011) manager competencies approach assumes that certain competencies have a direct positive effect on the company's performance (without a "diversion" via influencing behaviour). Furthermore, Boyatzis (like Fayol and Mintzberg) claims that if the appropriate competencies are present, positive corporate success will result. In practice, such positive success does not always materialise in practice. However, the theoretical approach supports the approach applied in this thesis of predicting performance on the basis of certain managerial qualities.

3.4 Relationships between the theories

This chapter concludes with an overview of the relationships of the theories discussed. This section provides a brief description of the individual theories, followed by a summary of how these theories relate to each other and why they are important for the current work.

Principal Agent Theory analyses the relationship between a company's owners and its managers (cf. Feng and Horta, 2021). The owners, as shareholders, devolve the management of the company to its managers. In this respect, the shareholders are principals, while the managers are the agents in relation to the shareholders (cf. Jensen and Meckling, 1976; Arrow, 1985; Handoyo *et al.*, 2022). Principal Agent Theory is important for the current work because it explains the main problem, namely that information asymmetries can arise due to the differing interests of the applicant and the supervisory board.

Before a contractual relationship comes into being, the potential candidate (the potential future executive board member) sends out signals (e.g. information about their age, gender, education and experience), which at the same time are a proxy for the principal (supervisory board) for certain (desired) qualities and competencies of the applicant (agent), to the employer (the bank or more specifically: the supervisory board) (cf. Song *et al.*, 2020). In this sense, Signalling Theory involves the interpretation of signals and the conclusions that can be drawn from them for contractual arrangements. Signalling is a means of overcoming information asymmetries (cf. Akerlof, 1970; Fritsch *et al.*, 2001; Winter and Zülch, 2019). The better-informed party sends out signals (e.g. on the basis of age, gender, education, experience etc.) about their qualities. In Screening Theory, on the other hand, the party which is less informed takes steps to improve their level of information (cf. Stiglitz, 1975). Screening Theory is the opposite of Signalling Theory (cf. Cornacchione and Daugherty, 2013; Riley, 2001; Stiglitz, 1975). Stiglitz's (1975) screening theory helps prevent information asymmetries from occurring in the appointment process of German cooperative bank executive board members. By doing so, the supervisory board can look for signals (in the form of qualities like age, gender, education and experience, which promise certain competencies) in advance of receiving an application that would allow them to pre-select the most suitable candidates.

Upper Echelon Theory explains how these qualities or signals can be used as predictors of strategic actions and resulting company performance (cf. Orazalin and Baydauletov, 2020). Upper Echelon Theory addresses the relationship between demographic characteristics (such as age, gender, education and experience) and business success. The central starting point of this perspective is that strategic decisions which have a strong impact on business performance are made by a group of senior managers (cf. Saci *et al.*, 2021). Upper Echelon Theory holds that the basis of the decisions made by the managers is characterised by the values and the cognitive bases of the managers, which are attributed to individual demographic characteristics (cf. Hambrick and Mason, 1984; Greening and Johnson, 1993; Hambrick, 2007; Janardhanan *et al.*, 2020). The theory recognises that individual executive board members strongly influence business results through their decisions, which in turn are influenced by the board members' qualities (cf. Orazalin and Baydauletov, 2020; Saci *et al.*, 2021). These qualities include observable features, such as age, education, experience and gender. Because psychological categories are difficult to measure or

access, the current work relies on demographic and, thus, measurable characteristics, which are regarded as reliable variables for psychological constructions (cf. Hashim *et al.*, 2022; Niklaus, 2015). Age, experience, education and gender are considered to be relevant demographic characteristics for managers.

The manner in which the behaviour of managers is influenced is discussed within trait theory and SCT. Trait theory focus on describing the traits and characteristics of an individual's personality in order to predict their future behaviour (cf. Sarker *et al.*, 2021). Certain authors (cf. Ramírez-Correa *et al.*, 2019; Firth *et al.*, 2020; Aggarwal and Mohanty, 2022) claim that personality traits that influence a person's behaviour are in turn influenced by socio-demographic factors like age, gender and education. On the other hand, the social cognitive theory (SCT) of personality focuses on how learning and the environment affect personality (cf. Tudor, 2012) and thus the qualities of an individual (in this case the manager). According to this theory, which was first proposed by Albert Bandura (2001), human activity can be explained by social conditioning and learning (cf. Tudor, 2012). A person's behaviour influences and is influenced by cognitive, affective and biological factors and the social environment (cf. Bandura, 2001). The social, cognitive and biological factors are in turn influenced by certain factors (here age, gender, education and experience). Trait theory and SCT are considered to be relevant for the current work because personality theories which focus on the characteristics of people (in this case, managers) provide indicators of manager behaviour (cf. Sarker *et al.*, 2021; Bandura, 2001). However, if the behaviour can be predicted, this may subsequently allow conclusions to be drawn about performance.

How this performance can be achieved is the topic of the research of Fayol (1949) and Mintzberg (1973). The work of Henri Fayol (1949) identifies the qualities a manager needs in order to positively contribute to the success of a company by assigning certain functions to management which, when fulfilled, guarantee the company's success. On the other hand, Mintzberg (1979) focuses on three types of task; interpersonal, informational and decisional, in which managers play ten roles (cf. Mintzberg, 1979) which in turn produce company success. Fayol and Mintzberg's research has laid foundations and their findings support the choice of variables examined in the current work. Moreover, Fayol's (1949) and Mintzberg's (1973) research supports the approach followed by the current work (to determine bank performance by means of

certain executive board member qualities, i.e. age, gender, education and experience).

In order to determine the factors which influence business performance, Boyatzis (1982) followed a similar approach. Boyatzis' (1982) basic underlying idea is that the success of an organisation depends on the competencies of its managers, which in turn influence company performance (cf. Soebbing *et al.*, 2015). Boyatzis' (2011, 1982) explanations of managerial competencies provide insight into the qualities managers need in order to contribute positively to organisational performance. Furthermore, his work supports the approach in the current work to determine bank performance by means of the chosen variables which can represent certain competencies.

Given that performance is a key element of the thesis question, the following section will now examine how the existing literature defines performance.

3.5 Performance and success

First, the term *success* is defined, and *performance* is explained as a measure of success. Then, several approaches to measuring performance are illustrated. After that, measurements of financial performance in general and for banks in particular are introduced. Furthermore, there is a definition and explanation of what exactly is meant by sustainable performance. This is followed by a discussion as to why the performance of cooperative banks is measured in a different way from that of other banks and companies. The Gross Profit Margin, which is regarded as a suitable measure of performance in the current work, is presented and compared with the operating result (as an alternative).

3.5.1 Definition of success and sustainable (bank) performance

Gebauer (1972) points out that success is inextricably linked to achievement, because they are two aspects of the same process: "Only in 'success' is 'achievement' constituted, and only through 'achievement' is 'success' possible" (Gebauer, 1972, p. 189). Success is often measured by financial indicators, but there are also non-financial measures of success, which include other (abstract) variables, such as meeting,

or not meeting, certain expectations (cf. Prajawati *et al.*, 2020; Jacobsen, 2003). This should also be considered in the context of the promotional mission³⁴ which represents such an abstract variable.

Stegerean and Gavrea (2010, p. 202) illustrate the relationship between performance and success by stating that “organizational performance is one of the most important variables in management research and arguably the most importable indicator of an organizational success”. Achieving and maintaining sustainably high performance is the ultimate goal for any company, because it is the only way a company can develop and achieve growth (cf. Llorca-Ponce *et al.*, 2021; Lazaretti *et al.*, 2020). Gunawardana and Aravinda (2021) and Lakhal (2014) explain *organisational performance* as the extent to which a company meets its financial and market objectives. Adedeji *et al.* (2020), Hilman and Siam (2014) and Ariff *et al.* (2014) state that customer satisfaction, internal processes and learning, good corporate governance and corporate reputation are classified as non-financial performance indicators. Maintaining a high level of performance over the long term should be the goal of every company (cf. Choi, 2021).

While the above statements on success and performance are broad, it is clear why success and performance are relevant to German cooperative banks. As a sector that has endured for over 200 years (cf. BVR, 2022e), it is clear that performance is at the heart of the German cooperative banking sector. Performance is also a legal requirement for cooperative bank boards, as it is regulated and defined in the rules of procedure for cooperative bank boards (DG Verlag, 2018b). The third paragraph of the rules of procedure states "...that the executive board must further develop the bank's performance. It must therefore ensure that the bank is managed in accordance with the latest business management findings and methods"³⁵ (DG Verlag, 2018b). Furthermore, § 7 of the rules of procedure outlines specific performance tar-

³⁴ § 1 GenG states that it is the task of the cooperative to promote the interests of its members, but gives the banks freedom in defining this.

³⁵ Original text: „Zur bestmöglichen Förderung und Erfüllung der Bedürfnisse der Mitglieder ist der Vorstand stets bemüht, die Leistungsfähigkeit der Bank weiterzuentwickeln. Dementsprechend hat er dafür Sorge zu tragen, dass die Bank nach neuesten betriebswirtschaftlichen Erkenntnissen und Methoden geführt wird. Wesentliche Grundlagen für die Leistungsfähigkeit der Bank sind des Weiteren Arbeitsteilung und partnerschaftliche Zusammenarbeit im genossenschaftlichen FinanzVerbund”.

gets for the company, stating that the executive board "...shall consolidate and expand the bank's market position". In particular, "the liquidity, efficiency and profitability of the bank are to be secured in the long term"³⁶ (DG Verlag, 2018b).

Several research papers (e.g. Mensah, 2020; Cavens, 2019; Hartmann-Wendels *et al.*, 2015) deal with how performance is measured, and this is the focus of the next section.

3.5.2 Approaches to performance measurement

To be able to compare the performance of individual cooperative banks, a uniform method of measuring the performance of cooperative banks must be established. Ideally, this would be a single indicator that captures a large amount of information in a condensed form (cf. Cavens, 2019). In the literature, this information is added to the banking production process (input) on the one hand, and the manufactured banking products (output) on the other (cf. Mensah, 2020; Hartmann-Wendels *et al.*, 2015).

There are two main approaches to measuring performance within banks (cf. Yumna, 2020; Hartmann-Wendels *et al.*, 2015): the *production approach* of Gilligan *et al.* (1984), and the *intermediation approach* of Sealey jr and Lindley (1977).

The production approach considers the bank as a producer. The approach is distinct in that it understands *production* (input) to involve only the factors *work* and *capital*. The bank creates various deposit accounts for its own refinancing and various loan accounts for the use of funds. Output is measured by the number of accounts created or by the number of transactions per account. However, banks do not regularly publish information on the number of accounts (cf. Yumna, 2020; Nitoi and Spulbar, 2019; Hartmann-Wendels *et al.*, 2015; Maurer, 2016), so the (empirical) use of the production approach is unsuitable for this thesis.

The intermediation approach understands the production process of a bank as being the sum of two sub-processes: transformation and intermediation (cf. Yumna, 2020; Maurer, 2016; Hartmann-Wendels *et al.*, 2015). These sub-processes are regularly

³⁶ Original text: „Ziel seiner Tätigkeit ist es, die Marktstellung der Bank planmäßig zu festigen und auszubauen; dabei sind unter Beachtung des genossenschaftlichen Förderungsauftrags die Kapitalausstattung, die Liquidität, die Wirtschaftlichkeit und die Rentabilität der Bank auf Dauer zu sichern”.

used as input factors. Most efficiency research in the banking sector is based on the intermediation approach. The approach facilitates data evaluation and the necessary data may even be available for external analysis (cf. Yumna, 2020; Maurer, 2016; Hartmann-Wendels *et al.*, 2015).

The intermediation approach, therefore, may be suitable for the current work in principle. However, the focus of this research is cooperative banks and the measurement of financial performance within these banks. Therefore, it is necessary to first introduce measures of financial performance in general before specifically discussing measures of financial performance in cooperative banks.

3.5.3 Measures of general financial performance

Several variables are used in the literature to measure financial performance as an indicator of success. The return on equity (ROE), reflects the level of performance in terms of the return on shareholder investments (cf. Liu *et al.*, 2021b; Areghan Akhanolu *et al.*, 2020). Another measure of financial performance is return on assets (ROA), which reflects the profitability of a company's assets (cf. Pavlović *et al.*, 2020; Kusumawati *et al.*, 2021; Sufian and Parman, 2009; Gupta *et al.*, 2014; Ariff *et al.*, 2014; Gorton and Schmid, 1999). This indicator can also be used to judge how efficiently executives have managed the company's assets. These two measures of performance are well-established methods used by a variety of companies, including banks. However, neither ROE nor ROA are suitable for the purposes of this thesis, as they can, for instance, be influenced by off-balance sheet activities (cf. Kundid Novokmet and Pavić, 2021; Trujillo-Ponce, 2013). Therefore, neither measure is considered further in the course of this thesis.

3.5.4 Measures of financial performance in banks

The literature discusses several methods which are used to measure financial performance in banks (cf. Kundid Novokmet and Pavić, 2021). Many research papers, for instance, use financial measures such as ROA and ROE (Fazam *et al.*, 2021; Lee and Kim, 2013; Jaseviciene *et al.*, 2013). Some organisations have taken a more holistic approach to measuring profit, using a Balanced Score Card to translate strategy

into a comprehensive set of measures that a bank must implement (Modiri *et al.*, 2020; Hilman and Siam, 2014; Kaplan and Norton, 1996).

Berger and Mester (1997) use different methods to measure bank efficiency:³⁷ the efficiency estimation method; the functional form method; the treatment of output quality method; and the role of financial capital. They find that the choice of method has little impact on efficiency. Berger and Mester (1997) identify the following methods as being part of the efficiency estimation technique: the thick frontier approach; the free disposable hull analysis; the data envelopment analysis (DEA); the distribution-free approach; and the stochastic frontier approach.

3.5.5 Specific aspects of measuring the performance of cooperative banks

The previous sections have outlined some of the many dimensions involved in measuring company performance. Company owners, however, are primarily interested in the profits a company makes (cf. Maurer, 2016).

Authors have used several criteria to analyse bank performance. Maurer (2016) focuses on mergers, scale effects and optimum bank size within the German cooperative bank sector, using profitability as an indicator of performance. In this context, Richter (2014) evaluates the CIR; however, given the criticisms of this measure in the literature, it is difficult to assess the outcomes of his research. In their analysis of German savings bank performance, Gann *et al.* (2010) research key figures, number of employees and number of branches. This research is important, because savings banks and cooperative banks share some characteristics (i.e. a high number of banks, a high number of branches, and an aim to provide banking services to all). Conrad *et al.* (2009) investigate the effect of regional and demographic factors on German savings bank performance, while Varmaz (2006) considers bank size, competition and scale efficiencies in savings banks, credit banks and cooperative bank performance. Wutz (2002) examines the influence of environmental factors on

³⁷ In general, the term *efficiency* focuses on the costs in a company. Berger and Mester (1997) examine efficiency by separating it into three measures, each with a different focus: cost efficiency, standard profit efficiency and alternative profit efficiency. What all three have in common is that they attempt to measure and express the economic success of a company.

cooperative banks, while Lang and Welzel (1998) research cost inefficiencies in cooperative banks by evaluating banking technology. Lang and Welzel (1996) evaluate bank size and cost efficiency in cooperative banks.

All of the above approaches to measuring performance are well-known, recognised methods. However, they do not meet – or only partially meet – the requirements for a performance measure established by Maurer (2016, pp. 68–69), which are considered to be well suited to the purpose of the current work and are as follows: a performance measure must be a single measure subject to only a limited influence by annual financial statement policy, which enables comparisons across banks of a range of sizes using readily available data.

3.5.6 Measures of performance: the operating result and the Gross Profit Margin

While ROA and ROE are primarily used by external parties to gather information (about banks), authors like Deutsche Bundesbank (2020), GVB Genossenschaftsverband Bayern e.V. (2015), Gischer (2014) and Kring (2002) suggest the so called *operating result* as a measure of performance. According to Maurer (2016, p. 110), the operating result is calculated as follows:

Net interest income	
+	Net commission income
+/-	Trading profit
+/-	Other operating income
=	Gross earnings margin
-	Personnel expenses
-	Operating expenses
=	Operating result before valuation (Gross Profit Margin)
-	Risk expenses
=	Operating result

The operating result has been established as the standard indicator of performance over a substantive period at German cooperative banks³⁸. It explains the difference

³⁸ The value of the gross profit margin measure as an indicator of sustainability is reflected in the fact that the Deutsche Bundesbank, as the supervisory body of all banks in Germany, has been collecting data on gross profit margins since 1968 (Deutsche Bundesbank (2019).

between operating benefits and costs within one accounting period (cf. Wirtschaftslexikon24.com, 2016). The operating result helps provide a deeper understanding of the actual earning power of a German cooperative bank. However, the measurement of the operating result has a decisive disadvantage. Because it is an internal bank measure, it uses internal bank data. This means that the data is likely to be difficult or impossible to obtain, which makes data collection difficult for a large sample and could subsequently yield unreliable results. To circumvent this problem, Schierenbeck (2003) proposes the so-called *gross profit from normal business activity*, also referred to as the Gross Profit Margin or operating result before valuation, as a suitable measure. This is an external accounting measure and is defined by Schierenbeck (2003) as follows: “The gross profit margin is comparable to the *operating result before valuation* from the *internal accounting* of credit institutions. This ... serves to inform managers and employees of the company and can – with some exceptions – be carried out independently of legal regulations ... The *operating result before valuation* is an important indicator of the sustainable earning power of an institution” (Maurer, 2016, p. 69).³⁹ Maurer (2016) further explains that profit generation helps banks accumulate reserves which can be used in times when profits are lower and therefore ensures sustainability.

Maurer (2016, pp. 69–70) states that the Gross Profit Margin is a key performance indicator used in banks and is used widely. In addition, several authors, such as Gischer (2014), Holtmann and Morales (2010), Christians (2010) and Riekeberg (2003), recommend using the Gross Profit Margin in relation to the average balance sheet total as a key figure for assessing the performance of a bank. The Deutsche Bundesbank (Deutsche Bundesbank, 2020) also uses this ratio for statistics.

For the purpose of this research, only data from external accounting is available. In this respect, considering the sources of the data used, the Gross Profit Margin is a suitable measurement method. Moreover, the Gross Profit Margin fulfils Maurer’s (2016) criteria, presented in the previous section, in the following ways: Gross Profit Margin is a single measure that is not affected by annual financial statement policies, In addition, the Gross Profit Margin is set in relation to the respective balance sheet total (more precisely, the average balance sheet total). Other items of the profit and loss account and the balance sheet are also included in the ratio to the balance sheet

³⁹ Also see Götze (2010) and Bremke *et al.* (2004).

total. The balance sheet is used in the evaluation as a standardisation instrument. The relationships determined are also called *ratios* (cf. Bourier, 2012). The Gross Profit Margin calculates the gross profit from normal business activity in relation to the average balance sheet total (cf. Schierenbeck, 2003). The data required to use the measure is readily available. With the help of the Gross Profit Margin it is possible to make cooperative banks of all sizes comparable.

3.6 Manager specialisation

According to Mintzberg (1973), management roles are influenced by specialisation. For example, production managers have a different focus to sales managers or human resources managers. Interpersonal aspects are more important to one manager, while another places more emphasis on decision-making. Consequently, Mintzberg (1973) states that the managers in a company have different roles which are independent of each other (cf. Hillebrand and Westner, 2022). Mintzberg (1973) distinguishes ten management roles, which he divides into three areas (cf. Matsuo, 2021). In the first area (interpersonal relations), the manager has roles such as figurehead, superior and networker; in the second area (information), the roles are monitor, disseminator and spokesperson; the third area (decisions) contains the roles entrepreneur, disturbance handler, resource allocator and negotiator (cf. Borg Ellul and Wond, 2020). The approach of Mintzberg (1973) with regard to the specialisation of the individual persons on an executive board can be transferred almost identically to cooperative banks in two respects: firstly, each executive board member is primarily responsible for a different area (usually the so-called sales area and the back-office area), but both board members are responsible for the bank as a whole (§ 4 (3) Rules of procedure of the executive board; DG Verlag, 2018b)⁴⁰. Secondly, this approach is very similar to the dual-leadership approach, which also divides responsibilities between two or more individuals and is evaluated in the current work.

Furthermore, according to Mintzberg (1973), coordination, standardisation and adaptation are qualities that correlate with a manager's job-specific knowledge and skills (cf. Moura *et al.*, 2021). A manager needs control and leadership skills to determine

⁴⁰ § 4 (3) of the rules of procedure of the executive board states: "On the basis of the business allocation plan, each executive board member is primarily responsible for his or her area of work, without this changing the overall legal responsibility of the executive board." (DG Verlag, 2018b)

work outcomes and to define the necessary work processes and methods. Thus, it is not just professional experience and education, but also the degree of education specialisation, that are important (cf. Hamid *et al.*, 2014). If Mintzberg's (1973) approach is applied to the managers of German cooperative banks, it becomes clear that managers who have a higher level of education and, above all, a more specialised education (such as in finance and economics) possess the leadership skills outlined by Mintzberg (1973).⁴¹

Mintzberg (1979) identifies specialisation as an important quality in managers. This is of particular importance when considering qualifications. Specialisation in this context is a vocational focus on a specific thematic area, especially with regard to a person's profession. It can also be understood as a focus of vocational training that is intended to prepare employees for specific tasks. For example, a qualification in business research is more appropriate than a qualification in mechanical engineering or biology for a career in banking. Here, the technical similarity (between the education and the desired job) is decisive, as reflected in the fact that specialist training or education specifically prepares students for their later work and thus has a qualifying function (cf. Romanyuk *et al.*, 2020; Capkun *et al.*, 2012).

The relationship between training (or academic study) and practical activity in the workplace allows a person to apply the skills acquired through learning directly in a professional context (cf. Krsmanovic, 2021). Apprenticeships usually impart knowledge for the specific activities of the respective occupation midhat (cf. Midhat Ali *et al.*, 2021), while academic study at degree level imparts subject-specific knowledge at a more theoretical level (cf. Arioglu, 2014).

This is confirmed by research. Alda *et al.* (2017) examine the effects of professional specialisation on, for example, equity fund managers. Their findings aid understanding of the importance of management tasks in the industry and illustrate the significance and benefits of a specialisation in management. They find that some managers perform sustainably and that some are more effective than others and have superior investment skills. Furthermore, the authors believe that managers perform better when they manage a single fund or investment objective, which allows them to maintain a focus on specific tasks. These managers are specialised. Alda *et al.* (2017)

⁴¹ Also see Northouse (2009).

conclude that specialised managers perform better in rising markets, while generalists perform better in downturns.

Sassone (2007) also addresses the issue of professional specialisation, stating that a lack of specialisation among managers and professionals as a cause of poor business performance. According to Sassone (2007), managers and professionals spend a relatively small proportion of their working time on managerial and technical tasks and a relatively large proportion of their time on unproductive, supporting tasks. Moreover, Sassone (2007) emphasises that a higher degree of specialisation in management functions can contribute to the success of a company.

Results from other professional spheres (e.g. medicine) clearly show that having a master's degree opens up employment opportunities and that further academic study is still regarded as valuable in the working environment. The perceived improvement in professional practice after a generic master's programme is considered to be significant (cf. Whyte *et al.*, 2000).

With regard to executive board members of German cooperative banks, this means that the level of their educational qualification is relevant: the higher their level of qualification, the more able the board member is to react to changing situations in a professional context and to perform complex management tasks. Furthermore, it is important that there is as strong a match as possible between education and professional activity. Accordingly, a degree in finance or economics is more suitable than a degree in another field of study for equipping a board member to fulfil the specific requirements of their role. This is confirmed by the BaFin⁴², which recommends vocational training or courses of study, especially in economics, business administration, tax law, general law and banking law, as a requirement for future bank board members (cf. Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin, 2020a).

⁴² In Germany, the BaFin is responsible for reviewing the authorisation of persons to act as board members of banks.

3.7 Summary

This chapter examined the theories which provide the basis for the current work. Principal Agent Theory can explain the contractual relationship between cooperative members and executive board members (cf. Muslim and Hamzah, 2022) and serves as a starting point to outline the theoretical problem. Signalling Theory illustrates solutions that can be initiated by the agent in order to reduce one of the main problems in the principal-agent relationship, namely information asymmetry. Screening Theory also describes solution approaches, but initiated from the principal side. Upper Echelon Theory, trait theory and SCT can indicate the extent to which certain criteria (i.e. the variables examined in the current work, which are used as proxies for certain competences and qualities) which in turn have an influence on performance make the behaviour of managers more predictable (cf. Boyatzis, 2011).

While Upper Echelon, trait theory and SCT consider that behaviour is decisive for corporate success, Fayol and Mintzberg assume that the fulfilment of functions and roles leads to corporate success. Boyatzis also follows this approach, explaining that certain competencies lead to corporate success. All in all, this supports the approach in the current work of drawing conclusions about performance on the basis of certain executive board member qualities.

Furthermore, various measures of economic success, such as ROA and ROE, have evolved into a basis for comparing banks, which has made it possible to compare large banks across national borders. However, these measures are not suitable for comparing the performance of German cooperative banks. Large banks have completely different structures to cooperative banks. Moreover, they do not operate in a homogeneous environment (i.e. having the same (ownership) structures, the same cooperative principles etc.) and they are often managed by one CEO only.

The measure Gross Profit Margin has become established as a measure of performance of German cooperative banks. The results obtained using this measure can be compared; in addition, it takes the special features and structures of cooperative banks into account. The Gross Profit Margin is therefore a suitable measure of performance for the current work.

An operationalisation of manager qualities has been achieved by Mintzberg (1979), whose approach describes the topic of specialisation in more detail. From this, it is

shown that different educational levels (e.g. bachelor's vs. master's) influence leadership qualities in different ways and, as a consequence, lead to different corporate successes.

Chapter 4: Literature review and development of hypotheses

4.1 Introduction

The following chapter discusses the extent to which factors examined in this thesis have already been covered in the existing literature. There is an analysis of how the existing literature has examined the issue of board characteristics, especially board size and board composition. Two hypotheses are developed and formulated on the basis of this analysis. There then follows an examination of the contributions of the existing literature to the understanding of the manager qualities age, gender, education and experience, with a hypothesis then being developed and formulated for each of them.

The variables examined below are relevant determinants of the performance of German cooperative banks. For this reason, they are divided into variables related to the executive board and variables related to executive board member qualities.

4.2 Characteristics of the executive board

This section examines variables related to executive board composition in more detail. As explained in Section 2.5.1, the executive board members are the legal representatives of the cooperative bank. They are solely responsible for managing and representing the cooperative bank in accordance with GenG (§ 24 Paragraph 1 and § 27 Paragraph 1 Sentence 1).

4.2.1 Executive board size and bank performance

In terms of board size, the standard argument (cf. Lu and Lee, 2021; Adams *et al.*, 2010; Jensen, 1993a) is that the larger the board, the less effective it is in supervising the management of an organisation. This is attributed to higher agency costs⁴³, particularly with regard to (relationship) problems with executive board members on the board, communication and coordination difficulties, and protracted decision-making.

⁴³ which can be explained by Principal Agent Theory (cf. Kabwe *et al.*, 2021)

However, the empirical findings are inconsistent (cf. Palacín-Sánchez *et al.*, 2019; Aebi *et al.*, 2012; Adams and Mehran, 2003; 2008; Adams and Mehran, 2012).

For this reason, the variable board size was selected, in part to analyse whether banks with the minimum of two executive board members (§ 24 GenG) perform better than banks which have more than the minimum number of members on the executive board.

Various authors like Grabinska *et al.* (2021), García Martín and Herrero (2018) and Walker (2009) have analysed the variable board size in a range of banking contexts, arriving at a range of conclusions in the process. Several research papers (cf. Grabinska *et al.*, 2021; García Martín and Herrero, 2018) argue that large financial institutions may require larger boards to deal with the complexity inherent in their underlying business concepts, increase the resources and expertise available, and increase the capacity for exposure to a range of clients and depositors (cf. Dalton *et al.*, 1999). In a comprehensive review of the corporate governance of British banks, Walker (2009) notes that banks aim for an ideal board size of 10 to 12 members, while Vural and Bacha Simoes (2022) and Ladipo and Nestor (2009) suggest that the best-performing European banks have boards that are smaller. Furthermore, Ismail *et al.* (2020) and Pathan and Faff (2013) show that banks in America perform better when they have a small board.

The research in this paragraph highlights correlations between board size and aspects of company (companies in general) performance. The (older) research from Eisenberg *et al.* (1998) and Yermack (1996) indicates that there is a negative correlation between board size and company performance. Cheng (2008) examines the relationships between board size and variability in corporate performance, and finds that companies with larger boards have less variability in performance. Jensen (1993b) states that as a board grows larger, the agency costs and the coordination and communication issues⁴⁴ outweigh the potential benefits of having more board members.

⁴⁴ This statement is supported by Principal Agency Theory, which posits that agency costs arise from information asymmetries (cf. Eka Berlianti *et al.*, 2022; Damayanti *et al.*, 2021).

While the research discussed above provides some valuable insights, it should be noted that not all of these insights will be directly applicable to the German cooperative bank sector. Some of the research papers mentioned above focus on companies in general, while others focus on banks (cf. Cheng, 2008; Eisenberg *et al.*, 1998; Yermack, 1996). Research that focuses on larger companies can be difficult to compare and thus to apply to this thesis due to there being too few similar companies or too many different industries in the research. Furthermore, board composition in other countries, especially in the Anglo-American region (e.g. Jensen, 1993a), is only partially comparable with the board composition of German cooperative banks. This is because the supervisory body is separate from the executive body in German cooperative banks, while in Anglo-American companies, one person often combines both functions as CEO. In their examination of all types of German banks, Berger *et al.* (2012) also consider board size. However, their observations include second-tier managers (e.g. the COO and CFO), which are not usually found in cooperative banks but only in large banks. In this respect, the results of this research are not transferable to the current work, which examines German cooperative banks in isolation. As a consequence, the research results have only a limited relevance to the specific environment of German cooperative banks. This leads to the following question: do banks with the minimum of two executive board members (§ 24 GenG) perform better than banks which have more than the minimum number of members on the executive board?

The GenG §24 provides for at least two board members to manage a cooperative bank. At the same time, there is evidence (cf. Deutsche Bundesbank, 2020) that the cooperative banking model is not just economically successful in the short term,⁴⁵ but has been in existence for several generations and is therefore successful in the long term. In this respect, there are indications that a two-member executive board is an optimal arrangement. Furthermore, the number of executive board members is an easily measurable⁴⁶ and therefore quantifiable variable.

These considerations lead to the following hypothesis:

⁴⁵ In the years 2013–2019, German cooperative banks showed the most favourable CIR and the highest ROE when compared with their larger counterparts and the savings banks (Deutsche Bundesbank (2020)).

⁴⁶ The number of executive board members can be found on the respective bank's website.

H1: Any number of executive board members greater than two will adversely affect the performance of German cooperative banks.

In theory, it would be possible to analyse each individual board size (two members, three members, four members, etc.). However, the number of cooperative banks with more than four board member is very small, hence the comparison will focus on banks with two executive board members on the one hand and banks with more than two executive board members on the other.

4.2.2 Executive board composition, dual leadership and bank performance

The variable board composition was chosen to better understand the performance impact of a dual board; especially when there is no CEO or when there are two CEOs.

Leadership by a single person is explained by the Unity of Command Theory (cf. Song and Kang, 2019; Md Rus, 2017; Simon, 1997; Fayol, 1949; Barnard, 1968; Gullick and Urwick, 1937) which regards leadership as a top-down process. From this perspective, organisations are most effective when an individual placed at the top of the hierarchy makes choices for the individuals below. This theoretical framework also concentrates on a single manager, whose personal attitudes and values become a motivating force for the entire organisation (cf. Cook and Geldenhuys, 2018; Finkelstein and D'Aveni, 1994).

Certain authors, such as Taqdees (2018) and Pearce *et al.* (2008, p. 624), argue that two people on one decision-making body cannot function effectively. They claim that organisations need a single person to develop a coordinating vision: the conflict that would arise between two or more leaders would render the vision incoherent and ineffective. Various authors like Huu Nguyen *et al.* (2020), Mintzberg (1989), Barnard (1968) and Fayol (1949) support this idea and defend single-leader management structures, arguing that a hierarchy with a single executive leader results in efficient and more rational processes and reduces conflict, confusion and emotions. Barnard (1968) describes how the specific vision and moral tone of a single executive leader fuels the collaboration between employees that is necessary for an organisation to succeed. Mintzberg's research (1989) on the activities of executive leaders supports the idea that leadership functions should rest with a single leader.

Dennis *et al.* (2009) state that no research on co-CEOs – CEOs who run a business and are responsible for its success together with other CEOs – has been conducted to date, even by authors such as Hambrick and Cannella (2004). Over the last three decades, the Upper Echelon and related literature have mostly focused on how business leaders affect organisational performance and corporate social performance (cf. O'Sullivan *et al.*, 2021; Wong *et al.*, 2011; Finkelstein and Hambrick, 1997; Thomas and Simerly, 1994; Wood, 1991; Hambrick and Mason, 1984).

However, in recent research papers – for example, by Hasija *et al.* (2017) – the links between dual leadership and corporate social responsibility have been examined and rated positively. The dual leadership (or shared leadership) theory,⁴⁷ attributed to Etzioni (1965),⁴⁸ states that as their tasks become increasingly complex, organisations may need two leaders to be effective (cf. Hasija *et al.*, 2017). This theory also suggests that teams are more successful in achieving their goals and have higher levels of satisfaction when they are managed by productivity leaders (who focus mainly on production) and expressive/charismatic leaders (who focus mainly on group cohesion) (cf. Balkundi and Harrison, 2006). Furthermore, the theory is that, in principle, these two types of leadership can be provided by one individual, also referred to as a *great man* or *great woman*, although this is rarely the case in practice. If two people fulfil the two leadership roles, support needs to be mutual if they are to lead the team effectively.

One of the foundations of dual (or shared) leadership theory is that complex organisations can be successful when led by a team as opposed to a single individual (cf. Eseryel *et al.*, 2021; Pearce and Conger, 2003). It also implies that an influencing, interactive and dynamic mechanism between the team members may lead to the team achieving its goals and the organisational aims. Shared leadership can promote increased consistency and better sharing of information⁴⁹ within groups. Creative group

⁴⁷ The dual-governance structure can be found in the banking sector, cultural organisations, non-profit organisations, journalist organisations and high-tech companies (cf. Seo *et al.*, 2017; Bantel and Jackson, 1989).

⁴⁸ Although Etzioni (1965) is credited with establishing the concept of dual leadership more than five decades ago, its origins go back as far as the Roman Empire, where a dual-leadership system was implemented successfully (cf. Sally, 2002).

⁴⁹ and can thus help to reduce information asymmetries in the company and subsequently agency costs, which in turn can have a positive effect on performance.

solutions are made possible by the mutually complementary knowledge of the leaders (cf. Salas-Vallina *et al.*, 2020).

Several studies show that organisations led by two people perform better than those headed by a single leader (cf. Fransen *et al.*, 2019; Hmieleski *et al.*, 2012; Carson *et al.*, 2007; Ensley *et al.*, 2006; Pearce and Sims, 2002). Dual leadership is when two equally powerful leaders manage a company (cf. Wijeweera *et al.*, 2019; Reid and Karambayya, 2009). In many companies, the dual leadership is divided into separate areas of competence⁵⁰. According to Joubert (2019) and Reid and Karambayya (2009), when the executive management function is separated into different functional roles⁵¹, it is referred to as a *dual-leadership structure*. In this kind of management structure, it is typical for one manager to be responsible for the economic goals of the organisation and the other to be responsible for the non-economic goals. Even though both managers are jointly responsible for the whole company, they each focus on their own areas of responsibility (Bhansing, 2013, pp. 124–125). Dividing responsibilities into different areas of expertise ensures that each manager can make the most of their individual strengths according to their training, professional experience and background⁵² (cf. Yu *et al.*, 2021). This benefits the company by enabling it to react better to conditions in the environment (Bhansing, 2013, p. 15).

With regard to the statements described above, a connection can be made to Upper Echelon Theory (cf. Hambrick and Mason, 1984). Upper Echelon Theory states there are links between managers' cognitive abilities and a company's results (Harjoto *et al.*, 2019). At the same time, the cognitive skills of individual leaders differ. According to Hambrick (2007, p. 334) "executives' experiences, values and personalities greatly influence their interpretations of the situations they face and in turn, affect their choices".

Osano and Waal (2020) and Denis *et al.* (2001) state that previous research regarding pluralistically structured organisations focuses on what strategies a company can use to successfully achieve several goals at the same time. They suggest that managerial positions that complement each other are helpful in achieving corporate goals

⁵⁰ which is in line with Boyatzis' manager competencies approach, which proposes that company performance is influenced by manager competencies (cf. Boyatzis, 1982; 2011).

⁵¹ see also the work of Fayol (1949) and Mintzberg (1973) which attribute company success to functions (cf. Fayol, 1949) and roles (cf. Mintzberg, 1973) performed by managers.

⁵² Individual strengths, education and professional experience can be summarised as competencies (cf. Boyatzis, 1982; 2011).

in dual management companies. At the same time, competitive situations can be difficult in companies that are structured in such a way. Scapolan *et al.* (2017) and Kilduff *et al.* (2000) point out that a dual-leadership structure entails the risk of conflict escalation. However, other research on shared leadership has shown that there are positive effects on versatility and flexibility (cf. Leeson *et al.*, 2012; Carpenter, 2002; Carpenter and Fredrickson, 2001), problem-solving skills (cf. Sun *et al.*, 2021; Hurst *et al.*, 1989; Nemeth, 1986) and innovation⁵³ (cf. Sun *et al.*, 2022; Murray, 1989; Bantel and Jackson, 1989). Baldenius *et al.* (2014) state that executives exercise either monitoring or advisory functions. In practice, most boards perform both functions, dividing these two tasks on the basis of board members' background and experience (cf. Klein, 1998; Bedard *et al.*, 2011; Weisbach, 2013).

The research on the relationship between dual leadership and performance is inconclusive, with MacAvoy *et al.* (1983) and Hermalin and Weisbach (1991) unable to find a positive correlation between company performance and board structure, while Klein (1998) shows a positive correlation. In contrast to the current research, Klein (1998) distinguishes between internal and external directors. Furthermore, he states that it is not the board composition itself that influences performance, but rather how the board utilises its members. In a UK study, Tanna *et al.* (2011) examine the relationship between bank efficiency and board structure (size and composition). Although they find a positive correlation between board size and efficiency, these results are not consistent with all the methods available for measuring efficiency. Berger *et al.* (2012) assume that every two-person board has one CEO, which does not necessarily apply in the context of German cooperative banks.

German cooperative banks have existed for more than 200 years (cf. dpa, 2018). Compared to other banking systems, they are very successful (cf. Deutsche Bundesbank, 2020; Arts, 2016). It is not clear whether the requirement to have at least two executive board members is the reason for the success of German cooperative banks. Moreover, there is no obligation for German cooperative banks to nominate a CEO from the executive board (cf. §18 of the statutes; DG Verlag, 2018c). However, there is a presumption that there could be a connection. Therefore, in the current work, and in line with the corresponding literature (e.g. Salas-Vallina *et al.*, 2020 and

⁵³ which are generally regarded as desirable competencies that a manager should possess (cf. Jacobs, 2021; Boyatzis, 1982; 2011).

Fransen *et al.*, 2019), which claims that dual leadership has a positive impact on performance, it is assumed that shared leadership has positive effects on the performance of German cooperative banks. On the other hand, it is assumed that the arrangement “CEO plus an additional member of the executive board” is likely to have a negative impact on performance⁵⁴ because then a similar situation may arise in practice as described in the Unity of Command Theory (cf. Song and Kang, 2019). Eseryel *et al.* (2021) also emphasise that companies can only be successful when led by several executives, as opposed to a single one. According to the literature reviewed so far, companies select one or more CEOs – either voluntarily or as a consequence of external circumstances (mergers, start-ups, etc.).

This leads to the development of the following hypotheses:

H2a: The composition of an executive board with two (or more) equal CEOs (shared leadership) has a positive impact on the performance of German cooperative banks.

H2b: The composition of an executive board with one CEO and one (or more) non-CEO(s) has a negative impact on the performance of German cooperative banks.

⁵⁴ In addition, the composition of the executive board in German cooperative banks has some other special features. In principle, the GenG makes no reference to a chairperson of the executive board (hereinafter referred to as the CEO). However, §18 of the cooperative bank statutes specifies that the supervisory board can appoint a chairperson (cf. DG Verlag, 2018c). Many cooperative banks refrain from appointing a CEO in order to emphasise the equality of the individual board members (Müller (2000, p. 34)). If a CEO is appointed on the basis of the template statutes (cf. DG Verlag, 2018c), this only has a public effect externally. No higher decision-making powers are associated with the role; a CEO simply coordinates the work of the executive board and represent the cooperative bank externally and internally (according to §4 (2) “Rules of Procedure of the Executive Board” (cf. DG Verlag, 2018b). Differences arise in practice, both in the CEO’s perception of his or her own role internally (i.e. associating it with higher decision-making powers and freedoms) and in external perceptions among customers and the public, as a position of primacy is implied. In turn, the external perception is reflected back onto the CEO’s own perception, and may be multiplied. In addition, the supervisory board usually wants to express a qualitatively higher competence (compared with the other executive board member(s)) through the appointment of a CEO. This is often accompanied by higher remuneration for the CEO. Such preferential treatment among equals sometimes leads to distortions and alienation within the board and can thus have a negative impact on performance in the long term.

Another issue is the use of the terms *CEO* and *non-CEO*. In this thesis, for the purposes of the hypotheses, the terms *CEO* (for a chairperson of the board) and *non-CEO* (for a non-chairperson of the executive board or an executive board member) are used. For hypothesis H2b, these terms are clearly delineated from each other. However, for the purposes of hypothesis H2a and in the context of the terms *dual leadership* and *shared leadership*, the arrangements CEO+CEO and non-CEO+non-CEO are used synonymously, as this is also the case in the day-to-day practice of cooperative banks, in order to express actual equality.

4.3 Manager qualities

First, there is a general definition of the term manager based on the existing literature and an overview of the effect managers have on performance.

4.3.1 Management and qualities in general

Manager and *leader* are terms that are often used interchangeably in the literature. However, they can be considered as two completely different roles (cf. Yukl *et al.*, 2002; Aij *et al.*, 2015). Leadership, on the one hand, “is about motivating a group of people and implies a social influence process, capable of facilitating change. Good leadership is essential to drive business improvement and to implement lean practice throughout an organization” (Aij *et al.*, 2015, p. 203). On the other hand, management “is about the organization of a group of people and focuses on providing work structure for individuals through controlling and coordinating activities” (Aij *et al.*, 2015, p. 203).

Business and management scholars have a keen interest in finding out whether managers have an impact on a company’s performance and how that impact manifests itself (Hall and Pedace, 2016, p. 542). Bertrand and Schoar (2003) demonstrate that there are correlative relationships between managers and firm performance. Using the fixed effects model with a sample of public listed companies, Bertrand and Schoar (2003) conclude that managers not only affect company performance but other company outcomes, such as decisions on investment and financing. Taking a similar approach, Bamber *et al.* (2010) find correlations between individual managers’ financial disclosure styles and observable characteristics relating to their individual backgrounds.

4.3.2 Age and bank performance

There are a range of claims in the literature regarding the relationship between manager age and bank performance. Dong *et al.* (2019) and Zhang (2017) point out that the literature on Upper Echelon Theory identifies a relationship between a manager’s age and their ability to process and integrate information. Researchers of age in man-

agement like McHutchison *et al.* (2019) claim that there is a negative relationship between age and cognitive ability. A person's memory, ability to multitask and information processing speed all decrease with age. Older managers may have less mental and physical endurance for bringing about change in the organisation than younger ones (cf. Békés *et al.*, 2021; Child, 1974). Furthermore, they may find it more difficult to adapt to new concepts or behaviours⁵⁵ (cf. Berge *et al.*, 2020; Oplatka, 2010). This, in turn, could mean that older managers have find it more difficult to acquire and process such fast-changing knowledge and are therefore at a disadvantage compared with younger managers (cf. Liu *et al.*, 2019; Cai and Stoyanov, 2016; Singh-Manoux *et al.*, 2012; Salthouse, 2009). This research is in line with that of other authors (cf. Chauhan *et al.*, 2021; Nazir *et al.*, 2018), who claim that younger CEOs are more risk-averse and career-conscious, and therefore more conservative.

In contrast, other researchers find that younger CEOs have more risk appetite and make riskier decisions than their older counterparts do (cf. Haider *et al.*, 2020; Li *et al.*, 2017; Serfling, 2014; Roberts and Rosenberg, 2006). Other research shows that older managers have more social networks and social experience than younger managers (cf. Oztimurlenk, 2021; Kanfer and Ackerman, 2004; Staudinger and Pasupathi, 2000). Social networks are often seen as the link between different companies, especially when it comes to insider knowledge (cf. Zhong and Wang, 2022; Inkpen and Tsang, 2005).

Croci *et al.* (2017) examine the relationship between company hedging and CEO age in the oil and gas industry. They find that the older the CEO, the more likely that hedging instruments are used. In an examination of the relationship between the readability of financial reports and CEO age, Xu *et al.* (2018) find that the older the CEO, the more readable the reports. Furthermore, they (Xu *et al.*, 2018) support Upper Echelon Theory, according to which there is a positive correlation between a company's performance and increasing CEO age. Salthouse (2009), Singh-Manoux *et al.* (2012) and Cai and Stoyanov (2016) focus on the influence of manager age on company performance. Kauko (2009) identifies a link between manager age and efficiency in addition to a link between education and efficiency. The research by Berger *et al.* (2012) examines the age of managers in German banks; however, the results

⁵⁵ which is in line with SCT according to which the influence of social, cognitive and personal factors on learning is emphasised (cf. Bandura, 2001; Oberdörfer *et al.*, 2021; Weaver and Wichman, 2018).

cannot be applied to this thesis, because reference is only made to risk appetite and *all* banking groups are examined.

Serfling (2014) examines the relationship between CEO age and risk appetite in ExecuComp firms between 1992 and 2010. He notes a negative correlation between CEO age and ROE. Furthermore, older CEOs reduce risk by making less risky investments, while younger executives are more open to making risky investments.

To evaluate the potential relationships between an executive board member's age and a bank's performance, it is necessary to consider the average age of at least two executive board members rather than an individual executive board member's age. The requirements for being appointed to the executive board of a German cooperative bank include professional training in addition to an appropriate level of experience and a certain number of years in the profession (cf. Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin, 2020a). On this basis, it is unlikely that a person in their twenties would be called to the executive board of a bank. The average age of executive board appointees is between thirty and forty (cf. Kudryashova and Solntsev, 2019). The evaluation presented in the current work determines the exact average age of executive board members. There is also evidence that the cooperative banking model is successful (cf. Deutsche Bundesbank, 2020; Arts, 2016), having sustained for several generations, and that it is based on experience and personal judgement. In this respect, there is evidence that age is associated with experience (cf. Sabatini *et al.*, 2022), which is thought to have a positive effect on the performance of a cooperative bank.

Consideration has also been given to whether alternative measures to age could be used. If using, for example, the lowest or highest age of only one board member, the problem is that the law (§24 GenG) requires that there be at least two board members. This means that there is always (at least) a second board member and their age has an influence on the average age of the executive board. Using the highest margin (i.e. the highest age difference)⁵⁶ can be beneficial when investigating the influence of age differences among board members (individual age combinations), and

⁵⁶ The highest margin was not included in the analysis because this would entail various problems in practice: first, usually only one executive board member is replaced at a time. In this respect, only the age of this one candidate can be taken into account, which can also be represented with the help of the average age (as chosen in this thesis). Secondly, if, theoretically, two or more executive board members were to be replaced at the same time, the issue of the optimal margin would be relevant. However, due to the lack of suitable candidates, it might be difficult to make exactly the right choice.

not just the absolute age in figures, on the Gross Profit Margin. However, mathematically, the results can be depicted by means of the average age.

In line with the research and reasoning laid out above, these considerations lead to the following hypothesis:

H3: The higher the average age of two (or more) executive board members, the greater the negative impact on the performance of German cooperative banks.

4.3.3 Gender

The variable gender was chosen to examine the effect of different genders on the board on performance.

Although the majority of German cooperative bank board members are male, there are some female⁵⁷ board members⁵⁸. Among the largest⁵⁹ cooperative banks in Germany in 2010, two banks (out of a total of 12) had women on their executive boards, which is equivalent to 16.7%. By 2017, women were represented on the management boards of six banks (out of a total of 17), which is a share of 35.3% (cf. Holst and Wrohlich, 2018). The exact proportion of female board members in smaller cooperative banks is not known. The current work determines this proportion in the empirical analysis.

The following sections discuss the differences between men and women outlined in the literature, and whether these differences can have an impact on leadership in

Thirdly, if a single executive board member is replaced, this means that there is a second remaining executive board member (or more remaining executive board members, depending on the size of the board), who would usually have a permanent contract of service. In this respect, the supervisory board can again only take into account the age of the new candidate to be appointed. Otherwise, the remaining executive board member would have to be dismissed, which would raise moral dilemmas. Fourthly, moral dilemmas would also arise if the supervisory board actually had to reappoint two candidates at the same time. The board would have to decide on which candidate to set the age limit, the younger or the older candidate. This could put the supervisory board under pressure or even overburden it.

⁵⁷ Acknowledging that there are more than two distinct genders. However, in the survey there were three different answers regarding gender (male/female/diverse). Based on the responses, only male or female genders were selected. For reasons of simplification, either male or female persons are spoken of in the further explanations.

⁵⁹ Bank size is usually measured by balance sheet total. A list of all cooperative banks, ordered by balance sheet total, can be found in *Appendix 3: List of all cooperative banks in Germany* as of the end of 2018 on page 250.

companies and, thus, on company performance. The next section discusses the fundamental question of whether (and if so, which) differences exist between the two genders.

4.3.3.1 Possible gender differences according to psychological models

Authors in the field of psychology (such as Gilal *et al.*, 2018) state that there are fundamental personality differences between men and women. Several psychological models have been developed (cf. Tran *et al.*, 2019; Costa *et al.*, 2001; Feingold, 1994) to explore these differences. Li *et al.* (2021) and Costa *et al.* (2001, p. 323) name two theories explaining gender differences: the biological theory and the social psychological theory.

The biological model links personality differences to characteristics related to inner temperament. Male aggression is attributed to hormones, and women's high susceptibility to depression and anxiety is attributed to their second X chromosome (cf. Ali, 2019; Ho *et al.*, 2015, p. 354). The sociocultural model assumes that gender differences in individuals are directly caused by social and cultural factors, such as social roles and gender stereotypes (cf. Galli *et al.*, 2019; Ho *et al.*, 2015, p. 354). A third model, the biosocial model, traces gender differences to both biological and sociocultural causes (cf. Li *et al.*, 2021; Ho *et al.*, 2015, p. 354). Social Role Theory (cf. Lekchiri and Kamm, 2020; Wood and Eagly, 2012; Eagly, 1997) states that people unconsciously apply certain beliefs when it comes to what is expected in a particular workplace. These beliefs are used to identify whether women or men are more suitable for a specific job (cf. Eagly and Karau, 2002). A basic assumption of Social Role Theory is that societies have underlying beliefs about gender-specific work differences, which observers attribute to the different behaviour of women and men (cf. Groenewald and Odendaal, 2021; Gawronski, 2004).

4.3.3.2 Gender-specific management styles

Following on from the theories for the existence of gender differences in behaviour, it makes sense to analyse how significant the gender differences between men and women are, if they exist at all, and their influence on management activity.

When managers make decisions, these decisions are always subject to certain behavioural patterns⁶⁰. Gender often plays a role in this. Various research findings emphasise that women tend to question things more than men do. Nugraha and Widyaningsih (2022) and Singh *et al.* (2002) show that women analyse issues more thoroughly than men before making a decision, while men can identify the concrete problems more quickly and precisely than women. Consequently, when a problem has been identified and a suitable solution is available, women take more time to delegate and explain work tasks. Men, on the other hand, often prefer a single solution, even though alternative solutions may be available. Furthermore, Marpaung *et al.* (2022) and Singh *et al.* (2002) argue that women tend to be more hesitant in decision-making. This can have negative consequences for the company, because hesitation in making decisions can lead to missed opportunities and new problems.

Previous research has shown that women attach more importance to non-financial and personal aims and are likely to consider the contribution they make to the quality of the decision cycle to be an advantage they have over their male competitors (cf. Carter *et al.*, 1997). Women in management are more concerned with interpersonal relationships than men are, and have confidence in the principle of honesty in the use of power; in contrast, men's attitude to power is focused on maximising the benefit to the individual (cf. Nargundkar *et al.*, 2020).

Despite differences in management styles, companies managed by women are no less successful than companies managed by men, as shown by analyses from the computer and software, food and beverage and health sectors (cf. Kalleberg and Leicht, 1991). This is confirmed by Martinez *et al.* (2022), Lanaj and Hollenbeck (2015) and Paustian-Underdahl *et al.* (2014), who have conducted research in other areas (such as SMEs) and also emphasise that women in management positions are just as successful as, or even more successful than, men. Therefore, although men and women tend to have different leadership style preferences and exhibit different decision-making behaviours⁶¹, the research does not reveal any difference in management performance that could be attributed to gender.

⁶⁰ which is in line with Trait Theory (cf. Sarker *et al.*, 2021) and Upper Echelon Theory (cf. Hambrick and Mason, 1984; Silva and Banda, 2022).

⁶¹ Upper Echelon Theory states that decision-makers are influenced by their cognitive abilities and related characteristics (cf. Silva and Banda, 2022; Hambrick and Mason, 1984).

In principle, a company can benefit from having management teams composed of men and women. However, the influence on performance is not primarily due to differences in gender, but rather reflects differences in leadership styles and decision-making patterns (cf. Zbihlejšová *et al.*, 2018). It is recognised that the different leadership styles and decision-making behaviours complement each other well in mixed management teams. The advantages of “male” and “female” styles can be combined to resolve complex issues for the benefit of the company (cf. Rao and Tilt, 2016). Therefore, although research suggests that a management team composed of women and men is more effective for improving organisational performance, the positive effect is more likely to be achieved by complementing and combining male and female leadership styles and approaches to decision-making than by having a mixed composition *per se*. Consequently, the board of a cooperative bank cannot benefit from the mere presence of a woman, but rather from the combination with the characteristics and approaches of the other (mostly male) board members. This may be expressed in an improved performance of the respective bank (cf. Kalleberg and Leicht, 1991; Lanaj and Hollenbeck, 2015; Paustian-Underdahl *et al.*, 2014).

4.3.3.3 Gender differences in career orientation

Bryant *et al.* (2019) and Eagly and Karau (1991) claim that men fill leadership positions more often than women do, as confirmed by Badura *et al.* (2018). Furthermore, several research papers (e.g. Dimitriadis *et al.*, 2017) show that, in general, successful managers have a predominantly male character. In this sense, “male character” does not refer to the natural gender of the manager, but to career orientation (cf. Puklek Levpušček *et al.*, 2018; Butler *et al.*, 1995). Willemssen (2002) states that if a distinction is made between male and female leadership styles (e.g. using a checklist of male, female and gender-neutral characteristics), it is found that male characteristics are rated more accurately than female characteristics for successful managers, but gender-neutral characteristics are rated even more so. This finding suggests that the successful manager is still portrayed as a man, even though the manager appears to have predominantly gender-neutral characteristics. Willemssen (2002, p. 387) points out that more methodological variation is needed in research on the gender characteristics profile of successful managers. Furthermore, Orser and Leck (2010) state, that career preparation is particularly relevant for women. Examples include

postgraduate education and international experience, which are vital credentials at the management level (cf. Orser and Leck, 2010).

4.3.3.4 Gender and bank performance

It has often been noted that a higher proportion of women on boards affects the dynamics of corporate governance in various ways (cf. Delgado-Piña *et al.*, 2020). However, the evidence of the impact on corporate and risk performance is far from conclusive. Kanter (1977) assumes that benefits for performance can only be achieved when the number of women in management reaches a level that allows them to have a significant impact on the corporate culture and strategy.

Other research papers find a positive relationship between a larger share of female directors and accounting performance (cf. Nguyen and Chen, 2020; Carter *et al.*, 2003; Erhardt *et al.*, 2003). In research on gender diversity in an Asian context, Kang *et al.* (2010) describe the investor response to the appointment of women as executive directors in companies listed on the Singapore stock exchange as positive. However, other recent research finds that on boards with a relatively large proportion of women, female board members are adversely affected by either excessive supervision⁶² (cf. Adams and Ferreira, 2007) or a lack of relevant experience (cf. Ahern and Dittmar, 2012). In terms of the relationship between risk-taking and gender, Malagila *et al.* (2021) and Skala and Weill (2018) state that psychological, economic and organisational research shows that women are on average more risk-averse than men.

The amount of literature which focuses on the topic of gender in German cooperative banks is very limited. A recent study conducted by Berger *et al.* (2012) concludes that the risk appetite of banks in Germany rose in the 3 years that followed an increase in the number of female executive board members, although the economic impact is not significant. Owen and Temesvary (2018) examine the relationship between female executive board members and bank performance. They note that the results of previous studies vary widely and claim that this is due to the different methods used to measure performance. Furthermore, they claim that there is a positive correlation in

⁶² which, according to Principal Agent Theory, indicates that increased supervision is intended to compensate for an information deficit (cf. Damayanti *et al.*, 2021).

higher-capitalised banks only. Skąła and Weill (2018) examine the relationship between CEO gender and bank risk in Polish cooperative banks and find that female CEOs are more risk-averse. At the same time, they find that the credit risks of banks with female CEOs are no different to those of cooperative banks led by male CEOs.

Withisuphakorn and Jiraporn (2017) examine the role of gender in ratios and risks. They find that women are on average 2 years older when promoted to the position of CEO than men are. Palvia *et al.* (2015) examine the relationship between bank capital ratios and standard risks and CEO gender, and find that female CEOs act more conservatively and are less prone to bank imbalances than male CEOs are. Balina (2017) examines the relationship between the gender of the chair of the supervisory board and bank efficiency in Polish cooperative banks, concluding that the number of banks run by female chairs is half the number of banks run by male chairs. By contrast, the indicators ROA, ROE, CIR and non-performing loans are markedly higher in the female-led cooperative banks than in the male-led ones. Balina and Idasz-Balina (2018) examine the relationship between CEO gender and bank efficiency in Polish cooperative banks. Looking at the ratio of female to male CEOs in banks of different sizes, they observe that the proportion of female CEOs is larger than that of male CEOs in small banks. Furthermore, they note that the gender of the CEO has an influence on the level of bank efficiency.

Gender is a topical subject, and it has been thoroughly investigated in the literature. The variable of female board members is easy to measure and is therefore quantifiable. However, on the basis of publicly available data, only a distinction between male and female can be made. In the survey developed for use in the current work, a third gender group, “divers” (a German word used to describe those who have a gender identity outside the male-female binary) was included, but no participants selected a category other than male or female.

The findings of Skąła and Weill (2018) suggest that female CEOs in Polish cooperative banks are more risk-averse than their male counterparts, which could lead to higher performance. Withisuphakorn and Jiraporn (2017) state that female CEOs are appointed to the board on average 2 years later than their male counterparts. This would mean that they have more experience when appointed to the board, resulting in a positive effect on performance.

These considerations lead to the following hypothesis:

H4: The presence of one or more female managers on the executive board positively affects the performance of German cooperative banks.

4.3.4 Education and bank performance

The variable education was chosen for this hypothesis because § 25 c KWG clearly requires that executive board members of a bank must have the appropriate professional qualifications.

Various authors have examined the correlation between education and intelligence. In several research papers (e.g. Buczyłowska and Petermann, 2018), education is seen as an indicator of a person's cognitive abilities⁶³. Accordingly, correlations are seen between a person's cognition, level of education and decision-making ability (cf. Petrocchi *et al.*, 2021; King *et al.*, 2016; Lubinski and Humphreys, 1997). Higher educational attainment is also associated with higher levels of patience and higher irritability thresholds (cf. Warner *et al.*, 2020; Funder and Block, 1989). Moreover, higher education is even associated with a longer life and a higher lifetime income, as Bella *et al.* (2021) and Jensen and Meckling (1998) show.

A connection between education and improved performance is shown both in Spence's (1973) Signalling Theory and in Human Capital Theory (cf. Zheng *et al.*, 2021). Indeed, human capital theory (cf. Schulz, 1967) focuses on the fact that human capital is created through education (cf. Wang *et al.*, 2019). Similarly, Signalling Theory states that individuals signal their qualification for a role through their acquired education (cf. Williams, 2021). In the Upper Echelon Theory literature, education is also often used as a measure of an individual's knowledge (cf. Hambrick and Mason, 1984). There is an assumption in the literature that managers with a more specialised knowledge base are considered to be better educated (cf. Hsu *et al.*, 2013; Herrmann and Datta, 2002). Senior managers who have previously acquired specialised knowledge are more able to incorporate and make use of new specialised knowledge (cf. Zaitouni and Ouakouak, 2018; Cohen and Levinthal, 1989), which gives them a greater knowledge base and in turn increases their awareness of technical opportunities that exist in the local area (cf. Cohen and Levinthal, 1989).

⁶³ which, at the same time, according to the Upper Echelon Theory, influences the decisions of managers, which subsequently have an impact on company performance (cf. Silva and Band, 2022).

This ability can help a company to take advantage of more of its existing excess expertise. At the same time, a higher level of specialist knowledge allows better-educated senior managers to better recognise and more effectively use external knowledge and ensure that such external knowledge is consistent with the company's resources and capabilities (cf. Huang *et al.*, 2021; Buyl *et al.*, 2011). As a result, the management can integrate external specialist knowledge more efficiently and apply it more quickly (cf. Zhang, 2017).

Similarly, education can be an indicator of social standing. According to Popov *et al.* (2019) and Hambrick and Mason (1984), education is associated with membership of certain socio-economic groups. A manager's level of education also has a positive effect on his or her *social capital*, as confirmed by Ozili (2020). For example, Belliveau *et al.* (1996) observe that better-educated managers have more social connections with other managers and government officials. These managers have access to exclusive social circles thanks to having attended prestigious educational institutions. Shipilov and Danis (2006) build on Upper Echelon Theory by exploring theoretical reasons for the positive influence of managers' educational background on their external networks. Furthermore, social networks are often seen as a link between companies from different sectors (cf. Hua and Peng, 2021; Shipilov and Danis, 2006).

Authors who have examined the links between education and its impact on performance have come to different conclusions. Golec (1996) states that an MBA improves funds' performance. Gottesman and Morey (2006) also find a positive relationship between manager education and investment fund performance, with a fund's performance related to the quality of the university at which the fund manager obtained an MBA. However, they find no relationship between undergraduate education and fund performance, and no additional benefits of further qualifications, such as a PhD. Chevalier and Ellison (1999), however, argue that there is in fact a positive relationship between managers' undergraduate training and their performance. At the same time, in contrast to the findings mentioned above, they find no connection between fund manager performance and that manager having an MBA. Positive correlations are also found in Kauko (2009), King *et al.* (2016), Miller *et al.* (2015), Beber and Fabbri (2012), Chevalier and Ellison (1999). While King *et al.* (2016) use factor analysis, Lindorff and Prior Jonson (2013) focus solely on dividend as a performance measure.

Li *et al.* (2011) examine the relationship between manager qualities (work experience and age) and hedge fund performance and find that senior executives with a better education tend to earn higher returns or display better fund performance. They find only a minor connection between greater CEO experience and lower fund performance. Philpot and Peterson (2006) use the variables of age (tenure), education (certification), team (number of members) and experience. Carmeli (2006) examines the relationship between education and performance, while Gottesman and Morey (2006) find a link between education and fund performance. Lindorff and Prior Jonson (2013) focus on relationships between CEO education and performance, while Li *et al.* (2011) focus on managers' training and experience and the impact of these factors on hedge fund performance.

Although the literature finds a link between executive education and enterprise performance, empirical evidence suggests that the impact varies depending on the type and quality of training received. Chevalier and Ellison (1999) find a positive relationship between managerial education and the performance of mutual funds. Specifically, they find that managers holding undergraduate degrees obtained from Ivy League universities in the United States experience larger risk-adjusted returns, while managers holding Ivy League MBA degrees experience higher returns due almost entirely to a shift towards higher levels of systematic risk. Bhagat *et al.* (2010) are not the only researchers to conclude that although training is often used as a crucial element in the CEO hiring process, the impact on company performance is often not considered in such selection procedures. This may be because the relationships between education and long-term business performance are not known.

As the current work examines German cooperative banks, the next section deals with the special features of education in the German cooperative bank sector.

4.3.4.1 Special features of education and training in the German cooperative bank sector

In principle, there are several qualification levels for bank managers in German cooperative banks. The first level of qualification is bank training (and is usually necessary for all employees of a bank). Bank clerk apprenticeships handle theoretical and practical elements simultaneously. This means that, over a period of 3 years, theoretical

knowledge is taught in school-based supervision (in Germany: vocational school) and practical knowledge is taught at the workplace (cf. IHK München, 2020). The share of school-based vocational training is about 880 hours, the vast majority of which is spent directly at the workplace. Usually, trainees cover all areas of activity included in the job description of a bank clerk.

In addition, some bank managers have an additional and officially recognised academic degree, such as a diploma in economics, or a postgraduate degree at the doctoral level (cf. Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017).

According to § 25 c KWG, prospective executive board members are required to have theoretical and practical experience⁶⁴. There are specific additional management training courses covering the theoretical expertise required by §25 c KWG and are a prerequisite for managing a bank (cf. Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin, 2020a). Therefore, the vast majority of prospective cooperative executive board members attends a special training course in Montabaur (the Academy of German Cooperative Banks). The special training courses allow all participants to become *certified banking administrators*. However, a certified banking administrator qualification is not an academic degree, so it is not officially recognised by the German government (cf. Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017).

The success of German cooperative banks in the German banking system is clear (cf. Deutsche Bundesbank, 2020; Arts, 2016). Given that research suggests that education has a positive influence on company performance, it could be concluded that the training of board members in cooperative banks has a positive effect.

These considerations lead to the following hypothesis:

H5: There is a positive relationship between the level of education of executive board members and the performance of German cooperative banks.

⁶⁴ to achieve the necessary competencies (cf. Boyatzis, 1982; 2011) to be able to manage a bank.

4.3.5 Professional experience and bank performance

The variable experience was chosen as a hypothesis because § 25c KWG requires several years of professional experience for board members.

Researchers have analysed the relationship between manager experience and company performance for many years. The overwhelming majority of researchers (e.g. Venturini and Verbano, 2017) agree that experience is one of the factors that influences a manager's activity. McCall (2004) notes that CEO jobs differ from other executive jobs due to higher job-specific experience. Furthermore, Upper Echelon Theory, as outlined by Hambrick and Mason (1984), states that manager experience has an impact on managerial decisions and thereby influences company performance, which is also confirmed by Orens and Reheul (2013), Custódio and Metzger (2013) and Huang (2014). Prastiwi *et al.* (2019) and Acquaah (2012) state that senior manager skills are based on experience in the form of knowledge, skills and expertise. As confirmed by Acquaah and Chi (2007) this allows a person to deal with difficult and complex tasks and, based on the information available, make informed decisions that are specific to particular industries.

Elias and Farah (2019), Castanias and Helfat (2001) as well as Kor (2003) even claim that knowledge can be replaced by a wealth of experience among the executives in a company. However, this is difficult to prove. In this regard, Nguyen *et al.* (2019) and Kor (2003) state that company-specific experience enables a manager to leverage product knowledge, manufacturing capabilities, technology, etc. to their competitive advantage and achieve high performance. Similarly, Ebisi and Arua (2019) and Kor and Mahoney (2005) state that experience leverages tacit knowledge of opportunities specific to the organisation. This includes not only financial resources but also employee know-how; furthermore, it includes relationships and processes with suppliers and customers that would be difficult for competitors to fulfil.

Numerous research papers (cf. Kahn, 1993; Scully, 1994; FizeL and Michael, 1999; Barros and Leach, 2006; Frick and Simmons, 2008) support the theory that there is a positive relationship between manager experience and company performance. However, this is not a universal view. Burke *et al.* (2018) argue that there are positive connections between entrepreneurial experience and business success, as also stated by Staniewski (2016), Bosma *et al.* (2004), Shane (2000) and Burke *et al.* (2008). Several research papers have found a positive correlation between manager

experience and (company) performance (cf. Kahn, 1993; Scully, 1994; Fazel and Michael, 1999; Barros and Leach, 2006; Frick and Simmons, 2008). In contrast, Zhang (2008) finds a negative correlation between CEO experience and a company's financial performance. Manager experience and performance is, however, not the primary focus of Zhang (2008), and he only shows this relationship using descriptive statistics. Gupta *et al.* (2018) examine the influence of CEO characteristics like experience, age, education and tenure on investment decisions in companies. They note that there is a positive correlation between experience and performance, which was especially evident during the financial crisis. Gounopoulos and Pham (2018) examine the relationship between CEO experience and firm performance by distinguishing between specialist CEOs and generalist CEOs. They find a positive association between specialised CEOs and the lower risk of failure and longer sustainability of a company.

The following research papers from Zhang and Rajagopalan (2004), Zhang (2008) and Elsaid *et al.* (2011) distinguish between the work experience of internal and external CEO candidates. Successor candidates who have been supervised by the current CEO of a company for many years are undoubtedly eligible for the CEO job, but those who have been CEOs elsewhere have gained more experience in the relevant job-related tasks (cf. Zhang and Rajagopalan, 2004). Therefore, committees may be more likely to select external CEO candidates with experience, because there is less likelihood of mismanagement (cf. Zhang, 2008). Companies have more information on the internal candidates at their disposal, yet information on external candidates, such as through economic reports or the press, may be more objective and reliable⁶⁵. Despite the benefits of external CEO experience outlined here, some research papers (cf. Elsaid *et al.*, 2011; Zhang, 2008) maintain that the performance of CEOs with job-specific experience is likely to be poorer than that of candidates with no prior experience.

Although the vast majority of researchers mentioned above agree that manager qualities have an impact on business performance, there are differences in the relationship between experience and performance. The research suggests that there is a

⁶⁵ According to Principal Agent Theory, the employer needs to decide which candidate incurs lower agency costs in such situations (cf. Damayanti *et al.*, 2021; Kabwe *et al.*, 2021).

positive correlation between manager experience and German cooperative bank performance⁶⁶ for the following reasons. The first reason is that professional experience is one of the requirements for becoming an executive board member (cf. Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin, 2020a). Secondly, the knowledge and experience of current executive board members is often transferred to successor board members in a succession plan. The prolonged success (cf. BVR, 2021b) of the German cooperative banking model could suggest this approach is successful.

Given the findings outlined in this section, professional experience is seen as an essential factor⁶⁷ contributing to the success of executive board members. However, there are different approaches in the literature to measuring work experience. Some research papers use the number of years of work experience collected from personnel files or through research instruments, such as surveys (cf. Hunter and Thatcher, 2007). To measure the experience variable, Margolis (2010) uses three subcategories: (1) the number of years in the current company; (2) the number of years in the industry; and (3) the number of years spent working in the current position. Dittmar and Duchin (2016) adopt a different perspective by researching managers' negative experiences, such as adversity and bankruptcy. By means of survey results, they investigate whether individual decisions are influenced by such negative experiences. They use business reports to establish which executives were employed by companies in distress.

However, measuring the level of professional experience solely on the basis of the number of years a person has worked in a profession is not sufficient. This argument is taken up by Guthrie Datta (1997). He claims that executives who remain at the same company for an extended period of time do not continue to develop in terms of professional knowledge. Furthermore, their sources of information diminish as their length of service increases, and information analysis becomes progressively more limited. As a result, these managers are often not open to new solutions and stick to tried and tested strategies. It can be concluded that the length of time spent in a profession is not an absolute, definitive indicator of performance in that profession.

⁶⁶ In other words, the results of the research are transferable to German cooperative banks.

⁶⁷ and can be seen as a proxy for certain qualities and competencies of the executive board member

Other authors take a different approach when measuring work experience. In the concept developed by Schaefer *et al.* (2011), performance also results from experience on the basis of prior knowledge. According to this concept, all experience in a field contributes to an executive's body of knowledge. This prior knowledge, in turn, influences executive performance. In this respect, mental capacity and experience would largely predict knowledge, but not performance. Due to the complexity of the experience variable, Schaefer *et al.* (2011) use four additional predictors in their research to adequately represent work experience: the trainers were first asked to predict how their subordinates would perform. The employees then had to answer a questionnaire that contained general questions. Using scales designed to map employees' experiences, the employees assessed several specific and criterion-based activities. In the next step, the employees had to judge their own performance; the researchers queried the extent to which the employees trusted themselves. These predictors were then used to establish the degree to which employees' performance could be predicted. Furthermore, research has shown that managers and career counsellors seem to assess managers' performance based on perceived prior knowledge rather than actual performance. In addition, it appears that many trainers judge an officer's performance based only on information regarding experience and rank. Using the information from the questionnaire, the authors were able to test the predictive accuracy of such information (cf. Schaefer *et al.*, 2011).

Considering the research approaches presented above, it is clear that experience can be expressed in several variants and cannot be represented by a single indicator. Therefore, the current work measures experience not only by the number of years in the cooperative bank sector but also by the number of previous positions in cooperative banking. In addition, particular attention is paid to the number of previous management positions an executive has held.

Based on the research discussed above, the current work divides executive board member experience into four components of one variable. Each variable is measured individually. Firstly, general work experience is measured in terms of total years of employment, analogous to the approach of Hunter and Thatcher (2007). Secondly, industry-specific experience is measured by counting the number of years executive board members have spent working in banks ; thirdly, management experience is

measured by the number of years spent in the current position (cf. Margolis, 2010). Fourthly, the number of previous board positions is measured.

Illmarinen (2001) mentions in this context that increasing age is also associated with more experience and has a positive effect on job performance. Similarly, Guthrie Datta (1997) demonstrates that age has a positive effect on the qualities of a manager. He further states that although age, work experience and education are separate factors, collectively they are predictive of organisational success and are likely to be positively related. For a better understanding and a quicker overview, the four experience variables are additionally marked with the abbreviations XP1–XP4 (*XP* stands for *experience*). This is initially done without ranking or weighting. However, a ranking is proposed in *Section 5.4.7* on page 141 to enable comparability.

In summary, experience is a difficult concept to quantify and measure. The variable experience is divided into four individual components in order to measure the individual components that constitute experience. These are XP1 – total professional experience, XP2 – professional experience in banks, XP3 – professional experience as a board member⁶⁸ and XP4 – number of previous board positions. Each of these components can be objectively measured and thus quantified.

These considerations lead to the following hypothesis:

H6: The different types of experience of executive board members have a positive influence on the performance of German cooperative banks.

In order to examine the experience variable more closely, each individual experience value (XP1 – total professional experience, XP2 – professional experience in banks, XP3 – professional experience as a board member, and XP4 – number of previous board positions) is also analysed against the 5-year Gross Profit Margin and the 10-year Gross Profit Margin.

⁶⁸ Used synonymously in the regression analyses as *board member for n years*.

4.4 Summary

This chapter examined board characteristics and their influence on performance more closely and developed hypotheses regarding board size and board composition. This chapter also derived four further hypotheses regarding age, gender, education and experience and their influences on performance.

As outlined above, the Hypotheses 1–6 were derived:

H1: Any number of executive board members greater than two will adversely affect the performance of German cooperative banks.

H2a: The composition of an executive board with two (or more) equal CEOs (shared leadership) has a positive impact on the performance of German cooperative banks.

H2b: The composition of an executive board with one CEO and one (or more) non-CEO(s) has a negative impact on the performance of German cooperative banks.

H3: The higher the average age of two (or more) executive board members, the greater the negative impact on the performance of German cooperative banks.

H4: The presence of one or more female managers on the executive board positively affects the performance of German cooperative banks.

H5: There is a positive relationship between the level of education of executive board members and the performance of German cooperative banks.

H6: The different types of experience of executive board members have a positive influence on the performance of German cooperative banks.

Chapter 5: Research methodology

5.1 Introduction

This chapter begins with an examination of the research philosophies that influence the current work. The chapter then presents and considers the ethical principles underlying the current work. The chapter also discusses the data collected for each of the variables (dependent, independent and control), how the data was collected and from what sources it was gathered. In addition, the individual variables are described in more detail. An explanation is offered as to what is included in an profit and loss account, what function it has in a company, and how the Gross Profit Margin is calculated – all of which are relevant for the methodology used in the current work and help answer the central research question.

The chapter also describes the statistical procedures used for testing each hypothesis and then concludes with a summary.

5.2 Research philosophy

According to Fitzgerald and Howcroft (1998a), several different research designs and approaches exist at the epistemological, ontological, methodological and axiological level. Furthermore, the authors state that a number of research paradigms are expressed in dichotomous terms: *positivist-interpretivist*, *realist-relativist*, *objectivist-subjectivist*, *quantitative-qualitative*, *relevance-rigour*. In addition, they state that there are other dichotomies “not all at the same level of abstraction, as some are more overarching than others, and some are almost synonymous” (Fitzgerald and Howcroft, 1998b, p. 318). At a fundamental level, these dichotomies are attributed to two contrasting positions: the *hard* versus the *soft* approaches (Fitzgerald and Howcroft, 1998b, pp. 318–319). These two contrasting approaches are actively debated in the research and scientific community and have emerged historically. Supporters of both approaches assert the advantages (“hard” facts in quantitative research against “soft” facts in qualitative methods) of each research method. It is essential, therefore, to start with a discussion of the philosophical considerations, as

many of the decisions on research strategy have an impact on the tools used for collecting and analysing data. In addition, there are approaches that do not fall into either category. These are also discussed below.

5.2.1 The ontological level

On the ontological level, the relativist takes a soft position. The underlying assumption is the existence of multiple realities as a construction of the mind. Reality is perceived through social transactions and contacts with other people. This perception varies among people due to the different linguistic and cultural environments in which they live. Also on the ontological level, the realist represents the hard position. The realist believes that there are fixed, tangible structures in the world, which exist independently of one's individual perception (cf. Fitzgerald and Howcroft, 1998a).

The considerations regarding the ontological view in the context of the current work are as follows. The current work is to be conducted in cooperative banks of all sizes. For the first step, it is important to develop a database that any researcher could reproduce. This approach is a prerequisite for the "hard" realist, because it underlines assumptions about hard, tangible structures in the world. The approach is also suitable for the second step: looking in depth at existing publicly available data. Furthermore, it should be noted that the data to be investigated is largely readily available, objective and measurable. Consequently, in order to answer the research question, such an objective approach is required which does not leave room for misunderstandings.

5.2.2 The epistemological level

The hard position taken by the positivist is that there are fixed laws of causation in the world. Complex situations can be reduced through simplification or, rather, reduction. Furthermore, the positivist view places belief in the objective measurement and repeatability of situations. On the other hand, the soft, interpretivist view holds that there is no universal truth, and that any truth relies solely on the researcher's own

findings through research and reference. The realism of context is paramount for interpretivists, who do not believe that uncommitted neutrality exists (cf. Fitzgerald and Howcroft, 1998a).

The hard, positivist position can reveal more about the impact board characteristics and manager qualities have on the performance of German cooperative banks. The current work attempts to reduce the complex reality by focusing on the essential influencing variables (independent variables + control variables). Selecting four dependent and three control variables as influencing factors simplifies the interpretation of influences affecting the performance of cooperative banks. A simplified framework of influencing factors enables both the further examination of these factors and specific analysis of individual factors. The selection of variables will also make the results more applicable in future research. As far as the objective measurability and repeatability of situations are concerned, the positivist view in connection with the quantitative data evaluation carried out by means of regression analysis can be shared. Furthermore, an objectivist view was adopted because the author intended to act as a researcher who was detached from the context under study. It was important for the author to approach the thesis question in a neutral manner, minimising any influence of personal values and biases.

However, on the other hand, it must be recognised that there can be no universal truth. Situations and events are linked with new insights through one's own subjective observation and classification in the respective context (cf. Josephsen, 2014). In the current work, new insights were gained, on the one hand, through engagement with the object of research and, on the other hand, through one's own experiences and interpretations. The development of the knowledge gained was not linear but took place in different phases.

5.2.3 The methodological approach

There are two methodological positions: the (hard) quantitative position and the (soft) qualitative position. The quantitative position uses statistical and mathematical techniques to identify facts and causal relationships. It is therefore closely associated with the positivist approach. Results obtained from smaller groups using quantitative

methods can also be applied to larger groups, i.e. research outcomes can be transferred from one situation to another situation with underlying similarities. On the other hand, the qualitative position determines what actually exists, and there is no emphasis on the amount of data. There is usually less structure but more responsiveness to the requirements and nature of the given research situation, i.e. new insights can be gained through inductive approaches (through observing a phenomenon and inductively drawing a conclusion). Thick description, as explained by Ponterotto (2006), is a common qualitative method.

The question of whether a qualitative or quantitative approach is the most appropriate depends on the research question at hand, as Bartezzaghi (2007) claims: “In this respect the central point is not if one method is superior to the others *in general*, but how to choose the most appropriate method for a specific research framework...” (Bartezzaghi, 2007, p. 193). In accordance with Bartezzaghi's statements, the approach will be chosen that best suits the purpose of answering the research question. In this context, an overview of the differences between quantitative and qualitative research is provided by Brüsemeister (2008, p. 19). He explains that quantitative research is commonly used for larger samples, as is the case in the current work; in most cases, quantitative methods are applied when there are corresponding theoretical foundations that can be verified by using the results from a large sample.

As of the end of 2018, there were 844 cooperative banks in Germany and at least 1,688 board members, and thus almost a complete dataset of a population (cf. BVR, 2022a). The large number of samples at hand meant that the quantitative approach was suitable as the primary methodology for this thesis. An empirical analysis was conducted using the data collected. This approach, which can summarise findings in numbers and formulas, is considered to be one of the advantages of quantitative research (cf. Hartmann, 1970). In addition, according to Heinze (1995), quantitative research can make information clear and manageable for analysis. On the other hand, the approach does have weaknesses. According to Lamnek (2005), one weakness is that the same quantitative instruments are often used without taking into account the underlying nature of the research object. Lamnek (2005) also states that the pre-con-

struction of thematic areas for hypotheses has an excessive influence on the responses provided. Having said this, this was mitigated in part by the current work⁶⁹. According to Lamnek (2005), another weakness is that insufficient practical relevance is attributed to quantitative methods, given that the results cannot be translated directly into practice. The results of the current work can, in fact, be used as an aid for the supervisory board in the recruitment of new executive board members, i.e. the findings can be applied in practice immediately. Furthermore, Lamnek (2005) is critical of the reduction of information, which comes at the expense of the concrete representation of reality.

The focus of qualitative research is on the discovery of new theoretical knowledge, with sample sizes tending to be smaller. A major distinction already exists in the terms used in quantitative and qualitative measures in their respective outcomes; *verification* for quantitative research and *generation* or *discovery* for qualitative research.

To support the quantitative evaluation and to examine the research object from several perspectives, a qualitative approach was also chosen in the current work. For the purpose of collecting the qualitative data, all board members of German cooperative banks were surveyed. This method utilises one of the central strengths of qualitative research; it enables researchers to work exploratively and thus to discover new *uz-uthings* (cf. Lamnek, 2005). More detailed findings can be recorded, so the data and information are correspondingly richer (cf. Lamnek, 2005). One of the biggest weaknesses of qualitative methods, however, is the potential for arbitrariness. There is the risk that questions and research objectives may not be clearly formulated, and different results may be obtained from the same set of data. Likewise, the textualisation and interpretation of the results is difficult to comprehend and verify. Another criticism is that the focus on the subjective impressions of individuals may result in a lack of objectivity (cf. Wilson, 1982).

In principle, the findings of the current work are derived deductively, i.e. the quantitative data is evaluated by means of statistical procedures (multiple regression analyses). Due to the large number of data sets available, a quantitative approach was

⁶⁹ Detailed information are provided within *Appendix 5 - E-mail and questionnaire* on page 312. However, the information requested was given as questions, not in the form of „yes/no“ answers, but with partially open questions.

the preferred variant⁷⁰. Inductive approaches, which are common in qualitative methods, were not used. This would have required further in-depth qualitative surveys, e.g. by interview, in addition to the questionnaire carried out. Furthermore, the quantitative surveys were conducted under "laboratory conditions". Since the data collected was fixed, unchangeable data, no disadvantages regarding a missing "natural environment" were identified.

5.2.4 The axiological level

The positivist approach is based on a "hard" and rigorous position. Research is validated using quantitative techniques, and conclusions are derived hypothetically and deductively. Therefore, for the current work, a realist-positivist quantitative research approach was used (cf. Fitzgerald and Howcroft, 1998a). However, the insights gained are initially only theoretical insights. One of the aims of this thesis is to derive not only theoretical but also practical insights. This can be achieved by providing the supervisory board with the results of this research as a guideline in the selection of new board members. In this respect, the current work is not only oriented towards making theoretical findings but also towards formulating practical solutions that can be implemented in practice.

⁷⁰ However, as pointed out above, because some supplementary data had to be collected manually by questionnaire, the opportunity was taken to collect some additional qualitative data.

Table 1 - Summary of soft versus hard research dichotomies according to Fitzgerald and Howcroft (1998b, p. 319) provides a summary of the discussions above. It compares the soft and hard approaches at the ontological, epistemological, methodological and axiological levels. This overview provides a sound basis for selecting the research design and the methodology to be applied in the current work.

Soft	Hard
Ontological	
Relativist Belief that multiple realities exist as subjective constructions of the mind. Socially transmitted terms direct how reality is perceived and this will vary across different languages and cultures	Realist Belief that the external world consists of pre-existing hard, tangible structures which exist independently of an individual's cognition
Epistemological	
Interpretivist No universal truth. Understand and interpret from research's own frame of reference. Uncommitted neutrality impossible. Realism of context important	Positivist Belief that the world conforms to fixed laws of causation. Complexity can be tackled by reductionism. Emphasis on objectivity, measurement and repeatability
Subjectivist Distinction between the researcher and research situation is collapsed. Research findings emerge from the interaction between researcher and research situation, and the values and beliefs of the researcher are central mediators	Objectivist It is both possible and essential that the researcher remains detached from the research situation. Neutral observation of reality must take place in the absence of any contaminating values or biases on the part of the researcher
Emic/Insider/Subjective Origins in anthropology. Research orientation centres on the native/insider's view, with the latter viewed as an appropriate judge of adequacy of research	Etic/Outsider/Objective Origins in anthropology. Research orientation of outside researcher, who is seen as objective and the appropriate analyst of research
Methodological	
Qualitative Determining what things exist rather than how many there are. Thick description. Less structured and more responsive to the needs and nature of the research situation	Quantitative Use of mathematical and statistical techniques to identify facts and causal relationships. Samples can be larger and more representative. Results can be generalised to larger populations within known limits of error
Exploratory Concerned with discovering patterns in research data and explaining/ understanding them. Lays a basic descriptive foundation. May lead to the <i>generation</i> of hypotheses	Confirmatory Concerned with hypothesis testing and theory verification. Tends to follow positivist, quantitative modes of research

Soft	Hard
Induction Begins with specific instances, which are used to arrive at overall generalisations that can be expected on the balance of probability. New evidence may cause conclusions to be revised. Criticised by many philosophers of science, but plays an important role in theory/hypothesis conception	Deduction Uses general results to ascribe properties to specific instances. An argument is valid if it is impossible for the conclusions to be false when the premises are true. Associated with theory verification/falsification and hypothesis testing
Field Emphasis on realism of context in natural situation, but precision in control of variables and behaviour measurement cannot be achieved	Laboratory Precise measurement and control of variables, but at the expense of the naturalness of the situation, because real-world intensity and variation may not be achievable
Idiographic Individual-centred perspective which uses naturalistic contexts and qualitative methods to recognise the unique experience of the subject	Nomothetic Group-centred perspective using controlled environments and quantitative methods to establish general laws
Axiological	
Relevance The external validity of the actual research question and its relevance to practice is emphasised, rather than constraining the focus to that which can be researched using “rigorous” methods	Rigour Research characterised by hypothetico-deductive testing according to the positivist paradigm, with an emphasis on internal validity through tight experimental control and quantitative techniques

Table 1: Summary of soft versus hard research dichotomies

Source: Fitzgerald and Howcroft (1998a, p. 319), table: “Summary of ‘soft’ v. ‘hard’ research dichotomies”

5.3 Research ethics

In the present research context, the question of ethics concerns the appropriateness of the researcher’s practice in relation to the rights of the German cooperative banks and their managers, who are the subjects of the current work.

For the purpose of this research, the author ensured that the research was designed in a manner that was methodologically sound and morally acceptable to all parties involved. All data used was anonymised.

The Middlesex University Research Ethics Review Framework was applied and the ethical principles of Middlesex University were followed. These principles are (1) autonomy, (2) beneficence, (3) non-maleficence, (4) confidentiality and (5) integrity.

Approval for the study was given by the Research Ethics Committee, as shown in *Appendix 6: Ethical approval and ethics consent form* on page 398.

The next section explains the type of analysis that was used to conduct empirical research in the current work.

5.4 Data sample

5.4.1 Analysis type

In the current work, a quantitative analysis of data from balance sheets and other directories is performed. The years 2009 to 2018 (i.e. a period of 10 years) were selected and calculated for the analysis and comparison of management qualities and performance in German cooperative banks. Reasons for selecting 2009–2018 as the data collection period are explained in more detail in the next section.

The following secondary sources were used for this purpose: information from the BISNODE⁷¹ database was used in the first instance as it provides a source of readily available data. The second data source was the Commercial Register⁷², a database containing information about companies and the year of appointment of the executive board members. The third data source was the Electronic Federal Gazette (www.bundesanzeiger.de), a database containing the balance sheet positions and profit and loss accounts for all German cooperative banks for the last 10 years. The fourth data source was CompanyHouse, a commercial database containing information about companies, the year of appointment of the executive board members and, in most cases, the executive board members' dates of birth.

⁷¹ BISNODE AG is a major European provider of digital business information. For the purpose of the current work, the BISNODE branch in Germany, Darmstadt, provided a database containing the balance sheet and profit and loss account data for all German cooperative banks. The original database (created by BISNODE in the form of an Excel spreadsheet) contained 17,646 data rows. Each row contained the balance sheet and profit and loss data for one German cooperative bank for one banking year.

⁷² In German, Handelsregister.

5.4.2 Strategies regarding the scope of the quantitative data

Bank and executive board data was examined that had been collected from several sources: the BISNODE database, the Commercial Register, the Electronic Federal Gazette and CompanyHouse. Therefore, the analysis is retrospective and includes information from previous years contained in the data sources. There are differing views in the literature with regard to the number of years to be considered, which are discussed in *Appendix 5* on page 288. The thesis follows the approach of Berger *et al.* (2012) and Pentina *et al.* (2009) in that it considers a longer period. Accordingly, a period of 10 years is considered appropriate for the purposes of this thesis. On the one hand, this can take into account effects that have a long-term impact on the bank due to a merger, for example, and on the other hand, the extensive data available in the BISNODE database (in addition to available and retrievable data from the Electronic Federal Gazette) can be utilised fully.

At the time of the data evaluation (autumn 2020), complete data was available for the annual financial statements of German cooperative banks up to 31 December 2018. In Germany, all companies are required by law to publish their annual financial statements in the Electronic Federal Gazette (www.bundesanzeiger.de). Publication is only possible after the annual financial statements have been audited and certified by external auditing associations. In principle, the annual financial statements must be prepared by the end of March of the year following the financial year. After the subsequent audit, the annual financial statement is approved by the members (at the general or representative assembly). Only after this has taken place is the data published in the Electronic Federal Gazette. Due to SARS-Covid-19, most cooperative banks experienced a significant delay in having their annual financial statements for 2019 approved by their members. As a result, it was not possible to include data for 2019 in the evaluation.

There are indications that, over a 10-year period, the influence of individual board members can affect the bank's results. Several changes (in the composition of the executive board) were to be expected due to several mergers of German cooperative banks in the past (within the ten-year period). In this respect, it did not seem reasonable to include only those banks for which only complete data sets (over a 10-year pe-

riod) were available (cf. Li *et al.*, 2001). Therefore, the current work follows the approach of Kouser and Saba (2011), which is to split the sample: every bank for which data was available for at least 5 years was included in the evaluation.

In concrete terms, this means that two samples are used in the current work. The first sample, which covers a period of 5 years, represents the entire sample (cf. Pentina *et al.*, 2009; Ton and Raman, 2010). In the second sample, those banks for which even 10 years of data could be accessed (i.e. the banks that had not experienced a merger in the last 10 years) were included. Thus, the data analysis was based on a total sample of 5 years and a sub-sample of 10 years.

The next section discusses the data gathering process.

5.4.3 Data gathering

Reliable research data is essential for obtaining comprehensible and informative results. Given that the collection of data for the empirical evaluation constituted a large share of the current work, a separate section is devoted to this topic.

The next section provides an overview of the data which had to be collected in order to calculate the Gross Profit Margin. The procedure for collecting the data on manager qualities is discussed, followed by a description of the selection criteria for the data collected.

First, it is necessary to explain the format in which the data was collected and stored. The required economic performance indicators were taken from the BISNODE database and subsequently used to calculate the Gross Profit Margin. The BISNODE database contains comprehensive data; any missing economic data was accessed online on the Electronic Federal Gazette website (www.bundesanzeiger.de). By law, all companies must publish data on the profit and loss account in addition to their annual financial statements with notes and a management report every year.⁷³ Data covering the previous 10-year period is publicly available. The data for each individual year must be retrieved manually for each individual bank. To ensure traceability, the retrieved data was displayed and saved as a PDF file or in HTML format (see *Appendix 2: Profit and loss account – Example “Raiffeisenbank Bühlertal”* on page 224).

⁷³ In German, *Jahresabschluß (Bilanz mit Gewinn- und Verlustrechnung) mit Anhang und Lagebericht*.

The information contained in these files was extracted manually and transferred directly into IBM SPSS 25⁷⁴ and Microsoft Excel.

5.4.3.1 Data sources for calculating the Gross Profit Margin

To calculate the Gross Profit Margin, it was necessary to obtain data from each bank's balance sheet and the profit and loss account. Information from the BISNODE database was used for this purpose.

Table 27, which can be viewed in *Data sources for calculating the Gross Profit Margin* in Appendix 5 (page 294), shows the number of cooperative banks for which data was available for a specific number of years; in other words, which data the BISNODE database contained. Deutsche Bundesbank publications were used to assess whether the amount of data contained in the BISNODE database – or, rather, the number of banks listed – was actually correct. Every year, the Deutsche Bundesbank publishes a list of all (cooperative) banks which operated in the previous year, as of 31 December. These statistics served as a reference for the data provided by BISNODE.

Table 28 compares the number of cooperative banks according to the data contained in the BISNODE database with the number of banks according to the statistics from the Deutsche Bundesbank. The table is presented in Appendix 5 on page 295.

5.4.3.2 Criteria for data collection

Several selection criteria for the data collected were applied. One selection criterion was based on the time period. In this respect, the only banks considered were those that had existed continuously (without a merger) for at least 5 years (for Sample 1) or even 10 years (for Sample 2). Although these exclusions may have led to distortions in the results, the approach was justified insofar as it made it possible to compare bank performance under the same conditions.

⁷⁴ IBM SPSS 25 was the most recent software version at the time the regression analyses were conducted. For new calculations that became necessary after the submission and defence of the thesis, software version 25 was also used.

Another selection criterion was based on percentage changes in the balance sheet total of the individual banks. According to this, percentage increases of less than 20% were interpreted as normal balance sheet growth. Like any other company, a cooperative bank can grow due to higher turnover, business expansion or similar causes. The reasons for this are manifold, and include increased customer demand, expansion of certain businesses lines, increased demand for credit, and others. Usually, smaller growth rates (usually < 10%) are shown for information only on the basis of numerical values, whereas larger changes (> 10%) are also explained in the notes and management report as well, with the reasons for such changes provided. Percentage increases of more than 20% but less than 35% were checked in each individual case in order to differentiate between normal balance sheet growth and growth due to a merger. Further explanations are provided on *Appendix 5* on page 297.

Merger processes have also been included as a selection criterion. In view of the circumstances described above, in the further course of this thesis, it is shown that a percentage increase in the balance sheet total of more than 35% from the previous year to the next year indicated a merger. To check whether this was actually the case, random samples were taken of 14 banks with growth rates of more than 35%. In all the cases examined, the growth could be attributed to merger activities. Depending on the year in which the merger took place, the bank was removed from the analysis or, if possible, used in the 5-year sample.

Based on the aforementioned selection criteria, a final identification of the data required for the current work was conducted. For the purpose of the current work, the years 2018 and earlier are relevant and are divided into two periods: 5 years and 10 years. On this basis, 714 banks were included for which balance sheet and profit and loss account data was available for at least 5 years, and 643 banks were included with data available for 10 years; in each case, starting from 2018 and moving backwards, see *Table 32* on page 303.

The data contained in the BISNODE database was re-sorted several times for the purposes of evaluation. For the final calculation of the Gross Profit Margin, the individual balance sheet and profit and loss account items were entered into the respective cells in an Excel spreadsheet, as shown in *Appendix 5* (see *Criteria within the profit and loss account for calculating the Gross Profit Margin* on page 303).

5.4.4 Collecting manager and executive board data

The relevant data for the individual managers was collected from the following sources: management reports, the BISNODE database, CompanyHouse, the Commercial Register, the home, privacy or contact pages of the respective bank's website, XING, LinkedIn, press reports, and other publications mentioning the respective bank. Furthermore, a questionnaire was distributed to all executive board members of German cooperative banks. Further details regarding the contents of the questionnaire are presented in *Section 5.4.4.6* on page 132 and in Appendix 5 (on page 287).

The following paragraphs provide a brief description of each source that was used.

CompanyHouse: This is an Internet service provider specialising in collecting manager data from online sources, such as the Federal Gazette and the Commercial Register.

Management reports: These reports were used to source data that was not available in the BISNODE database. The management reports were retrieved from the Electronic Federal Gazette (www.bundesanzeiger.de). All executive board members are listed by name in the management report. The appointment and departure of executive board members is noted for the respective business year. In general, the management report contains information on the number of board members (board composition), the gender of the board members (on the basis of first and last names listed) and, in the case of changes, the date a person joined or left the board. Furthermore, it states whether or not there is a chair of the board (CEO / non-CEO).

Commercial Register: All companies operating in Germany are listed in the Commercial Register. Certain data stored in the register is publicly available, including the date of registration for newly appointed board members, the names of the board members and their dates of birth.

Website (homepage or privacy and contact information⁷⁵ pages) of the respective banks: All German cooperative banks have an online presence. The privacy and contact information page, which must contain certain information by law, was used to find the names of the board members, the gender of the board members (as first name

⁷⁵ In German, *Impressum*.

and surname are mentioned), the composition of the board (CEO / non-CEO) and the number of board members (board size).

XING and LinkedIn: These are both career networking platforms. These platforms provide similar information to CVs, such as information on a manager's education, academic study, employment relationships, professional experience and company affiliations.

A discussion of the reliability of the data sources mentioned above is provided in *Section 5.4.5* on page 136 and how this issue is threatened within the current work.

5.4.4.1 Sources of data on boards and board members

Information in the BISNODE database was used to collect data on executive board members.

In addition to the balance sheet and the profit and loss account data for a single banking year, the BISNODE database contains an Excel worksheet with (incomplete) information on: the name of the cooperative bank; the names of the members of the executive board; the names of the members of the supervisory board; the dates of birth of the executive board members; the dates of birth of the supervisory board members; information on whether a board member is a CEO or non-CEO; information on whether a person is a supervisory board member or chair; the date on which a person started in their corresponding role (as an executive board member or a supervisory board member); and the date a person left their role as an executive board member (if applicable).

In total, the BISNODE database contained 10,015 records. A breakdown of members and chairs of the supervisory board, members of the executive board and CEOs is provided in *Table 34* (see Appendix 5, page 306).

5.4.4.2 Selection criteria: start and end dates of board membership

In the current work, only those executive board members who had been active in that role for at least 5 years were considered, counting backwards from 2018. Accordingly, 745 people who started their activities as executive board members in 2015 or

later were not considered in the evaluation. Similarly, 117 members of the executive board who left the board before 2018 were excluded from the evaluation.

5.4.4.3 Supplementing dates of birth and start dates

As BISNODE listed no date of birth for 400 executive board members and no start date of board membership for 289 executive board members, the next step was to try to find this information in other easily accessible sources, e.g. CompanyHouse. A total of 221 dates of birth and 172 board appointment dates were found.

5.4.4.4 Identifying female board members

It was possible to identify 59 members as female. For 46 other board members, a more detailed check was needed, as it was not clear whether their names (e.g. Uli) were female or male. A purely visual check was carried out which involved comparing published pictures of the board members of the respective bank with the first names. This made it possible to determine the gender of these board members⁷⁶.

5.4.4.5 Excluding executive board members due to bank mergers

After excluding the executive board members of banks that had been involved in mergers etc., 1,221 executive board members remained. These were spread across 674 cooperative banks.

5.4.4.6 Collecting outstanding data by means of a questionnaire

Because some data was not available to the extent required, all 1,221 executive board members were identified and contacted by email⁷⁷, regardless of their length of service (longer than 5 years or longer than 10 years). A total of 1,921 board members

⁷⁶ Due to the German law (in contrast to other countries), a first name must be clearly identifiable as female or male.

⁷⁷ All German cooperative banks were contacted to complete missing data sets and to compare them with existing data sets.

from 807 banks (as at 31 December 2018) were contacted and a total of 722 responses were received.

To identify and survey all cooperative bank executive board members, a list of all active cooperative banks in Germany as of the end of 2018 was used (cf. BVR, 2019b). For more details, see *Appendix 3: List of all cooperative banks in Germany as of the end of 2018* on page 250. Accordingly, a total of 873 cooperative banks were considered.

From this list, the website of each bank was retrieved by using the bank name. The information listed in Appendix 5 on page 308 was retrieved from the privacy and contact information page and entered into an Excel table. The data collected in this way is shown in *Table 2: Data collected in preparation for conducting a questionnaire*:

Number	Description
1,925	Executive board members
1,921	Available email addresses (three addresses could not be determined, one email address was not unique)
807	Cooperative banks (cut-off date May 2020; i.e., between 31 December 2018 and May 2020 there were 66 mergers)
89	Board spokesperson (=CEO)
335	CEOs
383	Cooperative banks with dual CEOs or multiple CEOs
1,495	Non-CEOs
2	Executive board members (position could not be determined)
1	Cooperative bank with only one executive board member
49	Executive board members with a doctoral degree
74	Female executive board members, of whom there were 13 CEOs and no spokespersons

Number	Description
608	Cooperative banks with two executive board members
122	Cooperative banks with three executive board members
62	Cooperative banks with four executive board members
6	Cooperative banks with five executive board members
5	Cooperative banks with six executive board members
1	Cooperative bank with seven executive board members
2	Cooperative banks with eight executive board members

Table 2: Data collected in preparation for conducting a questionnaire

Source: Privacy and contact information pages of the respective banks' websites, accessed 24.05.2020

In addition, this made it possible to compare the data gathered through this step with the data that had already been obtained from the BISNODE database. In this respect, inaccuracies caused by using only one data source could be avoided.

After the necessary information was collected, 1,921 members of the executive board were contacted by email and asked to answer nine questions (one of which was open-ended). The content of the email is presented in German and English under *Collecting outstanding data by means of a questionnaire* in Appendix 5 on page 308.

5.4.4.7 Collecting data on the insolvency rate, unemployment rate and gross value added

Further control variables – the unemployment rate, the insolvency rate and the gross value added – were investigated over a period of the past 10 years. These variables were chosen because they reflect the economic conditions in the regions where the

cooperative banks operate. It can be assumed that the unemployment rate of a region influences regionally active enterprises. A high unemployment rate weakens purchasing power in the region and thus makes it more difficult for local banks to conduct profitable business. The insolvency rate is another regional indicator which is closely related to the success and failure of companies. Again, if the insolvency rate in the region is high, it can be assumed that business with corporate clients may be below average. The variable gross value added is an indicator of purchasing power. All three variables are used as control variables in the statistical evaluations. They are readily available and easy to collect. The data needed for these variables was retrieved by submitting online queries through the portal of the Federal Statistical Office (www.destatis.de). The data for the years 2009–2018 was downloaded in the form of an Excel table. The data was used to calculate average values for the last 10 years. For the unemployment rate and the insolvency rate, the average value was expressed in per cent, per region. For the gross value added, the average value was expressed in euros per inhabitant, per region.

It should be noted that not all the data was available for all regions for all years.

5.4.4.8 Consolidating and completing the collected data

The data was collected as described above and recorded in Excel tables. For ease of handling, the raw data was collected in separate Excel tables and re-sorted for further processing.

In preparation for testing the individual hypotheses, the raw data was combined and supplemented, as shown in Appendix 5 under the heading *Consolidating and completing the collected data* on page 318.

After comparing the banks with respect to the data on the 5-year Gross Profit Margin and the 10-year Gross Profit Margin, 65 complete data sets for testing hypotheses for the 5-year sample (sample 1) and 62 complete data sets for testing hypotheses for the 10-year sample (sample 2) were identified.

5.4.5 Self-reported data

When collecting data from certain sources, including social media platforms such as XING and LinkedIn, there is a risk that the data may deliberately or unknowingly be incorrect because it is self-reported. Akutsu *et al.* (2021) and Teye and Peaslee (2015) argue that this is often due to construct validity, or because information providers have varying degrees of reliability. Furthermore, all types of data are susceptible to measurement errors, but self-reporting is especially problematic in terms of validity and reliability. A distinction is made between random and systematic errors (cf. Loebner *et al.*, 2022; Cole *et al.*, 2012). Random errors occur indiscriminately, which means that the same person could provide a different answer to the same question at different times. Random errors affect reliability rather than validity and do not pose a particular problem in research, because random errors usually apply to the whole population of data to be collected. This means that for multiple measurements, the arithmetic mean error should be zero (cf. Cole *et al.*, 2012).

Systematic errors represent a more serious problem as these constitute permanent errors or deviations from the truth (cf. Teye and Peaslee, 2015). Such errors call the validity of the data source into question. Systematic errors can be caused by misinformation on the part of those providing information, especially with regard to desirable social characteristics (cf. Bowman and Hill, 2011). Systematic errors are difficult to detect if they are consistently distributed across a sample and easier to detect if the errors vary and can be attributed to specific causative factors. Research into error rates in self-reported data does not provide clear findings with regard to gender, but there is clear evidence that the accuracy of self-reported data increases with age (cf. Teye and Peaslee, 2015).

In the current work, there are several sources of error. The data from the BISNODE database may contain transmission errors introduced by the individual reporting bank (random errors). Systematic errors should be minimised here, because the reported and published data is reported not only to the Federal Gazette but also to the supervisory authority, the Deutsche Bundesbank. In the event of deviations, the Bundesbank instructs the reporting bank to correct the data promptly.

The data published on the website of each individual bank is listed on the privacy and contact information page. The privacy and contact information page must contain certain mandatory information. Here, too, it is likely that no systematic errors occur, but the possibility of random errors does exist.

In the case of self-reported data from the social media platforms XING and LinkedIn, there is the possibility of random and systematic errors, as there are virtually no controlling authorities. A further source of error is the author of the current work: since the data was recorded manually by the author, it may be that errors occurred in this process.

To avoid random and systematic errors, the following measures were taken: first, the primary data sources BISNODE, the privacy and contact information page on the banks' websites and CompanyHouse were prioritised, as the data was readily available. In addition, existing data from one source (BISNODE) was combined with data from other sources (Federal Gazette, CompanyHouse, websites) and supplemented where required. Finally, manually collected data on the qualities of the executive board members was compared across various sources wherever possible. In addition, the data on the executive board members' qualities was not collected from social media alone, but also via an email questionnaire containing nine questions (with reference to the manager qualities to be investigated).

This section explains how self-reported data was handled in the current work. One of the aims of the data collection was to gather self-reported information about the educational background of the individual board members. Therefore, it was necessary to consider how an appropriate classification of the respective educational qualifications could be ensured. This is discussed in the next section, starting with an overview of the classification of qualifications in an international context.

5.4.6 Classification of qualifications in an international context

Since education is a variable used in the current work, it is necessary to define what is meant by education in terms of the classification of qualifications held by executive board members. In the 1970s, UNESCO developed a tool for comparing and classifying international qualifications: the International Standard Classification of Education (ISCED) (cf. OECD, 2004; UNESCO Institute for Statistics, 2012).

The ISCED uses two variables – education sector and education level – to classify the content of education programmes. This allows for statistical analysis and comparison of educational programmes and qualifications around the world (UNESCO Institute for Statistics, 2012, p. 6).

The ISCED provides a comprehensive definition of an education programme and its purpose: “In ISCED, an education programme is defined as a coherent set or sequence of educational activities or communication designed and organized to achieve pre-determined learning objectives or accomplish a specific set of educational tasks over a sustained period...” (UNESCO Institute for Statistics, 2012, p. 7).

The core statements in this definition refer to educational activities, communication, and organised and sustained learning.

ISCED 2011 can be used to map education programmes, both formal and non-formal, to different stages of a person's life. The term *formal education* refers to education that is organised and institutionalised by public or private organisations. At the same time, it contributes to the education of the respective country. *Non-formal education*, on the other hand, is alternative or supplementary education that complements formal education (UNESCO Institute for Statistics, 2012, p. 11).

The ISCED uses parallel codification schemes to assign levels to education pathways (ISCED-P) and educational attainment (ISCED-A). Parallel codification schemes consisting of educational pathways (ISCED-P) and levels of attainment (ISCED-A) form the ISCED classifications (UNESCO Institute for Statistics, 2012, p. 21). Further information regarding coding schemes is provided within *Table 40* on page 324, *Table 41* on page 325 and *Table 42* on page 326.

The 25 individually classified fields of education (unchanged from ISCED-97) are organised in nine broad groups. Inter- or multi-disciplinary programmes are classified according to the majority proportion: the field in which the student spends most of his or her time (cf. UNESCO Institute for Statistics, 2012).

5.4.6.1 Classification of qualifications in Germany

In Germany, the Federal Ministry of Education and Research,⁷⁸ in cooperation with the Standing Conference of the Ministers of Education and Cultural Affairs⁷⁹ of the Federal Republic of Germany, has formulated a German Qualifications Framework for Lifelong Learning (GQF).⁸⁰ This qualifications framework is based on the ISCED-2011 classifications and is regarded as the German implementation of the European Qualifications Framework (EQF). The GQF aims to make the German education system more transparent and enable the comparison of qualifications in Germany with those of other countries (cf. Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017).

The EQF acts as a tool that makes it possible to compare national qualifications across Europe. Eight reference levels form the core of the EQF. They describe learning outcomes; that is, what learners know, what they understand and what they are able to do. Accordingly, the learning outcomes at each level are described under three headings: *knowledge*, *skills* and *responsibility and autonomy*. The EQF, which was adopted by the European institutions in 2008 and revised in 2017, is being implemented throughout Europe. To this end, the Member States are in the process of developing their own national qualifications frameworks. Their levels are assigned to the levels of the EQF. The EQF thus serves as a European framework that facilitates the comparison of the different national education systems in Europe (cf. Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017).

Like the EQF, the GQF is composed of eight levels. However, these are structured differently to those of the EQF: a larger number of categories is used to extend and concretise the EQF. For example, to adequately represent the desired learning outcomes in the German education system, the GQF identifies four pillars – *knowledge*, *skills*, *social competence* and *independence* – instead of the three pillars in the EQF. The levels of the GQF mirror the levels of the EQF. Thus, the German qualifications assigned to the GQF are simultaneously assigned to the corresponding EQF level

⁷⁸ In German, Bundesministerium für Bildung und Forschung.

⁷⁹ In German, Kultusministerium.

⁸⁰ In the original German text: “Der Deutsche Qualifikationsrahmen für lebenslanges Lernen”.

(Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017, pp. 3–4). Further details are provided in *Table 43 – Overview of assigned qualifications/qualification types in English and German* in Appendix 5 on page 334.

5.4.6.2 Using the classifications and levels for the purposes of this research

To test Hypothesis 5 (level of education), data on the education and (if available) university degrees of the respective board members was collected manually from social media platforms, press reports, websites and the research questionnaire.

Analogous to the ISCED-2011 and GQF classifications, dual vocational training (where one part of the training is spent in a company and the other is spent at vocational college) is classed as level 4⁸¹, degrees (bachelor's and master's degrees) are classed at levels 6 and 7, and postgraduate degrees are classed at level 8.

Level 4 (post-secondary non-tertiary education) contains a list of all nationally recognised apprenticeships (as of 1 August 2017) based on the GQF. This list was used to assign all training completed by board members to a certain level. For example, apprenticeship as a bank clerk (the most common training for board members participating in the current work) was assigned to level 4 (cf. Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017; *BIBB / Berufesuche - Informationen zu Aus- und Fortbildungsberufen*, 2020). Level 5 (short-cycle tertiary education)⁸² mainly includes technical qualifications (for technicians) and was regarded as less relevant for the purposes of the current work. Level 6 (bachelor's degree or equivalent)⁸³ includes the following qualifications: Bachelor of Arts (BA), Bachelor of Science (BSc), Bachelor of Engineering (BEng), Bachelor of Law (LLB), Bachelor of Fine Arts (BFA), Bachelor of Music (BMus), Bachelor of Education (BEd), Diploma (from a University of Applied Sciences), State Examination. Level 7 (Master's degree or equivalent)⁸⁴ includes the following qualifications: Master

⁸¹ Source: Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen (2017, pp. 12–33).

⁸² Source: Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen (2017, pp. 34–36).

⁸³ Source: Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen (2017, pp. 37–66).

⁸⁴ Source: Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen (2017, pp. 67–69).

of Arts (MA), Master of Science (MSc), Master of Engineering (MEng), Master of Law (LLM), Master of Fine Arts (MFA), Master of Music (MMus), Master of Education (MEd), Diploma (University), Magister, State Examination, Postgraduate master's (e.g. MBA).

Level 8 (doctoral degree or equivalent)⁸⁵ includes the following qualifications: Academic doctorate (Dr), Doctor of Philosophy (PhD).

This section has shown how the different qualifications can be classified and how they can be used for the purposes of the current work.

The next section looks at how the education and experience variable can be operationalised for the purposes of the current work.

5.4.7 The operationalisation of manager qualifications

For the purpose of the empirical analysis in Chapter 6, however, it is necessary to make the education and the experience of executive board members comparable and measurable, i.e. to operationalise them. The following sections develop classifications and rankings for the variables education and experience.

5.4.7.1 Approaches to developing a ranking for the education variable

To generate reliable and meaningful analysis values, it is necessary to rank the different qualification levels. The following sections approach the question of ranking from different perspectives. In order to develop a qualification ranking, the requirements to be fulfilled by such a ranking must be established to enable a constructive answer to be provided to the research question in the current work. On the one hand, the ranking should help differentiate individuals, i.e. the value or rank should indicate which person (or group of persons) is more qualified. Furthermore, the classifications should have a sound basis in the qualification landscape. In addition, the ranking must include the specific features of training and qualification in German cooperative banks.

⁸⁵ Source: Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen (2017, pp. 70–75).

A categorisation of qualifications, and thus the development of a ranking, could be carried out on the basis of existing schemes. The international ISCED classification and the German GQF classification are suitable for this (cf. UNESCO Institute for Statistics, 2012; Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017). Since this research specifically examines German cooperative banks and the board members who work in them, the ISCED classification is not regarded as suitable.

For the purposes of the current work, the GQF is considered more suitable as it reflects the qualifications of the German education system, even though it does not include the specific features of qualifications within German cooperative banks. In the GQF each training level is assigned a unique level. A ranking can be derived from the level. This means that a higher level of education is linked to a higher professional qualification. In particular, a higher or lower qualification can be associated with the requirements of the respective education level. This also applies to the amount of time that a certain qualification level requires as well as to the knowledge and skills that candidates are expected to acquire. On this basis, qualification levels that are, for example, at level 4 (banking training) have a lower ranking and value than qualification levels at, for example, level 7 for a Master's degree. A banking apprenticeship can clearly be assigned to education level 4, and a bachelor's or master's degree to education levels 6 and 7 respectively, on the basis of the GQF classification (cf. Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017). As already explained, one weakness of the German GQF is that it does not reflect the special features of qualifications in German cooperative banks. This concerns the additional management training (cf. Akademie Deutscher Genossenschaften ADG, 2020), something mentioned in the data collection by the surveyed executive board members in addition to the two other essential qualifications of a bank training and a degree. The GQF does not provide for classification of such training.

Additional management training completed at a non-state institution (cf. Akademie Deutscher Genossenschaften ADG, 2022) is not a state-recognised qualification. Such training cannot be assigned to any educational level of the GQF.

However, it is not possible to overlook such training for this reason. Firstly, persons who wish to become a board member of a (cooperative) bank in Germany must fulfil

the requirements of §25 c KWG. These prerequisites, or rather theoretical qualifications, can be met either through a corresponding bank-specific course of study or through the additional management training, for which a licence according to §25 c KWG is awarded. The latter is a prerequisite for a position on the executive board of a cooperative bank in Germany. The majority of board members obtain the §25c qualification through additional management training; this was confirmed by the survey findings. The requirements for this management training are much lower than for a bank-specific or business administration degree. As a rule, for the §25c qualification a bank apprenticeship and several years of practical work experience are required.

The qualification period is usually one year, spread over approximately 15 teaching weeks (cf. Akademie Deutscher Genossenschaften ADG, 2022). The theoretical knowledge imparted is intended to enable participants to manage a bank. Practical experience is another prerequisite for admission as an executive board member (cf. Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin, 2020a). Due to the short learning period, the learning content is delivered in a condensed form and tested at the end of the training by means of an examination (cf. Akademie Deutscher Genossenschaften ADG, 2022). This approach has several major disadvantages. On the one hand, knowledge is imparted that the participants have often already acquired in previous qualifications or one-day training courses that are offered throughout the year. Secondly, there is the danger that learning is concentrated primarily on the examination. Furthermore, participants in additional management training are not yet board members, which means there is a gap between the knowledge taught and its practical application. Often, there is a time gap of several years between a candidate completing management training and being appointed to the executive board.

Regarding the ranking of the additional management training, it makes sense to consider the training in the context of the 3-year bank clerk apprenticeship. This apprenticeship lays theoretical and practical foundations at the same time. This means that, over a period of 3 years, theoretical knowledge is taught in the context of school-based supervision (in Germany: vocational school) and practical knowledge is gained at the workplace (cf. IHK München, 2020). The vast majority of the time is spent directly at the workplace. Usually, trainees go through all areas of activity of a bank clerk.

It is possible to complete additional management training without a banking apprenticeship and thus obtain a licence in accordance with § 25 c KWG. However, this is rare, and often only occurs in very large banks. Given that German cooperative banks tend to be small in size (there are 844 cooperative banks in Germany at the end of 2018 (cf. BVR, 2021a) executive board members tend to be familiar with all bank activities and processes and are often involved in the day-to-day business themselves. This is usually only possible if the board member knows all the activities involved and has already performed them, usually in the context of a bank apprenticeship.

Furthermore, the data collection shows that board members with only one professional qualification, e.g. a university degree (without further education) or only a banking apprenticeship, are the exception. The majority of board members have two or even three professional qualifications.

Additional management training can be ranked as follows: although additional management training entitles board members to manage a bank in theory, board members must still have practical experience, which usually takes the form of several years of training. For the purpose of the current work and in the context of the prerequisites described above, additional management training is considered to have a lower rank compared to a banking apprenticeship.

On this basis, it is possible to propose the following ranking of qualifications in descending order: doctoral degree, university degree, bank apprenticeship, additional management training. Furthermore, the following classification by education category is applied:

Category 1: bank apprenticeship + degree + additional training + doctoral degree

Category 2: bank apprenticeship + degree + additional training

Category 3: bank apprenticeship + degree

Category 4: degree + additional training

Category 5: degree

Category 6: bank apprenticeship + additional training

Category 7: bank apprenticeship

For the purposes of the current work, the education categories are examined for their relationship to the 5-year Gross Profit Margin and the 10-year Gross Profit Margin.

5.4.7.2 Approaches to developing a ranking for the experience variable

First of all, it is necessary, to establish the prerequisites an experience ranking should fulfil in order for it to provide reliable values and help answer the research question of the current work. The value should clearly indicate which person has more experience than another. The value should also be based on objective, measurable data. Ideally, it will reflect specific features of German cooperative banking.

The following sections provide an overview of the individual components of the experience variable and examine them with regard to the above prerequisites.

5.4.7.2.1 Overview of components of professional experience

Total professional experience: This variable component represents the total number of years that a person has spent in professional employment. Professional experience can be gained in a wide variety of areas such as social services, business, industry, banking, etc. Bank board members will most likely have spent the majority of their professional activity in the banking sector, but it cannot be ruled out that they have several years of professional experience outside the financial sector. With regard to the requirements that an experience variable should fulfil, the total professional experience would be less suitable when distinguishing between several board members. For example, it would be difficult to assess whether having 20 years of professional experience, of which 10 years were gained in the social sector and 10 years in the banking sector, should be ranked higher or lower than 15 years of professional experience in the banking sector alone.

Professional experience in banks: This variable component indicates how many years of total professional experience a board member has in the banking industry. There are significant differences between the individual banking sectors. A board

member who has professional experience in the savings bank sector (with banks which are usually much larger than cooperative banks in terms of total assets) will have different experience, know-how and attitudes to a board member who has professional experience in the cooperative bank sector.

Another drawback of this variable component is that it does not express the role in which the person has worked in the banking industry. This means that is not clear whether someone has worked for 20 years in service or 20 years as a credit department manager, with there being a significant difference between the two. This could be a topic for future research. In order to simplify the variable component, no distinction is made as to the banking system and function in which the board member has gained the professional experience in banking. The variable indicates the total number of years an individual has spent in the banking industry. This variable provides a clear value, expressed in a number of years, that is easily comparable with the values of other board members and enables classification into a higher or lower professional experience.

Board member for n years: this variable component is intended to indicate how many years the respective person has already worked as a board member in a bank. No distinction is made as to the banking systems in which the board experience was gained, which represents a drawback of the variable. In the broader context, there is even the possibility that an individual could have gained board experience in a non-banking sector. Although this is rather unlikely, it cannot be ruled out. Despite these two disadvantages, it can be assumed that this component is highly valuable, especially in comparison to the first two components. If a person is a board member, it can be assumed that this individual has several years of professional experience, usually in the banking environment. Direct comparability with other board members is possible and the variable component is therefore well suited for the purposes of the current work.

Number of previous board positions: This indicates how many previous board positions the person has held. This includes the current position of executive board member of a cooperative bank. Board members who are currently on a board for the first

time enter the value “1”. It is, however, difficult to determine the relevance and significance of a higher number of board positions. On the one hand, a higher number of previous board positions may mean an individual has more professional experience and expertise because the individual has gained insight into several banks and can bring this knowledge and expertise to their new board role. On the other hand, a higher number of board positions can be an indicator of inconsistency and opportunistic behaviour. Furthermore, it may be that the experience and expertise gained only makes a contribution to the management of the bank after a significant delay, because it usually takes several years until new know-how can be implemented in a bank and corresponding positive effects become noticeable. Direct comparability on the basis of numbers is possible, but not particularly beneficial. Consequently, it would make sense to evaluate this variable separately.

5.4.7.2.2 Summary of categories and overall view

Another approach to build adequate categories is to group individual empirical values into categories and to examine them in a larger context.

It can be assumed that people who are already on an executive board have a higher experience value than people who work in the banking industry but below executive board level. It can be deduced from this that the number of years of experience on an executive board has more value than the number of years of professional experience in banks. At the same time, the number of years of professional experience in banks is important as a secondary evaluation characteristic when comparisons made between board members with the same number of years on a board. This would allow for a further gradation and ranking. In this respect, a combination of the two values of years of executive board member experience and years of professional experience in banks would make sense. In concrete application, this approach can be implemented as follows: An initial evaluation of the available data yields several concentrations in the data distribution. The first is the large number of board members who have been on an executive board for less than 10 years. The second concentration is the number of board members who have been on an executive board for more than 10 but less than 15 years and thirdly, those who have been on an executive board for more

than 15 years. Furthermore, two larger groups of professional experience in banks emerge: less than 30 years and more than 30 years.

The combination of both values, produces the following 6-level ranking in ascending order:

Category 1: Board member for <10 years and professional experience in banks <30 years

Category 2: Board member for <10 years and professional experience in banks > 30 years

Category 3: Board member for 11-15 years and professional experience in banks < 30 years

Category 4: Board member for 11-15 years and professional experience in banks > 30 years

Category 5: Board member for >15 years and professional experience in banks <30 years

Category 6: Board member for >15 years and professional experience in banks >30 years

The categories provide a clear expression of the level of professional experience a board member has. For example, a board member in category 1 has less professional experience than a board member in category 5.

The inclusion of the total amount of years of professional experience in banking or in general in this categorisation is not expected to be useful for the purposes of this thesis. It is unlikely to provide further insight, since the total amount of professional experience, as already explained above, does not reveal much about an individual in and of itself⁸⁶. Secondly, the number of data sets is too small for further categorisation to be beneficial. In this respect, the evaluation of the amount of total professional experience is not pursued further. The number of previous board positions should be analysed as a further indicator of professional board experience. However, for the reasons already explained, this should be done separately.

⁸⁶ However, in the regression analysis, the XP1 - Total professional experience component is also evaluated to show any correlations.

5.5 Data variables –dependent, independent and control variables

Table 3 summarises all the dependent, independent and control variables included in the current work. It also illustrates how the individual variables were operationalised and how the data was collected.

Indicator of a bank's success: dependent variable			
<i>Variable</i>	<i>Description</i>	<i>Calculation or measurement</i>	<i>Data source</i>
Gross Profit Margin	Operating result before valuation by the internal accounting function of the banks, mean value of the Gross Profit Margin for the last 5 years (first sample) and the last 10 years (second sample)*	Difference between the gross margin and the gross requirement margin: sum of all earnings (current earnings situation = gross margin), offset by the operating costs (personnel costs and material costs = gross requirement margin)	Annual financial statements, balance sheet and profit and loss account, BISNODE database
Factors influencing success: independent variables			
<i>Variable</i>	<i>Description</i>	<i>Calculation or measurement</i>	<i>Data source</i>
Age of the executive board member	Average age	Average age of all members of a bank's executive board in the last 5 years (first sample) and the last 10 years (second sample)*	Management report (German Commercial Register, Electronic Federal Gazette), LinkedIn or XING, BISNODE database, CompanyHouse, questionnaire
Gender of the executive board member	Used to identify female executive board members	Listing of first names	Management report (German Commercial Register, Electronic Federal Gazette), LinkedIn or XING, BISNODE database, CompanyHouse, questionnaire

Board size	Number of board members	Executive board size, number of executive board members	Management report (German Commercial Register, Electronic Federal Gazette), BISNODE database, CompanyHouse, questionnaire
Shared leadership	Executive board composition, if the management in a cooperative bank is divided among several executive board members, multiple CEOs	If the bank has more than one CEO**	Management report (German Commercial Register, Electronic Federal Gazette), website of the individual bank
Professional qualification	Education of the executive board member	Category 1: bank apprenticeship + degree + additional training + doctoral degree Category 2: bank apprenticeship + degree + additional training Category 3: bank apprenticeship + degree Category 4: degree + additional training Category 5: degree Category 6: bank apprenticeship + additional training Category 7: bank apprenticeship	LinkedIn, XING, questionnaire, Internet

Professional experience	Amount of years at executive board level and in the banking industry	Category 1: Board member for <10 years and professional experience in banks <30 years Category 2: Board member for <10 years and professional experience in banks > 30 years Category 3: Board member for 11-15 years and professional experience in banks < 30 years Category 4: Board member for 11-15 years and professional experience in banks > 30 years Category 5: Board member for >15 years and professional experience in banks <30 years Category 6: Board member for >15 years and professional experience in banks >30 years	LinkedIn or XING, questionnaire, Management report (German Commercial Register, Electronic Federal Gazette)
Control variables			
<i>Variable</i>	<i>Description</i>	<i>Calculation or measurement</i>	<i>Data source</i>
Unemployment rate	Average unemployment rate for the last 10 years	Data for the years 2009–2018, aggregated to a value (average of the last 10 years as a percentage) per region	Response to query through the online portal of the Federal Statistical Office

Insolvency rate	Average insolvency rate for the last 10 years	Data for the years 2009–2018, aggregated to a value (average of the last 10 years as a percentage) per region	Response to query through the online portal of the Federal Statistical Office
Gross value added	Average gross value added for the last 10 years	Data for the years 2009–2018, aggregated to a value (average of the last 10 years in euros) per region	Response to query through the online portal of the Federal Statistical Office

Table 3: All variables: dependent, independent and control

*Notes: *The data analysis is based on an overall sample of 5 years (sample 1) and a sub-sample of 10 years (sample 2). This is because data is not available for all banks over a period of 10 years and banks who have been involved in mergers or whose business has been discontinued are excluded.*

***Shared leadership exists when a bank has more than one CEO. Because no hypotheses specify the exact number of CEOs, but only distinguish between one CEO and several CEOs, the exact number of CEOs was not recorded.*

5.6 Research methods

5.6.1 Statistical approach

The statistical evaluation involved several stages. The first step was data collection. This data included statistics on German cooperative banks and information provided about key figures. Subsequently, the numerical values from the individual hypotheses were regressed on the Gross Profit Margin as an influencing factor on bank performance.

In the current work, both absolute and relative ratios were used. The absolute ratios provide information about the size of an entity; they include individual values, differences, sums and mean values. Relative ratios are formed from two absolute numbers (a quotient). In addition, there are relationship numbers, measurement numbers and ordinal numbers. The ROI (return on investment) ratio is used to evaluate data and summarise ratios. In the ROI, the ROE after tax is calculated. This is a key figure

tree. This combines several components and provides the basis for calculating the ROE (cf. Heesen, 2018).

The data obtained was then processed using IBM SPSS 25 Statistics software and Microsoft Excel. It was therefore important to collect the primary and secondary data in a suitable standardised format.

For Hypothesis 1, which assumes a negative correlation between a bank having more than two board members and its performance, the number of board members was surveyed. A dummy variable was used to indicate whether each board consisted of more than two members (yes/no).

Hypothesis 2, which assumes a positive relationship between a board having two CEOs with equal authority (dual leadership) and performance, asks whether each bank has one CEO or more than one. A dummy variable was used to provide information on whether each bank has more than one CEO (yes/no).

For the purposes of Hypothesis 3, which assumes a negative relationship between the average age of board members and bank performance, the ages of all board members were gathered and the average was calculated.

Board members were classified as male or female on the basis of the board members' first names. A dummy variable was then used to indicate whether a board member was female (yes/no). The data obtained was used to test Hypothesis 4, which assumes a positive relationship between the proportion of female board members and bank performance.

Hypothesis 5 examines the relationship between the highest level of education held by a board member (as measured by the seven education categories) and the average Gross Profit Margin for the last 5 years for sample 1 and the average Gross Profit Margin for the last 10 years for sample 2.

Hypothesis 6 assumes a positive relationship between different types of professional experience of board members and bank performance. In each case, the variable experience was recorded for the board member with the highest level of experience (as measured by the six experience categories). Due to its complexity, as already explained in *Section 5.4.7.2* on page 145), the experience variable was broken down into the following individual components: XP1 – the number of years for which the

board member has worked (total professional experience); XP2 – the number of years for which the board member has worked in banks (professional experience in banks); XP3 – the number of years which the board member has spent in their current position (professional experience as a board member); and XP4 – the number of previous board positions the board member has held. The respective values were included in the analysis as individual variables.

Multiple regression is a suitable statistical analysis method for the current work. This is because the current work investigates influence of several independent variables (board size, dual leadership, age, gender, education and experience) as well as the control variables (unemployment rate, insolvency rate and gross value added) on a single dependent variable (Gross Profit Margin).

Since the information on the variables used is either already available in metric form (e.g. age = n years; managerial experience = n years) or can be converted from categorical form (e.g. education yes/no) into metric values with the help of coding (e.g. no = 0, yes = 1), according to Eid *et al.* (2017), there are sufficient proven statistical procedures to measure the correlations between the variables. In addition to multiple regression analysis, Eid *et al.* (2017, p. 31) proposes hierarchical linear models and linear structural equation models. The use of a hierarchical linear model is not appropriate for the current work because hierarchical linear models analyse data with a varying hierarchical structure, which is not the case with the data available. Similarly, the linear structural equation model is not appropriate because a structural equation model calculates regressions (dependencies) between multiple dependent and multiple independent variables, which is also not the case in the current work.

Multiple regression is a standard method used when working with multivariate statistics⁸⁷. It assumes a linear relationship between a dependent variable to be investigated (criterion) and two or more independent explanatory variables (predictors⁸⁸), which is the case in this thesis.

The aim of regression analysis is to calculate the level of influence of each predictor (independent variable) on the criterion (dependent variable) and thus to enable a prediction of the dependent variable on the basis of the independent variables. Mathematically, this is expressed by a so-called regression equation (cf. Eid *et al.*, 2017), which is provided below. Furthermore, the regression equations, along with the calculated regression coefficients and the regression constant are presented in the evaluation results (in the next chapter). With the help of the equation, predictions can be applied to new data, for example, to establish how the Gross Profit Margin changes when a new board member is hired after all relevant predictors have been collected.

In an initial analysis, a multiple linear regression was performed by using the independent variables from Hypotheses 1–4⁸⁹ to explain the dependent variables 5-year Gross Profit Margin and 10-year Gross Profit Margin. Furthermore, the control variables unemployment rate, gross value added and insolvency rate were included in the linear regression.

⁸⁷ With the help of multivariate procedures (also: multivariate analysis methods), several statistical variables can be examined simultaneously in multivariate statistics in order to establish correlative or causative relationships between the variables. Multivariate methods aim to reduce the number of variables and/or observations contained in a data set without significantly limiting the information contained therein. For this purpose, the correlation, or structure, of the data is analysed. The classical methods are linear models, which place special demands on the data used. For example, the data should be free of outliers and not asymmetrically distributed. If the data deviates from the required structure, one can, for example, remove existing outliers or subject the data to a non-linear transformation, such as logarithmisation. As a further prerequisite for the calculation of a multiple linear regression, the dependent variable must be at least interval-scaled. In addition, the (at least two) independent variables must be either nominally scaled (categorical) or at least interval-scaled (cf. Eid *et al.*, 2017).

⁸⁸ Predictors are variables that can be used to predict another variable (the criterion). Multiple regression can be used to find the best predictors for a criterion (cf. Eid *et al.*, 2017).

⁸⁹ The variables from hypotheses 3–6 (age, gender, education and experience) were assigned to the category “manager qualities”. The variables from hypotheses 1 and 2 (board size and dual leadership) were assigned to the category “board characteristics”.

In the regression analysis, the hypothesis variables were not ordered by group but by the number of data sets available. The most data sets were available for hypotheses 1–4.

The following regression equation is derived from this⁹⁰:

$$\hat{y} = b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + a$$

It was recognised that if the sample numbers for the variables from Hypotheses 5 and 6 were too low, a linear regression would not be beneficial. In this case, the metric variables would be described using descriptive methods via the median and the mean. Furthermore, to compare the distribution of a metric variable of independent groups, the Shapiro–Wilk test was used to check whether the data was normally distributed (cf. Shapiro and Wilk, 1965).

If the normal distribution is rejected, the Kruskal–Wallis test is usually used in the next step for a category comparison. The Kruskal–Wallis test is recommended because there are more than two groups/categories (cf. Blanca *et al.*, 2017). If the normal distribution assumption is not rejected, the F-test is usually recommended for further analysis (cf. Blanca *et al.*, 2017). The F-test is used when there are more than two groups or categories.

In a second multiple linear regression, the variables from Hypothesis 5 (education) and Hypothesis 6 (experience) were examined to analyse the 5-year Gross Profit Margin and 10-year Gross Profit Margin.

In the first multiple linear regression, XP4 (number of previous board positions) was compared with the 5-year Gross Profit Margin and the 10-year Gross Profit Margin. To quantify the relationship between the 5-year Gross Profit Margin and the 10-year Gross Profit Margin and XP1 (total professional experience in the banking industry), the Pearson correlation coefficient was calculated.

It was recognised that no reliable or robust conclusions could be drawn for Hypotheses 5 and 6 with a small number of data sets. The fewer data sets there are available, the greater the risk that individual data sets will have an excessive influence on the parameter estimates and/or the assessment of the model. This would create uncertainty about the interpretability of the results (cf. Baltes-Götz, 2019). Therefore, it was decided that if such a situation were to arise, the regression analysis for Hypotheses 1–4 would be carried out again, but would be supplemented by a larger number

⁹⁰ $\hat{y}$ = Gross Profit Margin (5 – year or 10 – year); b_1 = Regression weight of the first predictor (female board members); x_1 = Measured value of the first predictor (female board members); b_2 ... (number of board members); b_3 = ... (more than one CEO); b_4 = ... (unemployment rate); b_5 = ... (insolvency rate); b_6 = ... (gross value added); b_7 = ... (average age); a = regression constant

of data sets from Hypotheses 5 and 6. For this purpose, the variables from Hypothesis 5 (education) and Hypothesis 6 (experience) would be included in the regression model as further explanatory variables. The evaluation would also include banks for which the data of at least one board member was available in full. Although this would not rule out all inaccuracies, the data available would be regarded as the minimum level for the respective bank; that is, the level of education or professional experience cannot be any lower than that expressed in the data. In this respect, the insights gained were considered relevant.

To ensure that the evaluation delivered results that were as meaningful and as reliable as possible, the regression model was limited to the variables that were identified in the first regression model as significant or slightly more than significant.

The following regression equation is derived from this⁹¹:

$$\hat{y} = b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + a$$

The next section explains the statistical approach used to analyse the collected data in order to produce reliable, comprehensible and meaningful results that help answer the research questions.

5.6.2 Calculating the Gross Profit Margin and specifying the data-selection criteria

The future earnings potential of a credit institution, also referred to as its *future viability*, can be expressed on the basis of its earnings situation. The profit and loss account in the annual financial statements provided the necessary data for this purpose. Using the average balance sheet total, the following relative ratios are calculated to assess the earnings situation.

The earnings power, which summarises all income, is compared with the operating costs, which, for cooperative banks, mainly consist of personnel and administrative costs. Administrative or operating costs are represented by the gross margin. The gross margin and gross requirement margin are used to calculate the Gross Profit

⁹¹ $\hat{y}$ = Gross Profit Margin (5 – year or 10 – year); b_1 = Regression weight of the first predictor (number of board members); x_1 = Measured value of the first predictor (number of board members); b_2 ... (unemployment rate); b_3 = ... (average age); b_4 = ... (education category); b_5 = ... (experience category); b_6 = ... (previous positions as a board member); a = regression constant

Margin. The Gross Profit Margin is the difference between the gross earning margin and the gross requirement margin (Hölscher *et al.*, 2016, p. 186).

The Gross Profit Margin compares income and costs. Income includes interest income from lending and money market transactions in the profit and loss account; interest income from fixed-income securities and debt register claims; and current income from shares and other variable-yield securities, including participating interests and business balances with cooperatives, shares in affiliated enterprises, income from profit pools, profit transfer or partial profit transfer agreements, commission income, net income/expense from trading portfolios and other operating income. Costs, on the other hand, include profit and loss account items comprised of interest expenses; commission expenses; personnel expenses; other administrative expenses; depreciation and value adjustments on intangible assets and property, plant and equipment; and other operating expenses (Maurer, 2016, p. 72).

After calculating the difference between costs and income, the gross profit is set in relation to the average balance sheet total of the cooperative bank. The result is expressed as a percentage value (Maurer, 2016, p. 73).

Table 44, Table 45 and Table 46 in Appendix 5 (on page 338) show a balance sheet and profit and loss account providing basic financial information. For better understanding and traceability, the function of the profit and loss account is explained in general terms in *Appendix 5 - Calculating the Gross Profit Margin and specifying the data-selection criteria* on page 336.

5.6.2.1 Excel formulas for calculating the gross profit and average balance sheet total

Calculating the gross profit

The gross profit was calculated by using the following formula in the Excel spreadsheet:

$$\text{Gross profit} = (\text{GX} + \text{GZ} + \text{HA} + \text{HY} + \text{IA} + \text{HX} + \text{HC} + \text{IN} + \text{IP} + \text{ID}) - (\text{HG} + \text{HH} + \text{HN} + \text{HR} + \text{HS} + \text{IE})$$

Calculating the average balance sheet total

The Gross Profit Margin represents a percentage value. In order for this value to be calculated correctly, the average balance sheet total must first be determined.

For the actual sample selection, the years 2009–2018 (10 years) and 2014–2018 (5 years) were generally sufficient. However, the 5-year and 10-year sample selections were added along with the balance sheet total for the previous year (if available) for the calculation of the balance sheet total. These additional years (2009 and 2013) serve only to determine the average balance sheet total more precisely. When data for a period of exactly 5 years or 10 years was available, the balance sheet total of the first available year was used twice.

Therefore, the average balance sheet totals were calculated by using the following Excel formulas.

Average balance sheet total for the 10-year sample:

Year 2009 = (Balance sheet total 2008 + Balance sheet total 2009) / 2 >> if 2008 is available*

Year 2010 = (Balance sheet total 2009 + Balance sheet total 2010) / 2

Year 2011 = (Balance sheet total 2010 + Balance sheet total 2011) / 2

Year 2012 = (Balance sheet total 2011 + Balance sheet total 2012) / 2

Year 2013 = (Balance sheet total 2012 + Balance sheet total 2013) / 2

Year 2014 = (Balance sheet total 2013 + Balance sheet total 2014) / 2

Year 2015 = (Balance sheet total 2014 + Balance sheet total 2015) / 2

Year 2016 = (Balance sheet total 2015 + Balance sheet total 2016) / 2

Year 2017 = (Balance sheet total 2016 + Balance sheet total 2017) / 2

Year 2018 = (Balance sheet total 2017 + Balance sheet total 2018) / 2

*if 2008 is not available:

Year 2009 = (Balance sheet total 2009 + Balance sheet total 2009) / 2

...

Year 2018 = (Balance sheet total 2017 + Balance sheet total 2018) / 2

The average balance sheet total (5-year sample) was calculated using the following Excel formula.

Average balance sheet total for the 5-year sample:

Year 2014 = (Balance sheet total 2013 + Balance sheet total 2014) / 2 >> if 2013 is available*

Year 2015 = (Balance sheet total 2014 + Balance sheet total 2015) / 2

Year 2016 = (Balance sheet total 2015 + Balance sheet total 2016) / 2

Year 2017 = (Balance sheet total 2016 + Balance sheet total 2017) / 2

Year 2018 = (Balance sheet total 2017 + Balance sheet total 2018) / 2

*if 2013 is not available:

Year 2014 = (Balance sheet total 2014 + Balance sheet total 2014) / 2

...

Year 2018 = (Balance sheet total 2017 + Balance sheet total 2018) / 2

5.6.2.2 Checking data consistency

In order to check the consistency of the data (the conformity of the BISNODE data with the Federal Gazette data), samples from the BISNODE database were compared with data from the Federal Gazette. Two methods of comparison were used: (1) a complete evaluation over 10 balance sheet years for five randomly selected banks (Raiffeisenbank Mutlangen, Raiffeisenbank Pfaffenwinkel, Raiffeisenbank Sinzing, Sparda-Bank Nürnberg, Vereinigte Raiffeisenbank Burgstädt); (2) 10 randomly selected individual balance sheet years⁹² (Raiffeisenbank Hofkirchen-Bayerbach 2013, Volksbank im Ostmünsterland 2018, Raiffeisenbank Ried 2008, Raiffeisenbank Vordersteinenberg 2014, Volksbank Feldatal 2008, Volksbank Haltern 2011, Volksbank Hameln-Stadthagen 2010, Volksbank Immenstadt 2017, Volksbank Lastrup 2009, Volksbank Remseck 2012). The evaluation of the samples is shown in *Table 47* in Appendix 5 (page 354).

Accuracy of the results

To increase accuracy, the Gross Profit Margin was calculated and displayed to eight decimal places.

⁹² The consistency of the data was compared for individual items in the balance sheet and profit and loss account taken from the BISNODE data source and from the Federal Gazette data source.

Calculating the Gross Profit Margin for each individual bank year

The next step was to calculate the Gross Profit Margin for each bank for each individual year, using the following Excel formula:

$$\begin{aligned} \text{Gross Profit Margin} \\ &= (\text{Gross profit from ordinary business activity}) \\ &\quad / (\text{Average balance sheet total}) \end{aligned}$$

In the final analysis, an average value was calculated for each bank over either 10 years or 5 years. The average values were then incorporated into the evaluation.

5.6.3 Qualitative content analysis

Since quantitative data alone is not sufficient for the purposes of this thesis, qualitative data was also collected. Qualitative content analysis was used to evaluate the feedback in the final question in the survey, which was an open question: “Is there anything else that you would like to add in terms of qualities and characteristics that you think are likely to impact the success of a cooperative bank?”. According to Mayring and Brunner (2009), qualitative content analysis can be used to establish a link to quantitative analysis, which is the main instrument used in the current work. The development and application of categories is often qualitatively oriented, but a further analysis regarding frequency, differences and correlations is carried out quantitatively.

Mayring and Brunner (2009, p. 673) define qualitative content analysis as follows: “It represents a method of evaluating fixed communication (e.g. texts), proceeds systematically, is rule- and theory-based by means of a set of categories, and measures itself against quality criteria. The qualitative element consists in the development of categories and the content-analytical systematisation of assigning categories to text components – steps that are usually ignored in quantitative content analysis”.

A distinction is usually made between material found in the literature and material produced by the current work. The answer to the open question in the survey is classed as material produced by the current work. According to Hüttner and Schwarting (1999) and Harwood and Garry (2003), qualitative content analysis is the appro-

priate means of evaluating open answers in questionnaires. The techniques of qualitative text content analysis are summarising (reducing), explaining (explicating) and structuring.

According to Mayring and Brunner (2009), quality criteria are essential in qualitative content analysis. These include objectivity, reliability and validity. For objectivity, it is necessary that at least two evaluators check their codes for conformity. For the sake of reliability, texts should be examined several times and the results should be compared. For validity, it is necessary to develop a theory-based category system.

Doppler and Steffen (2019) suggest that data quality should first be improved by processing the data to make the information more usable. In concrete terms, the following approach, which could easily be transferred to the current work, is recommended: copy the raw data, sort the data (e.g. by survey date), summarise all the data in a table, assign the data to the respective bank, and conduct qualitative content analysis according to Mayring (2010). The first step here is creating paraphrases from the data. This starts by identifying passages of text which contain useful information and deleting those which do not. The individual paraphrases are transformed into terms that generalise the content; this is called coding. To create codes, questions should be asked of the text; for example, “What is addressed here?”, “What is relevant to the research question?”, etc. (cf. Strübing *et al.*, 2018). After this, paraphrases that duplicate others or that are not relevant are identified and deleted. The remaining paraphrases and associated codes are bundled together in a tabular evaluation and summarised into new, higher-level paraphrases that reflect the main content of all responses. This records the central statements. The last step is to indicate the absolute and relative frequency of entries (cf. Doppler and Steffen, 2019).

The qualitative evaluation of the answers to the open question was conducted on this basis. *Table 48* in Appendix 5 on page 367 shows the original responses to the survey question, and *Table 50* on page 388 shows the volume of responses received. Most of the answers contain only keywords, not full sentences or explanations. The statements were initially numbered and assigned to the respective banks. Furthermore, the original answers were retained in German before further processing.

Based on the procedure described above, reductions and coding (i.e. assignments to certain generic terms) were performed during further processing. In this context, a generic term was a paraphrase under which similar keywords were grouped. *Table*

49 on page 388 shows that the answers were first paraphrased as far as possible and necessary. In the next step, they were reduced and assigned to a generic term.

It was not possible to assign certain keywords to only one generic term without creating ambiguity, so these keywords were assigned to multiple generic terms.

Table 51 on page 397 shows the main points mentioned under the respective generic terms. In some cases, the same key points were mentioned several times.

5.7 Summary

This chapter introduced the different research philosophies that were considered for the purposes of the current research. A detailed discussion of the “hard” and “soft” research dichotomies was presented, and this served as a basis for the selection of research design and methodology. A quantitative empirical analysis based on primary and secondary data was adopted for the current work. This was supplemented by a survey of all executive board members in German cooperative banks, which was evaluated not only quantitatively but also qualitatively. Explanations were provided for the ethical foundations and principles observed in this thesis.

This was followed by a discussion and justification of the scope of the data used in this research. The chapter went on to explain how the relevant primary and secondary data was collected and which sources were used. Furthermore, descriptions were given of how the collected data was processed to ensure the data provided a secure and reliable basis for the statistical evaluations reported in the next chapter.

A comparison of the European and German education systems was made for the purpose of classifying the education levels in Germany. This was followed by a discussion on how to operationalise the education and experience variables. For this purpose, the variables education and experience were divided into several categories.

In the further course of the chapter, the variables used were introduced and justified. Information was provided on the dependent variables (the 5-year Gross Profit Margin and the 10-year Gross Profit Margin) and the independent variables (age, gender, executive board size, executive board composition and dual leadership, in addition to education and experience). In addition, control variables in the form of unemployment rate, insolvency rate and gross value added were taken into account.

The statistical calculation methods and tests used for the individual hypotheses were then explained in detail. The chapter concluded by discussing the collection of the quantitative data and the data obtained from the survey of individual board members.

Chapter 6: Results

6.1 Introduction

This chapter presents an empirical examination of the developed hypotheses set out in the previous chapters. The results of various statistical analyses conducted for this purpose are presented in tables, described and then interpreted.

6.2 Statistical methodology

In a regression model, the influence of the variables on the 5-year Gross Profit Margin and the 10-year Gross Profit Margin were investigated simultaneously using a multiple linear regression. The following quantities were used to describe the metric variables: number, mean, median, minimum and maximum.

6.3 Multiple linear regression analysis with the variables from Hypotheses 1–4

In the first analysis, the variables from Hypotheses 1–4⁹³ were examined in relation to the 5-year Gross Profit Margin and 10-year Gross Profit Margin.

The data sets contained the following information: female members on the board (yes/no), number of board members, boards with more than one CEO, unemployment rate, insolvency rate, gross value added, 5-year Gross Profit Margin, 10-year Gross Profit Margin and average age. For processing in IBM SPSS 25, the variables gender, board size and board composition (boards composed of more than one CEO) were each divided into yes/no categories and assigned the values 0 or 1.

The data is shown in *Table 4* below:

⁹³The variables from hypotheses 3-6 (age, gender, education and experience) were assigned to the category “manager qualities”. The variables from hypotheses 1 and 2 (board size and dual leadership) were assigned to the category “board characteristics”. In the regression analysis, the hypothesis variables were not ordered by group but by the number of data sets available. The most data sets were available for hypotheses 1–4.

Variable	Valid N	Mean	Median	Minimum	Maximum
5-year Gross Profit Margin	672	.934	.912	.168	2.468
10-year Gross Profit Margin	608	1.009	.984	.011	2.451
Unemployment rate ⁹⁴	788	.049	.041	.015	.151
Insolvency rate ⁹⁵	777	.034	.030	.011	.119
Gross value added	780	34,745	31,250	15,749	127,285
Average age	423	53	53	40	64
Female board member = No	731				
Female board member = Yes	71				
Number of board members = 2	606				
Number of board members > 2	196				
More than one CEO = No	415				
More than one CEO = Yes	387				

Table 4: Descriptive statistics for dependent variables 5-year and 10-year Gross Profit Margin, independent variables number of board members, more than one CEO, average age, female board members (from Hypotheses 1–4) and control variables unemployment rate, insolvency rate and gross value added

The unemployment rate ranges from a minimum of 1.49% to a maximum of 15.06%, which means that the data encompasses regions with almost full employment and regions where every seventh person of working age is unemployed. The median is 4.10%. The insolvency rate ranges from a minimum of 1.05% to a maximum of 11.85%, which means that there are regions with relatively few business failures and, at the other extreme, regions where 1 in 10 businesses fail. The median is 3.02%. The gross value added ranges from 15,749 euros to 127,285 euros, which is reflected in the purchasing power of the population. The median is 31,250 euros. For the 5-year Gross Profit Margin the minimum is .168 and the maximum is 2.468, and for the 10-year Gross Profit Margin the minimum is .011 and the maximum is 2.451.

⁹⁴ Note: the values reported are in decimal notation, but are presented as percentages in the descriptive statements. This is because in statistical publications the unemployment rate is usually given in per cent. The minimum and maximum values are rounded.

⁹⁵ Note: the values reported are in decimal notation, but are presented as percentages in the descriptive statements. This is because in statistical publications the insolvency rate is usually given in per cent. The median, minimum and maximum values are rounded.

This means that at one end of the scale there are banks that barely show a profit, in either the medium term or the long term; at the other end of the scale, there are very successful banks that perform well in the medium term and the long term.

The median values for the 5-year Gross Profit Margin and the 10-year Gross Profit Margin are .912 and .984, respectively. This shows that the banks surveyed perform slightly better over the long term than over 5 years. The average age of the board members ranges from 40 to 64 years, which indicates that board members of cooperative banks are usually appointed to these positions in their later years. The median age is 53 years. Out of 802 banks, 606 have two executive board members and 196 have more than two board members. Of the 196 banks with more than two board members, 123 have three, 62 have four and 14 have five to eight board members (see *Table 38: Completion of collected data for hypotheses 1–3* on page 320). More than half (415) of the 802 banks are managed by an executive board with a chair or CEO. There is no CEO at the other 387 banks, meaning that in these banks there are at least two board members on an equal hierarchical level (dual leadership).

To explain the dependent variable 5-year Gross Profit Margin by the independent variables (which relate to the number of CEOs, board members, female board members, and average age, in addition to the control variables unemployment rate, gross value added and insolvency rate), a multiple linear regression was performed. The results are presented in *Table 5* below:

Variable	Regression coefficient B	Wald-Chi- Square	Sig.
Female board members	.003	.006	.941
Number of board members	-.077	3.809	.051*
More than one CEO	-.020	.488	.485
Unemployment rate	-.015	3.641	.056*
Insolvency rate	-.033	.057	.811
Gross value added ⁹⁶	-.026	.303	.582
Average age ⁹⁶	-.360	5.326	.021**
AIC ⁹⁷ = 77.008			
Regression constant	2.744		
N = 396			

Table 5: Regression analysis for 5-year Gross Profit Margin with the control variables unemployment rate, insolvency rate, gross value added and independent variables from Hypotheses 1–4 (number of board members, more than one CEO, average age, female board members)

Notes: *Significance at the 10% level; **Significance at the 5% level; ***Significance at the 1% level.

Multicollinearity was checked for the regression analysis. The VIF value of < 10.00 was confirmed on the basis of the collinearity statistics. Thus, no multicollinearity was found between the predictors. For the VIF values, see *Table 52: VIF values from the multicollinearity tests for regression analysis for 5-year Gross Profit Margin with the control variables unemployment rate, insolvency rate, gross value added and independent variables from Hypotheses 1–4 (number of board members, more than one CEO, average age, female board members)* on page 430.

Regression equation for 5-year Gross Profit Margin = .003 x Female board members - .077 x Number of board members - .020 x More than one CEO - .015 x Unemployment rate - .033 x Insolvency rate - .026 x Gross value added - .360 x Average age + 2.744

The correlations between the 5-year Gross Profit Margin and the variable average age ($p = .021$) is identified as statistically significant. Due to the use of the natural logarithm of the age variable, no statement can be made about the exact effects. However, this result indicates that a higher average executive board age could have a negative impact⁹⁸ on the 5-year Gross Profit Margin. The number of board members, while not statistically significant at the 5% level, is significant at the 10% level

⁹⁶ For this variable, the natural logarithm was used in the regression analysis.

⁹⁷ AIC = Akaike information criterion

⁹⁸ Note: although statistically significant, this does not necessarily imply practical significance or impact. Therefore, the explanations and interpretations refer exclusively to the respective mathematical result, which was calculated on the basis of the regression analysis.

with $p = .051$. Furthermore, the variable unemployment rate with $p = .056$ is significant at the 10% level. This means that for every extra member of the executive board, the 5-year Gross Profit Margin deteriorates by an estimated .077. At the same time, the 5-year Gross Profit Margin decreases by an estimated .015 with each percentage point increase in the local level of unemployment.

For the multiple linear regression analysis concerning the 10-year Gross Profit Margin, 356 complete data sets were available. The results of the analysis are presented in *Table 6* below.

Variable	Regression coefficient B	Wald-Chi-Square	Sig.
Female board members	.028	.423	.516
Number of board members	-.106	5.640	.018**
More than one CEO	-.020	.407	.523
Unemployment rate	-.023	8.540	.003***
Insolvency rate	.012	.659	.417
Gross value added	-.051	1.111	.292
Average age	-.309	3.580	.058*
AIC = 68.068			
Regression constant	2.860		
N = 356			

Table 6: Regression analysis for 10-year Gross Profit Margin with the control variables unemployment rate, insolvency rate, gross value added and independent variables from Hypotheses 1–4 (number of board members, more than one CEO, average age, female board members)

*Notes: *Significance at the 10% level; **Significance at the 5% level; ***Significance at the 1% level.*

Multicollinearity was checked for the regression analysis. The VIF-value < 10.00 was confirmed on the basis of the collinearity statistics. Thus, no multicollinearity was found between the predictors. For the VIF-values, see *Table 53: VIF values from the multicollinearity tests for regression analysis for 10-year Gross Profit Margin with the control variables unemployment rate, insolvency rate, gross value added and independent variables from Hypotheses 1–4 (number of board members, more than one CEO, average age, female board members)* on page 430.

Regression equation for 10-year Gross Profit Margin = $.028 \times \text{Female board members} - .106 \times \text{Number of board members} - .020 \times \text{More than one CEO} - .023 \times \text{Unemployment rate} + .012 \times \text{Insolvency rate} - .051 \times \text{Gross value added} - .309 \times \text{Average age} + 2.860$

The correlations between the 10-year Gross Profit Margin and the variables number of board members and unemployment rate are identified as statistically significant (number of board members at the 5% level, unemployment at the 1% level), with the average age being statistically significant at the 10% level, with $p = .058$. The unemployment rate is significant, with $p = .003$. This means with every percentage point increase in the unemployment rate (over 10 years), the Gross Profit Margin decreases by an estimated .023 (over the same period). With $p = .018$, the correlation of the variable number of board members is also significant. As a result, for a bank with more than two members on its executive board, the Gross Profit Margin deteriorates by an estimated .106. With $p = .058$, the correlation of the variable average age is within the 10% level of the significance value. Due to the use of the natural logarithm of the age variable, no statement can be made about the exact effects. However, this result indicates that a higher average age of the board members could have a negative impact⁹⁹ on the 10-year Gross Profit Margin.

6.4 Small-scale bivariate and descriptive analysis with the variables from Hypotheses 5 and 6

To further explain the variables 5-year Gross Profit Margin and 10-year Gross Profit Margin, the variables from Hypothesis 5 (education) and Hypothesis 6 (experience) were examined. However, due to the low number of complete data sets, the data was examined using bivariate methods only, and the results are mainly explained descriptively.

Hypothesis 5 examines the potential influence of a board member's education on the performance of cooperative banks. The banks' performance is measured in terms of the dependent variables 5-year Gross Profit Margin and 10-year Gross Profit Margin. The independent variable education is expressed in terms of the following individual categories in descending order of rank¹⁰⁰:

⁹⁹ Note: although statistically significant, this does not necessarily imply practical significance or impact. Therefore, the explanations and interpretations refer exclusively to the respective mathematical result, which was calculated on the basis of the regression analysis.

¹⁰⁰ For further explanations regarding the formation of the categories and their ranking, see *Section 5.4.7.1* on page 142.

Category 1: bank apprenticeship + degree + additional training + doctoral degree

Category 2: bank apprenticeship + degree + additional training

Category 3: bank apprenticeship + degree

Category 4: degree + additional training

Category 5: degree

Category 6: bank apprenticeship + additional training

Category 7: bank apprenticeship

The existing data concerns 65 banks for which full data on the education and training of the board members was available. The information provided by the board member with the highest level of education was used for the analysis. The reasons for this approach are described in detail in *Section 4.3.4 - Education and bank performance* on page 107.

In *Table 7* and *Table 8*, the number, mean value, median, minimum and maximum are used to describe the metric variables from Hypothesis 5 for the education categories over the two periods studied.

Category	Valid N	Mean	Median	Mini- mum	Maxi- mum
1 – bank apprenticeship, degree, additional training, doctoral degree	4	.916	.968	.635	1.095
2 – bank apprenticeship, degree, additional training	21	1.029	.985	.681	1.524
3 – bank apprenticeship, degree	11	.926	.835	.717	1.331
4 – degree, additional training	3	.897	.705	.623	1.362
5 – degree	5	.676	.636	.168	1.082
6 – bank apprenticeship, additional training	21	.993	.949	.517	1.883

Table 7: 5-year Gross Profit Margin– Description of the metric variables from Hypothesis 5 for education categories 1–7

Category	Valid N	Mean	Median	Mini- mum	Maxi- mum
1 – bank apprenticeship, degree, additional training, doctoral degree	3	.913	1.052	.586	1.101
2 – bank apprenticeship, degree, additional training	17	1.067	1.026	.753	1.440
3 – bank apprenticeship, degree	10	.947	.956	.657	1.190
4 – degree, additional training	3	.928	.719	.646	1.419
5 – degree	5	.683	.687	.118	1.127
6 – bank apprenticeship, additional training	19	1.008	1.048	.514	1.433

Table 8: 10-year Gross Profit Margin– Description of the metric variables from Hypothesis 5 for education categories 1–7

The seven pre-defined education categories are represented in different proportions in the data set. Category 6 occurs the most frequently, followed by Category 2. Categories 1, 4 and 5 occur the least frequently, while Category 7 does not occur.

To compare the location of the distribution of a metric variable of independent groups, the Shapiro–Wilk test was used to establish whether the data was normally distributed (Shapiro and Wilk, 1965).

Education category	Sig.
1 – bank apprenticeship, degree, additional training, doctoral degree	.417
2 – bank apprenticeship, degree, additional training	.118
3 – bank apprenticeship, degree	.149
4 – degree, additional training	.195
5 – degree	.708
6 – bank apprenticeship, additional training	.048

Table 9: Shapiro–Wilk test of normal distribution for education categories 1-7 for 5-year Gross Profit Margin

The normal distribution assumption for the 5-year Gross Profit Margin was rejected for Category 6 ($p < .05$). If the normal distribution is rejected, the Kruskal–Wallis test is usually the next step for a category comparison. The Kruskal–Wallis test is recommended when there are more than two groups or categories (cf. Blanca *et al.*, 2017).

Null Hypothesis	Test	Sig.	Decision
The distribution of 5-year Gross Profit Margin is the same across categories of education categories 1-7	Independent samples Kruskal-Wallis Test	.466	Retain the null hypothesis
Asymptotic significances are displayed. The significance level is .05.			

Table 10: Category comparison with Kruskal-Wallis test

The Kruskal–Wallis test returned a result of in $p = .466$, which means that no difference could be found among the education categories for the 5-year Gross Profit Margin.

The normal distribution assumption for the 10-year Gross Profit Margin was not rejected for any category ($p > .1$).

Education category	Sig.
1 – bank apprenticeship, degree, additional training, doctoral degree	.164
2 – bank apprenticeship, degree, additional training	.151
3 – bank apprenticeship, degree	.136
4 – degree, additional training	.163
5 – degree	.671
6 – bank apprenticeship, additional training	.946

Table 11: Shapiro–Wilk test of normal distribution for education categories 1-7 for the 10-year Gross Profit Margin

If the normal distribution assumption is not rejected, the F-test is usually recommended for further analysis (cf. Blanca *et al.*, 2017) when there are more than two groups or categories.

	Sum of squares	Df	Mean square	F	Sig.
Between groups	.618	5	.124	1.935	.105
Within groups	3.256	51	.064		
Total	3.874	56			

Table 12: F-Test for 10-year Gross Profit Margin within education categories

The F-test returned a result of $p = .105$, meaning that no difference could be found among the education categories for the 10-year Gross Profit Margin. As a result, no

relationship could be found between the level of education of the executive board and the 5-year Gross Profit Margin and 10-year Gross Profit Margin.

At most, a statement can be made on the different mean and median values of the education categories, but this bears no statistical significance. Categories 2, 6 and 3 have the highest mean values in relation to both the 5-year Gross Profit Margin and the 10-year Gross Profit Margin. The small number of complete data sets available might have influenced this result. In addition, this small number of data sets was spread across six categories, which further reduces the significance.

Hypothesis 6 examines the potential influence of a board member's experience on the performance of cooperative banks. The performance was measured in terms of the dependent variables 5-year Gross Profit Margin and 10-year Gross Profit Margin. Experience is expressed in terms of the following four sub-variables: XP1 – total professional experience; XP2 – professional experience in banks; XP3 – professional experience as a board member (also referred to as *board member for n years*); and XP4 – number of previous board positions.

The full details of the experience of the members of the executive board were available for 62 banks. The information provided by the board member with the highest level of professional experience was used for the analysis. The reasons for this approach are described in detail in *Section 4.3.5 - Professional experience and bank performance* on page 111. In the first regression analysis, the variable XP4 (number of previous board positions) was compared with the 5-year Gross Profit Margin and the 10-year Gross Profit Margin. In *Table 13* and *Table 14*, the number, mean value, median, minimum and maximum are used to describe the metric variable from Hypothesis 6 for the two periods analysed.

Variable	Valid N	Mean	Median	Mini- mum	Maxi- mum
One previous board position	46	.982	.936	.494	1.883
Two previous board positions	11	.868	.878	.567	1.086
Three previous board positions	5	.817	.819	.168	1.301

Table 13: 5-year Gross Profit Margin – Description of the metric variable from Hypothesis 6 regarding XP4 – number of previous board positions

Variable	Valid N	Mean	Median	Mini- mum	Maxi- mum
One previous board position	42	1.0041	1.037	.432	1.506
Two previous board positions	10	.906	.899	.685	1.181
Three previous board positions	2	.490	.490	.118	.862

Table 14: 10-year Gross Profit Margin– Description of the metric variable from Hypothesis 6 regarding XP4 – number of previous board positions

The evaluation reveals that there are three groups of board members who have previous experience at board level: those with one previous board position, those with two previous positions and those with three. The most numerous group is the group of board members with only one previous position, followed by the group of board members with two previous positions.

Variable	Sig.
One previous board position	.234
Two previous board positions	.962
Three previous board positions	

Table 15: Shapiro-Wilk test of normal distribution for the variable previous board positions for 5-year Gross Profit Margin

Variable	Sig.
One previous board position	.917
Two previous board positions	.073
Three previous board positions	

Table 16: Shapiro-Wilk test of normal distribution for the variable previous board positions for 10-year Gross Profit Margin

The normal distribution assumption for the 5-year Gross Profit Margin and the 10-year Gross Profit Margin was not rejected in any group ($p > .05$).

	Sum of squares	Df	Mean square	F	Sig.
Between groups	.225	2	.112	1.445	.244
Within groups	4.592	59	.078		
Total	4.817	61			

Table 17: F-Test for 5-year Gross Profit Margin within variable previous board positions

For the 5-year Gross Profit Margin, the F-test returned a result of $p = .244$. This means that none of the groups has a significant correlation with the 5-year Gross Profit Margin in terms of XP4 – number of previous board positions.

	Sum of squares	Df	Mean square	F	Sig.
Between groups	.550	2	.275	4.307	.019
Within groups	3.254	51	.064		
Total	3.804	53			

Table 18: F-Test for 10-year Gross Profit Margin within the variable previous board positions

For the 10-year Gross Profit Margin, the F-Test returned a result of $p = .019$. This means that the groups do have a significant correlation with the 10-year Gross Profit Margin in terms of XP4 – number of previous board positions.

To quantify the relationship between the 5-year Gross Profit Margin and the 10-year Gross Profit Margin and the total number of years of professional experience in banks (XP2) and on an executive board (XP3), the Pearson correlation coefficient was calculated. No significant differences from zero were shown in the calculated correlation coefficients for the variables XP1 – total professional experience, XP2 – professional experience in banks, or XP3 – professional experience as a board member.

With regard to the median and the mean values, board members with three previous board positions scored lowest, followed by board members with two previous positions. The highest median and mean values were recorded for board members with

only one previous position as a board member. This applies to the 5-year Gross Profit Margin and the 10-year Gross Profit Margin.

Therefore, the research shows that board members who have held only one previous position as a board member perform best in the medium and long term. However, the number of data sets is too small to make reliable statements about this.

6.5 Large-scale multiple linear regression analysis with the variables from Hypotheses 1–4 supplemented by the variables from Hypotheses 5 and 6

Due to the small number of data sets in the evaluation described in the previous section, no reliable conclusions can be drawn for Hypotheses 5 and 6. The fewer data sets that are available, the greater the risk that individual data sets have a disproportionately strong influence on the parameter estimates and the model assessment. This creates uncertainty with regard to the interpretability of the results (cf. Baltes-Götz, 2019). Therefore, the regression analysis for Hypotheses 1–4 was carried out again, but supplemented by a larger number of data sets from Hypotheses 5 and 6. For this purpose, the variables from Hypothesis 5 (concerning education) and Hypothesis 6 (concerning experience) were included in the regression model as further explanatory variables. For the purpose of the regression analysis, the education categories and experience categories were each combined into one variable (Education categories 1-7, Experience categories 1-6). The evaluation also included banks for which the data of at least one board member was available in full. Although this still contains certain inaccuracies, the data available can be regarded as the minimum level in the respective bank: in other words, the level of education or professional experience cannot be lower. In this respect, the insights gained are considered relevant.

To ensure that the evaluation delivered results that are as meaningful and reliable as possible, the regression model was limited to those variables that were identified in the first regression model as significant or just slightly more than significant: number of board members, unemployment rate and average age for the 5-year Gross Profit Margin and 10-year Gross Profit Margin. In addition, Category 1 of the education variable (apprenticeship + degree + additional training + doctoral degree) was combined with Category 2 (apprenticeship + degree + additional training), because there were only 11 data records for Category 1 and the two categories were very similar.

The available data is described in *Table 19* and *Table 20*.

Category	Valid N	Mean	Minimum	Median	Maximum
1 (+2) – bank apprenticeship, degree, additional training (doctoral degree)	73	1.018	.968	.507	2.468
3 – bank apprenticeship, degree	35	.906	.853	.383	1.411
4 – degree, additional training	11	.902	.935	.550	1.362
5 – degree	13	.783	.819	.168	1.161
6 – bank apprenticeship, additional training	119	.969	.938	.287	1.883
7 – bank apprenticeship	19	.918	.865	.533	1.718

Table 19: 5-year Gross Profit Margin– Descriptive statistics for metric variables from Hypothesis 5 regarding educational Categories 1–7

Category	Valid N	Mean	Minimum	Median	Maximum
1 (+2) – bank apprenticeship, degree, additional training (doctoral degree)	62	1.104	1.050	.586	2.451
3 – bank apprenticeship, degree	32	.947	.915	.619	1.261
4 – degree, additional training	11	.926	.975	.409	1.419
5 – degree	12	.825	.932	.118	1.232
6 – bank apprenticeship, additional training	105	1.038	1.048	.478	1.688
7 – bank apprenticeship	16	.960	.905	.577	1.761

Table 20: 10-year Gross Profit Margin– Descriptive statistics for metric variables from Hypothesis 5 regarding educational Categories 1–7

The seven pre-defined education categories are represented in different proportions in the data set. Category 6 occurs most frequently, followed by Category 1 (+2), and Categories 4 and 5 occur the least frequently.

Variable	Valid N	Mean	Median	Minimum	Maximum
5-year Gross Profit Margin	643	.932	.912	.168	2.434
10-year Gross Profit Margin	584	1.008	.984	.011	2.369
Unemployment rate	759	.049	.041	.015	.151
Average age	403	53	53	40	64
XP1 – total professional experience	241	35	35	12	50
XP2 – professional experience in banks	241	33	34	6	50
XP3 – board member for n years	241	15	13	5	36
XP4 – previous board positions = 1	182				
XP4 – previous board positions > 1	59				
Number of board members = 2	583				
Number of board members > 2	190				
Cat.1 (+2) – apprenticeship, degree, additional training (doctoral degree)	68				
Cat.3 – apprenticeship + degree	27				
Cat.4 – degree + additional training	11				
Cat.5 – degree	12				
Cat.6 – apprenticeship + additional training	112				
Cat.7 – apprenticeship	11				

Table 21: Descriptive statistics for dependent variables 5-year and 10-year Gross Profit Margin, independent variables number of board members, average age, education categories 1-7, experience XP1 – XP4 and control variable unemployment rate on a large scale

With regard to XP1 – board members' total professional experience – the minimum is 12 years, the maximum is 50 years and the median is 35 years. The professional experience in banks (XP2) ranges from 6 years to 50 years, with a median of 34 years. In terms of the number of years as a board member (XP3), this period ranges from 5 years to 36 years – a result that is also in line with the average age: because board members are only usually appointed after they have gained a significant degree of experience, the number of years they can spend on a board is limited (e.g. to 25 or 30 years). The median period of time on the board is 13 years.

For the multiple linear regression analysis regarding the 5-year Gross Profit Margin, 163 data sets were available, as shown in *Table 22* below.

Variable	Regression coefficient B	Wald-Chi-Square	Sig.
Number of board members	-.086	3.095	.079*
Unemployment rate	-.005	.004	.949
Average age ¹⁰¹	-.371	1.989	.158
Education Categories 1-7	.010	.807	.369
Experience Categories 1-6	-.013	1.089	.297
Previous board positions	-.049	1.232	.267
AIC = 10.607			
Regression constant	2.466		
N = 163			

Table 22: Large-scale regression analysis for 5-year Gross Profit Margin with control variable unemployment rate and independent variables number of board members, average age, including variables from Hypotheses 5 and 6 (education categories 1-7, experience categories 1-6, previous board positions)

Notes: *Significance at the 10% level; **Significance at the 5% level; ***Significance at the 1% level.

Multicollinearity was checked for the regression analysis. The VIF value of < 10.00 was confirmed based on the collinearity statistics. Thus, no multicollinearity was found between the predictors. For the VIF-values see *Table 54: VIF values from the multicollinearity tests for the large-scale regression analysis for 5-year Gross Profit Margin with control variable unemployment rate and independent variables number of board members, average age, including variables from Hypotheses 5 and 6 (education categories 1-7, experience categories 1-6, previous board positions)* on page 431.

Regression equation for 5-year Gross Profit Margin = $-.086 \times \text{Number of board members} - .005 \times \text{Unemployment rate} - .371 \times \text{Average age} + .010 \times \text{Education category} - .013 \times \text{Experience category} - .049 \times \text{Previous positions as a board member} + 2.466$

The correlation of the number of board members variable is statistically significant at the 10% level, with a figure of $p = .079$. This means that the performance of banks having more than two executive board members is estimated to be .086 lower (in terms of the 5-year Profit Margin) than that of comparable banks.

For the multiple linear regression analysis of the 10-year Gross Profit Margin, 146 data sets were available. The details are shown in *Table 23*.

¹⁰¹ For the variable average age, the natural logarithm was used in the regression analysis.

Variable	Regression co-efficient B	Wald-Chi-Square	Sig.
Number of board members	-.105	4.506	.034**
Unemployment rate	-.765	1.040	.308
Average age ¹⁰²	-.531	3.952	.047**
Education categories 1-7	.008	.589	.443
Experience categories 1-6	-.008	.425	.515
Previous board positions	-.089	3.762	.052*
AIC = -7.473			
Regression constant	3.188		
N = 146			

Table 23: Large-scale regression analysis for 10-year Gross Profit Margin with control variable unemployment rate and independent variables number of board members, average age, including variables from Hypotheses 5 and 6 (education categories 1-7, experience categories 1-6, previous board positions)

*Notes: *Significance at the 10% level; **Significance at the 5% level; ***Significance at the 1% level*

Multicollinearity was checked for the regression analysis. The VIF value of < 10.00 was confirmed on the basis of the collinearity studies. Thus, no multicollinearity was found between the predictors. For the VIF values see *Table 55: VIF values from the multicollinearity tests for the large-scale regression analysis for 10-year Gross Profit Margin with control variable unemployment rate and independent variables number of board members, average age, including variables from Hypotheses 5 and 6 (education categories 1-7, experience categories 1-6, previous board positions) on page 431.*

Regression equation for 10-year Gross Profit Margin = $-.105 \times \text{Number of board members} - .765 \times \text{Unemployment rate} - .531 \times \text{Average age} + .008 \times \text{Education category} - .008 \times \text{Experience category} - .089 \times \text{Previous positions as a board member} + 3.188$

The correlation of the number of board members is statistically significant with a figure of $p = .034$. The performance of a bank that employs more than two board members is estimated to be .105 lower than that of comparable banks. Furthermore, the average age is statistically significant with a figure of $p = .047$. A higher average age of the executive board could have a negative impact¹⁰³ on the performance of the bank.

¹⁰² For the variable *average age* the natural logarithm was used in the regression analysis.

¹⁰³ Note: although statistically significant, this does not necessarily imply practical significance or impact. Therefore, the explanations and interpretations refer exclusively to the respective mathematical result, which was calculated on the basis of the regression analysis.

The correlation of the experience variable XP4, which is related to the number of previous board positions a board member has held, is also statistically significant at the 10% level, with a figure of $p = .052$. Therefore, over a 10-year period, the performance of banks that employ board members who have previously held at least one board position is estimated to be .089 lower than that of comparable banks.

In summary, the analyses reveal the relationships between the individual variables and banks' performance. The results show that the long-term performance, measured by the 10-year Gross Profit Margin, is influenced by the variables average age and number of board members.

6.6 Control variables: unemployment rate, insolvency rate and gross value added

The reported results for the 5-year Gross Profit Margin are presented in *Table 5* on page 168. Although the correlation with unemployment is not significant at the 5% level, it is significant at the 10% level with a figure of $p = .056$. This means that for every percentage point by which unemployment in a region rises, the Gross Profit Margin decreases by an estimated .002 over a period of 5 years.

The reported results for the 10-year Gross Profit Margin are presented in *Table 6* on page 169. With a figure of $p = .003$, the unemployment rate has the most significant correlation with this variable. This means that if the unemployment rate in a region increases by one percentage point over 10 years, the Gross Profit Margin decreases by an estimated .023 over the same period.

Chapter 7: Discussion and conclusions

In this chapter, the results of the empirical analysis are discussed in depth, along with the implications of the results.

The conclusion discusses the limitations of the current work, suggests areas for future research and proposes practical advice for supervisory boards. This is followed by a discussion as to the extent to which the research question can be answered and whether and to what extent research objectives have been achieved. The chapter concludes with a summary of the main findings.

7.1 Discussion of findings

This section presents the interpretation of the results of the thesis and the conclusions that can be derived from these results. Furthermore, links are made to the existing literature and the findings are placed in the context of the current state of research.

7.1.1 Hypothesis 1: number of executive board members

The following hypothesis was formulated with regard to the number of executive board members of a commercial bank:

Hypothesis 1: Any number of executive board members greater than two will adversely affect the performance of German cooperative banks. The research results of the current work suggest that the performance of banks that employ more than two executive board members is inferior to that of banks with two executive board members in both the medium and the long term. Thus, the null hypothesis was rejected and Hypothesis 1 is supported. This supports the findings of Vural and Bacha Simoes (2022) and Ladipo and Nestor (2009), who point out that the best-performing European banks have smaller executive boards. To ensure that the results were representative of bank performance over a sufficient period of time, the evaluation only included data from individuals who had been on the executive board for at least 5

years or longer¹⁰⁴. This ensured that the results considered performance over the long term and not just short-term periods of transition and familiarisation.

According to the work of Grabinska *et al.* (2021) and García Martín and Herrero (2018), executive boards with more than two board members can also be found at larger banks such as Deutsche Bank (Deutsche Bank, 2022b) and Commerzbank (Commerzbank AG, 2022), with each individual board member being responsible for a specific area of the bank. Banks may also have more than two board members in the aftermath of a merger, as was the case in the merger of VR-Bank Westküste (cf. VR Bank Westküste eG, 2021) and Raiffeisenbank Kreis Kelheim (cf. Raiffeisenbank Kreis Kelheim eG, 2021). Depending on the size of the bank after the merger and the age of the board members, the number of board members may be significantly more than two (cf. Atzler, 2017).

According to the results of the empirical analysis, more than two members on the board could have an impact on performance of one-twelfth in the medium term and one-tenth in the long term. It is therefore advisable that supervisory boards should ensure that there are no more than two persons on the executive board, except for short-term familiarisation, in order to safeguard bank performance. In the medium term and especially in the long term, a larger number of board members could have a negative impact on performance. This reflects the findings of Lu and Lee (2021) and Adams *et al.* (2010). This result of the evaluation also suggests that the two-board-member model has proved its worth over the 200 years for which cooperative banks have existed (cf. Deutsche Bundesbank, 2020).

This is all the more remarkable when considering that the first cooperative banks were much more fragmented than those of today; in part, for example, because a cooperative bank was established almost in each village (cf. BVR, 2022a). Furthermore, the board members were only volunteers and did not work full time. Given that cooperative banks has increased in size over time (through mergers) (cf. BVR, 2021b), it could be assumed that a two-member board is no longer appropriate and that the large cooperative banks of today need more than two board members. However, the results of the investigation contradict this assumption. Furthermore, the results of the

¹⁰⁴ In order to eliminate distortions of results that arise due to short-term transition periods when a departing executive board member and the newly appointed executive board member are on the executive board at the same time.

empirical analysis show that out of 807 cooperative banks analysed, 75% employ only two board members. Three or four board members are employed in 22.8% of the banks. This may be due to the fact that there are more than two persons on the executive board for a short period of time due to mergers or transitional phases. Only 1.73% of the banks, i.e. a very small proportion, employ five or more board members. Among the 10 largest German cooperative banks (as of 31 December 2018), there is only one bank (BBBank eG, 2022) that employs only two board members, thus confirming that the four-eyes principle can also work in larger banks.

The remaining nine banks employ between three and six board members. It is probably the case that cooperative banks (also large ones) have aligned their business strategy in such a way that they have shifted responsibilities to lower hierarchical levels, with the two executive board members in charge of the respective front office and back office departments (cf. DG Verlag, 2018b). It is remarkable in this context that the 10 largest cooperative banks each have a CEO, with no banks having a dual leadership arrangement.

The underlying business strategy of those banks that deliberately employ more than two board members is not clear. On the other hand, smaller banks, in which board members are often involved in day-to-day operations, may not be able or willing to have more than two board members, as they carry out many day-to-day tasks themselves.

This finding is new and unique, at least in the context of German cooperative banks, in the sense that the legal requirement for banks to have at least two board members at all times is also shown to deliver the highest level of performance. Is it coincidence or confirmation that a historically or legally established fact is thus confirmed “retrospectively” by figures based on the results?

The question of whether the findings can also be transferred to the wider European banking market and beyond can only be answered in part. In the North American context, Ismail *et al.* (2020) and Pathan and Faff (2013) have shown that US banks with a small executive board achieve superior financial results. Previous research (cf. Cheng, 2008; Eisenberg *et al.*, 1998; Yermack, 1996) also supports this. Due to the different cultures, contexts and compositions of executive boards and supervisory

boards in non-European countries, the results of the current work may be transferable only to a limited extent.

7.1.2 Hypothesis 2: dual leadership

The following hypotheses were formulated:

H2a: The composition of an executive board with two (or more) equal CEOs (shared leadership) has a positive impact on the performance of German cooperative banks.

H2b: The composition of an executive board with one CEO and one (or more) non-CEO(s) has a negative impact on the performance of German cooperative banks.

The results of the evaluation do not show any correlation between a bank having two or more equal CEOs (dual or multiple leadership) and performance as proposed by Hypothesis 2a. At the same time, the results of the analysis show no correlation between banks with a CEO and one (or more) non-CEOs and performance as proposed by Hypothesis 2b. Thus, the null hypothesis is maintained and Hypothesis 2 is rejected. Therefore, the results do not support the findings of Hasija *et al.* (2017) and Salas-Vallina *et al.* (2020), which suggest dual leadership is beneficial for a bank, or those of Song and Kang (2019) and Taqdees (2018), which reject the concept of dual leadership. The results of the investigation suggest that there is little to no impact on performance if an executive board has a CEO or if both (or all, if there are more than two) executive board members have equal rights and responsibilities; this would support the findings of Hermalin and Weisbach (1991) and MacAvoy *et al.* (1983). The result of the current work is supported by the statutes of the cooperative banks, according to which the supervisory board is free to elect a CEO or not. No decisive statement can be made at this point as to whether this open regulation is forward-looking in nature. However, cooperative banks have remained successful over the years, and this may be despite or because of the (non-)regulation of this point in the statutes¹⁰⁵ (cf. Deutsche Bundesbank, 2020).

The principle of dual leadership also refers to the allocation of leadership tasks at the top of the management hierarchy (cf. Hasija *et al.*, 2017), i.e. allocating tasks among

¹⁰⁵ In the years 2013–2019, German cooperative banks showed the most favourable CIR and the highest ROE when compared with their larger counterparts and the savings banks (cf. Deutsche Bundesbank, 2020).

several people has a positive impact on performance. This is because each person on the executive board has a different background in terms of education and professional experience. These different backgrounds complement each other when the board members exercise their duties. This is supported by Upper Echelon Theory (cf. Hambrick and Mason, 1984), which states that organisational outcomes are related to the cognitive skills and abilities of its leaders and how they interpret situations (cf. Harjoto *et al.*, 2019; Hambrick, 2007). That this mutual complementation makes sense is also shown by the fact that the respective specialist field (sales or back office) is always mentioned when new executive board positions become open (BI Bankinformation, 2022). In other words, specialists are required rather than generalists. On the one hand, this ensures the four-eyes principle (mutual supervision), and on the other hand, there is always a specialist for the front office and a specialist for the back office on the executive board.

Furthermore, the executive board's rules of procedure (cf. DG Verlag, 2018b) stipulates that although each executive board member is responsible for his or her own area (front office or back office), there must be coordination between them and each executive board member must be informed about the key activities of the other executive board member. These legal requirements also mean that not only are all board members informed about all transactions in the bank (cf. DG Verlag, 2018b), but they can also fill the role of the other board member(s) in case of absence. In line with Yu *et al.* (2021) and Bhansing (2013), the results of the current work suggest, that the cooperative idea seems to have been far ahead of its time, considering that the division of management tasks between two board members has been common practice for decades (cf. DG Verlag, 2018c, 2018b).

Dual leadership also depends on the relationships between board members and on the management of tasks in the bank (cf. Fjellvaer, 2010). Reid and Karambayya (2009) see a risk of conflict within management in a dual leadership structure. On the other hand, Heenan and Bennis (1999) state that dual leadership structures present opportunities by making a company more open to its environment. Alvarez and Svejnova (2005) understand mutual complementation to be the main benefit of the dual leadership model. The results of the current work do not indicate whether a board that is led by two people is superior to a board that is led by one person, as argued by e.g. Carson *et al.*, 2007; Ensley *et al.*, 2006; Hmieleski *et al.*, 2012; Pearce

and Sims, 2002. However, this was not the subject of the investigation in the current work.

7.1.3 Hypothesis 3: age of board members

The following hypothesis was formulated:

H3: The higher the average age of two (or more) executive board members, the greater the negative impact on the performance of German cooperative banks.

The results of the current work suggest that the average age of board members could have a negative impact on bank performance in both the medium term and the long term. In other words, for every year the average age of the bank's executive board increases, the bank's medium- and long-term performance declines. Thus, the null hypothesis was rejected and Hypothesis 3 is supported. This is in line with the arguments of Berge *et al.* (2020) and McHutchison *et al.* (2019). On a general level, having older board members would, at first, appear to be advantageous, as age can be associated with business experience and knowledge. The results of the current work, however, find a negative correlation between average board age and bank performance.

At the same time, however, the empirical analysis shows that the financial impact of every additional year of average board member age is minimal. Nevertheless, these effects do become noticeable when there is a significant difference in the age of the board members, especially if the difference is 10 years or more. The empirical analysis shows that banks with such a difference in average age suffer from a medium-term decline in performance of one-seventh or one-sixth. This puts the banks concerned at an enormous competitive disadvantage.

Any formulation of recruitment recommendations made on the basis of this work must be handled in an appropriate manner. On the one hand, any recommendations derived from the findings would contribute to the sustainability of cooperative banks by facilitating effective recruitment. However, when applying such suggestions, supervisory boards must be sure to avoid committing discriminatory actions vis-a-vis potential candidates. This can succeed, for example, as follows. As the Principal Agent Theory states in conjunction with the Signaling Theory, a candidate already applies to the supervisory board with a knowledge advantage (asymmetrical distribution of

information). In this respect, the use of the results of the current work could represent a balancing of information, in line with Akerlof (1970) and screening according to Stiglitz (1975), to create equality of opportunity. On the other hand, it cannot be ruled out that discriminatory behaviour has occurred and continues to occur in selection procedures.

It is also worth bearing in mind that the average age of the board members of 53 years (according to statistics), meaning that it is likely that board members of a similar age will also be hired in the future. This is because older executives may be assumed to have more professional experience, with a potentially positive effect on performance. Furthermore, it cannot be assumed that supervisory boards will immediately and fully apply these findings in practice, despite the findings of this research. However, the findings can help supervisory boards select candidates with the most promising characteristics. It should be noted that cooperative banks are also subject to certain moral and ethical obligations as regulated by law (e.g. General Equal Treatment Act¹⁰⁶), which prohibit discrimination on the grounds of characteristics such as age and gender.

7.1.4 Hypothesis 4: female board members

The following hypothesis was formulated:

H4: The presence of one or more female managers on the executive board positively affects the performance of German cooperative banks.

The empirical results show no correlation between an executive board having female members and the performance of German cooperative banks, either in the medium term or in the long term. Thus, the null hypothesis is maintained and Hypothesis 4 is rejected. It is noteworthy that there were no boards with only female board members at the time of the research (cf. BVR, 2021a). As a consequence, at least one other

¹⁰⁶ In German: Allgemeines Gleichbehandlungsgesetz (AGG)

board member in every bank included in the research was male^{107 108}. In this respect, the results do not support definitive statements on the extent to which female executive board members have a positive or negative influence on performance.

Even though the overall proportion of women on executive boards has increased in recent years, it is still far below the average of 10.7% in the Women on Board Index 185 and the Women Managers Barometer (cf. Damson, 2020; Holst and Wrohlich, 2019). Meanwhile, political efforts to increase the number of women on German cooperative bank executive boards have failed. The lack of a mandatory legal framework may be a reason for this. Only cooperative banks that are subject to the Co-Determination Act (those with more than 2,000 employees) are legally obliged to appoint women to management positions. Given that only a handful of cooperative banks in Germany have more than 2,000 employees (cf. BVR, 2021b), this legal requirement is largely meaningless; therefore, it can be concluded that most of the 802 banks appoint female board members voluntarily, rather than to meet a regulatory or internal requirement¹⁰⁹. The results of the empirical analysis do not indicate that women and

¹⁰⁷ Several legal regulations exist which stipulate a requirement for female participation in senior corporate management. The Act for the Equal Participation of Women and Men in Leadership Positions in the Private and Public Sector¹⁰⁷ (hereinafter referred to as the Act on the Advancement of Women) came into effect on 1 May 2015 (cf. Bundesamt für Justiz / Bundesgesetzblatt, 2021). The aim was to increase the number of women in management positions. At the same time, § 9 GenG stipulates that cooperatives with more than 2,000 employees must determine a proportion of women to be included on the supervisory board and on the executive board. German cooperative banks have set deadlines (of no more than 5 years) for reaching these quotas.

¹⁰⁸ In comparison to exchange-listed German companies, the proportion of women on cooperative bank boards has increased only slightly. In addition, according to the Women on Board Index 185, 10.7% of the board members of the 188 exchange-listed companies in Germany are women (cf. Damson, 2020) – a percentage that is also confirmed by the Women Managers Barometer (cf. Holst and Wrohlich, 2019). On an international level, the proportion of women in management positions is significantly higher than it is in Germany. According to the BCG Gender Diversity Index, which is compiled annually by the Boston Consulting Group, Germany ranks twenty-fourth among European countries, with a proportion of women on management boards of 10.7% (cf. Lorenzo *et al.*, 2020).

The largest German cooperative banks have increased the proportion of women in senior leadership positions in recent years. Among the largest cooperative banks in Germany, two (out of a total of 12, representing a share of 16.7%) had female members on their management boards in 2010. By 2017, women were represented on the management boards of six banks (out of a total of 17), a share of 35.3% (cf. Holst and Wrohlich, 2018).

The situation is rather different in the vast majority of banks, however. The largest institutions mentioned above are already included in the share of all German cooperative banks with a woman on the board (71 out of 802 banks, or 8.85%). If this number is already very low, the proportion of women as a percentage of the total number of board members in German cooperative banks (1,925 board members) is even lower, at 3.68%. Of the 71 women who are board members¹⁰⁸, 13 hold the position of CEO, which is 3.07% of the total number of CEOs and spokespeople (424).

¹⁰⁹ This could have the opposite effect, i.e. executive board members could be explicitly selected on the basis of gender in order to meet certain quotas and qualifications played a subordinate role.

men differ in terms of their professional qualifications. Therefore, professional qualification does not explain the dominance of men on the banks' boards.¹¹⁰

Indeed, the history and tradition of the cooperative banks could provide reasons for the low share of women on cooperative bank executive boards. It has been a long-standing requirement for German cooperative banks to appoint at least two board members (§ 24 GenG). Although there has always been a focus on appointing board members with sufficient professional experience (cf. Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin, 2020a), it has not always been necessary to appoint a CEO (cf. DG Verlag, 2018c). Since their emergence, cooperative banks have been almost exclusively male-dominated, starting with the founders Friedrich Wilhelm Raiffeisen (1818-1888) and Hermann Schultze-Delitzsch (1808-1883). Although the male dominance of banking has until very recently continued without such scrutiny, there is no reason for this to remain the case in the future. What potentially were the factors for success in earlier decades can thus become the greatest stumbling blocks for the present and the future. The Federal Financial Supervisory Authority¹¹¹ requires that a board member devote sufficient time to their role on the board (cf. Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin, 2020a). Such a requirement is not conducive to part-time employment, whether a board member is male or female. This may be another reason for the low number of female executives who apply for a board position. Furthermore, it cannot be ruled out that, despite the Equal Treatment Act and the legally prescribed women's quota, unequal treatment in appointment procedures may occur for a wide variety of reasons.

The above questions would be suitable subjects for investigation in separate research. In terms of the results of the current research, however, the low proportion of female board members within German cooperative banks could have implications for the future.

The author of the current work agrees with the statement made by Kalleberg and Leicht (1991, p. 136) that “businesses headed by women were not more likely to go out of business, nor less successful, than those owned by men”. Martinez *et al.*

¹¹⁰ It should also be mentioned that banks in general, not only cooperative banks in particular, are strongly male-dominated.

¹¹¹ In German, *BaFin*.

(2022), Lanaj and Hollenbeck (2015) and Paustian-Underdahl *et al.* (2014) also support the notion that women are at least as successful as men at leading a company, which is also confirmed by the empirical results of the current work. With regard to German cooperative banks, these banks could take the lead in hiring more women. This could create a new unique selling point of cooperative banks. At the same time, the very gradual increase in the share of women in executive boards could be accelerated. Furthermore, a mixed executive board, which by law consists of at least one female and one male, could significantly improve the quality of decisions, which is supported by Khidmat *et al.* (2021) and Alluwi and Sarun (2018).

7.1.5 Hypothesis 5: education of board members

The following hypothesis was formulated:

H5: There is a positive relationship between the level of education of executive board members and the performance of German cooperative banks.

While the pure numerical trends (i.e. statements based on the different mean and median values) of the empirical analyses in the current work indicate that different levels of education can have an influence on medium and long-term performance, the regression analysis shows no significance. Thus, Hypothesis 5 is rejected. Purely numerical trends have been identified for the different values of education and training: the higher the level of education, the higher the mean and median values. In concrete terms, this means that banks with board members who have completed a bank apprenticeship and a degree in business, in addition to further training to become a certified bank manager, perform best in the medium and long term. Board members who also hold a doctoral degree improve performance even more and are thus considered to have the best level of education. The second-best level of education is therefore that of a bank apprenticeship supplemented by an additional qualification in bank management.

In the descriptive procedures for the median and mean values, the lowest values for the 5-year Gross Profit Margin and 10-year Gross Profit Margin are shown for education Category 5 (degree only). According to this, banks with board members who only have an academic degree and no bank apprenticeship or further training that leads to

a qualification in bank management, perform worse than other banks. This can be explained by the fact that board members who have completed a bank apprenticeship or a qualification in bank management gain practical experience.

In contrast to vocational training in many other countries, vocational training in Germany usually includes theoretical instruction at a vocational college along with practical activities in the workplace (cf. IHK München, 2020). Most vocational training lasts for between 2.5 and 3.5 years (cf. IHK München, 2020). During the training period as a bank clerk, trainees work in all the departments of a bank and perform all associated activities. Often, a degree course in general business management is followed by full-time or part-time training in a bank. More in-depth management knowledge can be acquired through additional training at the Academy of German Cooperatives, which can lead to certification as a bank manager (cf. Akademie Deutscher Genossenschaften ADG, 2022). This training usually consists of a mixture of theoretical instruction and practical work. Because of the nature of this training, board members between the ages of 30 and 40 have usually had several years of practical work experience.

On the other hand, executive board members who have completed a bank-specific business administration course only can still be admitted to the executive board in accordance with § 25c KWG due to the nature of the course (cf. Akademie Deutscher Genossenschaften ADG, 2022; Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin, 2020a). Therefore, the more obvious route for these people is to start in a management position after completing their studies, right at the start of their career. Any such individual would lack the fundamental elements of bank training and additional management. This can have a negative impact on performance. The fact that Category 1 (apprenticeship + degree + additional training) has the highest median and mean values supports this explanatory approach.

In terms of business impact, the performance of banks that appoint individuals who only have a degree would be reduced. This accounts for about one-third of the Gross Profit Margin in the medium term and in the long term. A bank that only hires board members with a degree (and no further bank-related training or qualifications) is thus at a considerable disadvantage. However, in the regression analyses, no significant correlations were found between education level (Category 1-7) and the 5-year and 10-year Gross Profit Margins. In this respect, no reliable statement can be made on

the basis of the data.

The purely numerical trends support the findings of Kauko (2009), King *et al.* (2016), Chevalier and Ellison (1999), Beber and Fabbri (2012) and Miller *et al.* (2015) that education has a positive impact on performance. However, it may be sufficient for supervisory boards to select potential candidates with an "average" level of education, as candidates with additional doctoral degrees are expected to contribute only a low level of additional performance in comparison to candidates without doctoral degrees. At the same time, candidates should have an adequate level of education. Accordingly, a bank apprenticeship supplemented by additional management training is the best combination to ensure adequate performance. In principle, the results of this thesis support the findings of Gottesman and Morey (2006a). However, their study differentiates degrees in terms of the reputation and quality of the university awarding the degree. This was not considered in this thesis. It must also be noted that the authors mentioned above each examined a different environment in terms of country, period, education system, etc..

7.1.6 Hypothesis 6: experience of board members

The following hypothesis was formulated with regard to board member experience:

H6: The different types of experience of executive board members have a positive influence on the performance of German cooperative banks.

Potential effects of the different types of executive board member experience on performance can be observed only with regard to XP4 – number of previous board positions. Thus, Hypothesis 6 is rejected. The results relating to XP4 suggest that banks with board members who have held only one previous board member position perform better in the medium term and the long term than banks with board members who have held two or more board positions. This may seem peculiar at first, given that board members with more than one prior board positions bring their experience and insights from those previous positions to their new position, which one would assume would have a positive effect on performance. This apparent contradiction could be explained by the fact that only data from board members with more than 5 years of service was included in the evaluation. In the case of board members with more

than one previous board position, it could be that the period of familiarisation with a new position outweighs the positive effects of the additional experience and knowledge gained in previous positions. Consequently, the more frequently a board member changes jobs, the greater this effect is likely to be.

However, since the majority of the board members included in the evaluation had only held only one previous position, such an effect cannot be proven. Furthermore, on the basis of the available data, it is not possible to draw any conclusions about whether board members with only one previous position were already employees of the bank or were recruited from another company to fill the board position. The origin of a board appointee can influence performance, as Klein (1998) points out. It was also not possible to take into account whether a new board member had gained similar (board) experience before assuming their board position, or whether they were instructed by the previous board member. Such arrangements could also have different influences on the results; these cannot be examined in more detail due to a lack of information.

From a financial point of view, the medium and long-term performance of banks with board members who have held more than one previous board position would be reduced by just over one-tenth of the earnings and is therefore not negligible.

Additionally, older board members who have held several previous board positions could have an even more negative effect on performance. In reality, it is likely that such candidates are appointed because it is assumed that experience and competence increase with age and with the number of board positions held. This may be true to some extent, but research findings suggest that board members with such qualities do not succeed in applying their knowledge to improve performance until later on in their tenure.

The research of Burke *et al.* (2018), Bosma *et al.* (2004), Shane (2000), Burke *et al.* (2008), Staniewski (2016), Kahn (1993), Scully (1994), Fizel and Michael (1999), Barros and Leach (2006) and Frick and Simmons (2008) which finds a positive correlation between board member experience and company performance might differ as the authors conducted the research in different contexts. The findings of the current work support Guthrie Datta's (1997) findings, which suggest that XP4 – number of previous board positions has an influence on performance.

However, the extent to which the results of the current work support the same conclusions as the results of the research carried out by the authors above is limited.

In addition to the conclusions stated above, it must be noted that the results of the current work only allow assumptions to be drawn; the correlations identified are not causative relationships. Similarly, although statistically significant, this does not necessarily imply practical significance or impact. It should also be noted that each variable in isolation may not initially have a major economic impact or may only have an impact that is evident over a longer period. However, other factors may have an impact on performance, such as a high unemployment rate in the region, unfavourable conditions for businesses (as measured by the insolvency rate) or low gross value added. Several unfavourable factors taken together can increase the negative impact on the 5-year Gross Profit Margin and 10-year Gross Profit Margin.

7.1.7 Interpretation of the results in connection with the theory

This section interprets the results of the current work in the context of the research on the topic.

In line with Principal Agent Theory there is evidence that the executive board members have an information advantage over the supervisory board in the application process¹¹² (cf. Feng and Horta, 2021; Niklaus, 2015). Furthermore, it is stated in the literature (cf. Puriwat and Tripopsakul, 2021; Boivie *et al.*, 2011) that executive board members may act in an opportunistic manner¹¹³. This results in agency costs; for example, in the form of higher salaries for the executive board members.

¹¹² The basic principal–agent relationship between cooperative members as owners of the cooperative (principal) and board members as managers (agent) has not changed as a result of this research. However, insights have been gained into the internal principal–agent relationship between the supervisory board as principal and the executive board members as agent. This is the decisive principal–agent relationship, as the board members are usually appointed by the supervisory board. The supervisory board thus acts as an agent on behalf of its members and, in turn, as the principal in appointing the executive board. Therefore, the following explanations refer to the internal principal–agent relationship.

¹¹³ Stewardship Theory (cf. Chrisman, 2019; Henssen *et al.*, 2014) takes the opposite view, i.e. the executive board member acts for the good of the company. In this context, the basic claim that potential executive board candidates behave in an opportunistic manner must be viewed critically.

The purpose of the efficiency criterion of Principal Agent Theory is to minimise agency costs (cf. Puriwat and Tripopsakul, 2021; Niklaus, 2015; Föhr, 2013; Wolf, 2013; Boivie *et al.*, 2011; Chrisman *et al.*, 2004). The results of the current work can contribute to reducing information deficits on the one hand, and to reducing agency costs on the other hand. To compensate for information asymmetries, the principal has various options at their disposal. The principal can insert detailed regulations into service contracts with the executive board members (according to § 18 of the statute, DG Verlag, 2018c). The aim here is to limit the scope of action of the better-informed side (the agent). Based on the current work, which finds that increasing executive board member age is negatively correlated with performance, time-limited service contracts with a maximum term of 5 years (this is already the rule in several cooperative banks and especially in savings banks, Sparkasse, 2022) would be an option for the principal to assert more control over the agent.

Another way for the principal to reduce information asymmetries, i.e. to limit the agent's room for action, is to monitor the agent regularly. This is already one of the core tasks of the supervisory board (§ 18 (1) GenG). The empirical findings of this work suggest that more detailed monitoring of executive board members with a lower level of education (or/and executive board members who have only completed a degree without additional bank-specific training) would be beneficial. Furthermore, increased monitoring would be advisable in the case of board members who have already held several previous board positions.

The above options available to the principal must always be considered in the context of legal regulations as well as from an ethical point of view. In other words, courses of action which may be legal may not be ethically justifiable or wise from a management point of view. For example, limited-term contracts for executive board members may represent inferior conditions to the unlimited-term contracts of other executive board members.

However, if efforts by the principal to reduce information asymmetries take place after a new executive board member is hired, this could potentially create additional challenges. It would be much easier for the principal if certain circumstances did not arise in the first place. One approach that the principal could take is proposed by Stiglitz's (1975) screening theory.

As suggested by Bergh *et al.* (2020) and in accordance with screening theory, both the principal (i.e. the supervisory board) and the agent (the potential executive board member) benefit from the results of this research. In particular, the findings that increasing age, multiple previous board positions and a low level of education have a negative correlation with performance are important preliminary information for the principal (here: the supervisory board) to avoid such combinations of candidate characteristics from the start. Rather, the findings offer some criteria for supervisory boards to consider when appointing executive board members which are correlated with improved bank performance. The findings of the current work suggest that characteristics of such board members would be an age below 53 years, a banking education supplemented by a business degree and a management education and only one previous board position. Consequently, the focus can be directed towards those candidates who most closely match these criteria (cf. Stiglitz, 1975). In addition, this approach is likely to save time and money (i.e. reduce agency costs), especially if there is a large number of candidates (taking into account the General Equal Treatment Act). Furthermore, the results of the current work suggest that appointing no more than the legally required two executive board members benefits bank performance. Moreover, the variables examined in this thesis may also serve the supervisory board as proxies for certain competences and qualities of the potential candidate.

From the agent's perspective, a potential applicant can also benefit from knowing which characteristics are likely to lead to a positive bank performance (cf. Fukasaku, 2015; Miller *et al.*, 2004). Before applying, a potential applicant can consider whether their attributes would be likely to bring a more profitable performance to the bank. It may be possible for the agent to save time and (agency) costs by making application decisions on the basis of their attributes as compared to those which offer potential for maximising bank performance. In the context of the results of the current work, the chances of success for an applicant may be lower if the candidate is older than 53 years, has only a degree without further additional training and/or has already held several previous board positions. Furthermore, a potentially negative indicator for an applicant would be if he or she were to be joining a board already consisting of two members. If the agent decides to apply anyway, there is at least clarity in advance that agency costs will be incurred if their profile does not match.

The considerations above describe an ideal case, in which both principal and agent are fully informed and act completely rationally. The regularity with which this situation actually occurs in reality is difficult to assess. However, the results of the current work can make a significant contribution to improving the negotiating position for new appointments, both for the supervisory board and for an applicant.

The results of the current work can contribute to a better understanding of Signalling Theory. By applying the conclusions drawn in the current work, it may be possible to reduce information asymmetries before the appointment process begins by implementing Stiglitz's (1975) screening theory. This could help the supervisory board to identify signals that would assist in determining the most suitable candidate in advance of receiving applications from candidates (cf. Bergh *et al.*, 2020). In order for this to succeed, the supervisory board must know the signals (age, gender, level of education and professional experience) that distinguish the most promising candidates. The research results provide information as to the signals of improved banking performance and thus help reduce information asymmetries (cf. Benda *et al.*, 2019; Fukasaku, 2015). In any case, the signals identified can be considered indicators of a candidate's suitability and can serve as a proxy for underlying qualities and competences (hidden qualities) of the candidate. Similarly, negative selections can be slightly reduced. Signalling Theory also involves distinguishing "reliable" from "less reliable" signals. In this sense, reliable signals would be, for example, if the applicant's age was below 53, the applicant having a banking education supplemented by a business degree as well as management training and not having held more than one previous board position. Combining the determinants of "success" identified in the current work may make selection processes more reliable (cf. Mallick, 2019).

The fact that the supervisory board is able to reduce information deficits *before* making appointments means that the findings of the current work are most closely aligned with Stiglitz's (1975) screening approach. However, it is worth noting that information asymmetries will continue to exist, possibly because there may not be enough candidates to choose from who meet all of the required criteria, or because the supervisory board and the potential candidates do not have the knowledge gained from the current work. Furthermore, supervisory boards are made up of lay people (cf. Reichle, 2019), who often rely on "common sense" rather than academic theory. In addition,

supervisory boards may rely on selection criteria which have been applied in the company over an extended period of time.

In the context of the literature on Upper Echelon Theory, the results of this research support the work of Dong *et al.* (2019) and Zhang (2017), according to which the age of managers has a negative influence on performance. With increasing age, a manager's information-processing and multitasking abilities deteriorate and their memory performance declines which can have an impact on their decisions and subsequently on company performance. This is also confirmed by Child (1974), Chown (1960), Hambrick and Mason (1984), Salthouse (2009), Singh-Manoux *et al.* (2012) and Cai and Stoyanov (2016). The results of the current work may also suggest that older executive board members are less flexible in the face of change and less able to adapt to new situations and related decisions. A possible explanation for this is provided by Serfling (2014), Li *et al.* (2017) and Roberts and Rosenberg (2006), who found that younger CEOs have more risk appetite and make riskier decisions than older CEOs. However, these are only speculations, and the results of the present research do not allow any conclusions to be drawn about the risk appetite (examined by Berger *et al.*, 2012) of executive board members. Moreover, the findings of the current work support the fundamental basis of Upper Echelon Theory, according to that individual executive board members strongly influence business results (performance) through their decisions (cf. Saci *et al.*, 2021) which in turn are influenced by the board members' qualities. Although the regression analyses in the current work do not provide any significant findings, the mean and median values reveal that a higher education level is positively correlated with performance.

Trait theory and SCT contributed to the current work because personality theories which focus the characteristics of people (in this case, executive board members) provide indicators of executive board members behaviour (cf. Sarker *et al.*, 2021; Bandura, 2001). If the behaviour can be predicted, this may subsequently allow conclusions to be drawn about the bank performance.

Fayol and Mintzberg's research has laid foundations and their findings support the choice of variables examined in the current work. Moreover, Fayol's (1949) and Mintzberg's (1973) research support the approach followed by within the current work (to determine bank performance by means of certain manager qualities, i.e. age, gender, education and experience).

Boyatzis (1982) followed a similar approach. Boyatzis' (1982) basic underlying idea is that the performance of the bank depends on the competencies of its executive board members, which in turn influences bank performance (cf. Soebbing *et al.*, 2015). Boyatzis' (2011, 1982) explanations of executive board members' competencies provide insight into the qualities executive board members need in order to contribute positively to organisational performance. Thus, his work supports the approach in the current work to determine bank performance by means of the chosen variables which can stand for certain competencies.

7.2 Complementing the tested hypotheses by qualitative statements

Isolated statements from the survey have already been quoted in the previous sections. This section provides an overview of the additional information obtained from the qualitative data and assesses the extent to which these findings support the hypotheses. Furthermore, additional information is provided on which factors can influence the performance of German cooperative banks.

Measured by the frequency of mentions by the participants, the personality of each board member is the most important factor influencing performance. In each case, the qualities which influence performance are aspects of the executive board member's personality. "Empathy", "groundedness", "an eye for the essential", "openness to new things" and "willingness to change" are very often mentioned as factors influencing performance. The results of the current work could serve as a basis for future research to use appropriate methods, such as interviews, to find out which of the "soft" factors are decisive for the performance of German cooperative banks.

Practical factors have an almost equal number of mentions. Great importance is attached to the practical experience of a board member. Thus, "practical experience", "gain experience in other banks", "gain experience in all areas of the bank", "stay involved in day-to-day business so you know what's going on" are named as factors influencing performance. This supports the basis of hypothesis 6, according to which experience has a strong influence on the performance of German cooperative banks.

The third most frequently mentioned area is leadership qualities, according to which “leadership and management skills” and “ability to motivate employees in a meaningful way” were cited as influencing performance. Future research could use questionnaires or interviews to investigate the extent to which the leadership qualities mentioned by the participating executive board members align with the perceptions of employees, and to what extent the individual board members exhibit these qualities.

Qualifications are mentioned several times as a factor that influences performance, although significantly less often than the factors above. “Technical qualification”, “regular further training” and “exchange with professional colleagues” are mentioned several times as relevant to performance, which supports hypothesis 5 (education). In addition, it is worth mentioning that board members having “roots in the region” is something respondents thought to be linked to the performance of the bank. The behaviour of the board members towards each other is only mentioned as an influential factor on occasions; for example, “different expertise on the board”, “harmony in the management team”, “appreciative cooperation”, “well-functioning management team”. There may be several reasons for this relatively low number of mentions, and it could indicate conflicts within the board; however, an investigation by future research into the relationships between board members could shed light on this.

7.3 The limitations of the findings

The following section discusses the limitations of this research.

The results of the current work are observations and numerical correlations. No causative relationships can be identified in the findings. Moreover, statistical significance does not necessarily imply practical significance or impact.

Furthermore, one can argue that the significance of the correlation for Category 5 (degree) in the context of education is limited due to the small number of data records available. Similarly, the significance is further reduced by the fact that only those board members with the highest level of education were included in the evaluation. In this respect, any conclusions drawn with regard to education must be considered in light of the small sample size.

Another limitation of the current work is the fact that the education variable (with its seven categories) is only one of many factors which could explain performance. Furthermore, the same limitation applies to the experience variable (with its six categories).

In addition, the study only included banks that have existed for more than 5 years and board members who have been employed for at least 5 years.

Furthermore, in the case of banks with three board members or more, no clear statement can be made as to whether this was a medium- or long-term arrangement, or whether it was only in place for a short-term transitional period during which a new board member was being inducted into the company. Similarly, executive boards with more than two board members were found in larger banks, where each individual board member is responsible for a specific area of the bank. Another possible explanation for a bank having more than two board members is a merger. Depending on the size of the bank after the merger and the age of the board members, the number of board members may increase to significantly more than two.

7.4 Recommendations for future research

Although this work has examined one aspect of German cooperative banks in great detail, new questions have been raised by the results. These questions could be the subject of future research projects.

The primary focus of future research on manager qualities and their influence on the performance of German cooperative banks should be on creating a more extensive and detailed database. On the basis of the currently available data, it is not possible to make any statements about the effects of age diversity on a board or, as stated by Eulerich *et al.* (2014), which age structures on a board are optimal.

Furthermore, the current work has not established how age diversity or age structure affect bank performance. The work also provides no indication as to which board members learn from which others. One would expect a younger or newly appointed board member to learn from the older board members. However, if the younger or new board member has better qualifications or more extensive board experience, this may not be the case. Such information may enable conclusions to be drawn on the

optimal board age differences for learning phases and the age after which a board member's performance could be expected to decline.

It would also be meaningful to examine executive boards staffed by women only. At present, it is clear that women are a minority on German cooperative bank executive boards, accounting for less than 10% of board members. Nonetheless, this proportion is higher than it was a few years ago. At present, there are no boards that are staffed by women only. It would be valuable for future research to examine boards that are exclusively comprised of women. However, this would require a significant increase in the number of women on executive boards. Furthermore, previous research mainly looks at organisations where there is a female CEO. Research on banks with a female executive board member in a dual or shared leadership arrangement is lacking.

Regarding dual leadership, it would be valuable to know how much power each board member actually has. The theory of dual leadership assumes that the balance of power is always equal. In practice, this is not likely to be the case due to age differences, different levels of professional experience, and other factors. Differences in board member power could be even more pronounced in situations where one board member is a CEO and the other is not. In the case of steep differences in board member power, this may be equivalent to a unity-of-command relationship. The results of the present work do not provide any information regarding power relations in a German cooperative bank, as the results show no significant correlations between executive boards having a CEO and bank performance. In this respect, future research could investigate how power is distributed among board members and what influence this could have on performance. In practice, unequal power relations are more likely to be the rule than the exception.

Additionally, dual leadership may involve risk in the event of difficult board relations. Therefore, it would be important to examine difficulties in board relations, their causes and their effects on bank performance.

Furthermore, it would be valuable to investigate the influence of different degree programmes on performance. In the current work, a distinction is made only between board members with and without university degrees. As a result, the available data does not allow any conclusions to be drawn about the effect of board members hav-

ing degrees in different subjects. It would therefore be beneficial to examine the influence of different degree programmes on performance. Although the overwhelming majority of board members have a degree in business administration or a banking-related subject, there are also programmes of study that differ from these. Another relevant factor is the educational institution from which a board member's degree was obtained. This has been addressed by Gottesman and Morey (2006a); Golec (1996); Chevalier and Ellison (1999); Kauko (2009), King *et al.* (2016), Beber and Fabbri (2012); Miller *et al.* (2015) and Lindorff and Prior Jonson (2013). However, research gaps remain with regard to Germany, as the studies were conducted in other countries and in other contexts.

In addition, if a sufficient number of complete data sets were available, the "optimal" education pathway for a future board member could be identified. The available results only allow for general conclusions to be drawn here.

Furthermore, from the available data, no conclusions can be drawn as to whether the board members with only one previous position on a board were internal or external candidates; that is, whether they were existing employees of the bank or whether they were recruited from outside to fill the board position. This knowledge may allow conclusions to be drawn as to whether it is better to appoint internal or external candidates as board members.

Similarly, the current work did not investigate whether new board members had gained experience in a previous management position that could be relevant to the new board position or whether the new board member had been inducted by a previous board member. Such knowledge could lead to conclusions regarding an optimal familiarisation period and would build on the research of Zhang and Rajagopalan (2004), Zhang (2008) and Elsaid *et al.* (2011).

The promotional mission of cooperative banks was not the subject of this research. Nevertheless, the promotional mission is a key element of any cooperative bank and thus is relevant to any bank's board members. The current work raises issues related to the promotional mission of cooperative banks that would warrant further investigation.

Furthermore, if the executive board members of cooperative banks mainly act in the interests of profitability and neglect or even ignore the promotional mission, they may

be violating § 1GenG. Although such a course of action may violate regulations and disappoint expectations, it could be claimed that such conduct has ensured cooperative bank stability. Such pragmatism is in line with the research of Hahn (1979, p. 39) and Grosskopf (1990b, p. 159), who emphasise that banks need to generate profits to survive. Further research would be required to establish the extent to which cooperative banks observe their promotional missions. This would be particularly meaningful in light of the environment of low interest rates, increasing digitalisation, rising costs and falling yields.

With regard to German cooperative banks, there are a range of topics that would warrant further investigation. Despite the modest nature of the findings presented in this work, it could be that they instigate further study or are adopted, at least in part, in practice. The next section outlines the limitations of the findings of the current work.

7.5 Practical implications and good practice recommendations

In his role as a board member of a German cooperative bank, the author considers it important not only to examine the research question from a theoretical point of view but also to derive practical recommendations for action. For this reason, the practical implications of the research results are presented in this section, along with the limitations of the results.

An aspiration of this current work is that its results can be used to help formulate concrete recommendations for supervisory boards when appointing new members to the executive board. Although the recommendations may, at first, seem modest in terms of their significance, their application could reveal further findings and help ensure bank performance and thus sustainability.

The supervisory board of a German cooperative bank is typically made up of lay people (cf. Reichle, 2019). By law and by tradition, supervisory board members must represent all professional groups in the population in as balanced a way as possible. For historical reasons, farmers are often represented on the supervisory board. Due to the increased demands on supervisory board members in recent years (cf. Reichle,

2019), however, it is becoming more common to replace departing supervisory board members with individuals who have a background in business management.

There are usually two procedures applied by supervisory boards when appointing new members to the executive board. The supervisory board either selects and appoints executive board members directly, or appoints a recruitment agency to pre-select candidates. The final selection and appointment remain in the hands of the supervisory board. The selection and appointment processes are similar to those for recruiting any other employee. Usually the candidate's CV, their qualifications and the personal impression they make are considered at the interview.

Here, too, the cooperative principle is based on the idea that the best possible result is achieved by the supervisory board cooperating effectively; in this case, the best candidate for the executive board is hired. Sometimes, however, the criteria that candidates must meet are open to the subjective interpretation of the individual members of the supervisory board. In addition, since executive board positions do not usually need to be filled on a regular basis, very few supervisory board members have a great deal of experience in appointing executive board members. Distortions can also arise when the eloquence and rhetorical skills of a potential executive board candidate are more convincing than his or her qualifications.

On the basis of the results of the current work, it is possible to provide practical guidance for the supervisory board on in the form of criteria to apply in the executive board member appointment process in order to improve the bank's performance in the medium and long term and to ensure sustainability.

It is expected that candidates who appear to be convincing will continue to be appointed in the future. However, the findings of the work could act as a "filter" when several candidates apply for a board position. Even when it is a matter of making a final decision between, for example, two humanly convincing candidates, the findings could be used to make the best choice clearer and contribute towards appointment decisions.

In accordance with the results of the current work, the ideal candidate for the executive board would have the following qualities: the candidate's education should include a bank apprenticeship, studies in business administration or a bank-related subject, and additional training to become a certified bank manager; furthermore, the

new board member should not have held more than one previous position as a board member; additionally, younger board members should be appointed (e.g. younger than the median of 53 years); in addition, the supervisory board should ensure that there are never more than the two board members except for short induction periods; moreover, it would be advisable not to have a single CEO, but two equal CEOs in a dual leadership model. Therefore, the results offer an additional contribution to the existing body of knowledge by highlighting potentially beneficial board member characteristics. This could help banks maintain optimum performance and remain viable in the long term.

The practical significance of the findings of the investigation could be even greater if they are consistently applied in existing employment relationships with board members. Executive board members are usually hired for an indefinite period after a probationary period (usually 6–12 months). Some service contracts (the term used to describe the employment contract of a board member), especially older ones, even provide for non-terminability after a certain number of years of employment – a clause that can be revoked only in the event of gross negligence and often only after making a large severance payment. According to the Legal Commentary on § 24 GenG, “poor performance” is not expressly included as a breach of duty. In practice, this means that board members who have such service contracts may remain in their role even if their performance declines.

A further aspect of this issue is reflected in the fact that when job advertisements are published for board members, it is often desirable or even a requirement that the future board member reside in the bank’s catchment area. Cooperative banks aim to create local networks, establish contacts with local customers and create bonds with their customers. In addition, the board member should represent the bank at public events. To this end, it is an advantage if board members are popular in the bank’s catchment area and participate in public life. Candidates who live outside the catchment area of the bank are given the opportunity to relocate to the bank’s catchment area. This is because cooperatives only offer services to locally based customers. This requires the board member to live close to the bank’s place of business. However, if the performance of the board member is inadequate, any popularity of the board member may make it more difficult for the supervisory board to impose sanctions on the board member.

The question arises as to whether it would be beneficial to issue service contracts to executive board candidates with terms limited to 5 years. Although the increased number of board positions may mean a decline in performance, this effect would be smaller than the decline in performance that accompanies increasing age. A fixed-term contract may encourage board members to perform to their maximum ability, which may offset certain disadvantages. Some savings banks apply a limited term of 5 years to board memberships. If the management board performs well, the contracts are extended accordingly.

However, such a policy may deter¹¹⁴ potential applicants, as the term of appointment is limited. There is also the matter of legal implications surrounding the amendment of any existing service contracts.

Another important contribution can be made by the findings of this work regarding the promotional mission, which has already been mentioned at various points in this work. The implementation of the promotional mission is still a subject of debate in academia and in the cooperative banking sector. Due to the anticipated negative developments throughout the banking sector, especially in the cooperative banks as the subject of this thesis, it is considered that it may soon no longer matter how the promotional mission is interpreted, because there may be only a few large cooperative banks left in Germany. Therefore, the focus of the current work is on how the cooperative banks can be sustainable. This sustainability can only succeed if the banks generate profits. Given that the executive board members, with their various qualities, can have a decisive influence on how the bank is managed and the resulting success, the conclusions of the current work can contribute to answering the question about the interpretation of the promotional mission. In any case, the statements made by the survey participants (all of whom were executive board members) regarding the promotional mission indicate that the promotional mission is still relevant to their work.

¹¹⁴ Such a procedure could be disadvantageous for potential candidates, as there would be no security beyond a time horizon of five years and thus personal planning would be difficult. Consequently, such a contractual reform would be unattractive, especially for high-performing candidates.

7.6 Answering the research question

On the basis of the findings of the current work, the research question can be answered as follows.

Executive board members have an influence on a bank's course of development and its success, and thus their sustainability. These decisions are in turn influenced by the characteristics and qualities of the managers. The empirical investigation has shown that executive board member age, gender, education and experience, as well as board size and composition, influence the performance and thus sustainability of German cooperative banks to varying degrees.

The board size has the highest empirically verifiable effect, both over 5 years and especially over 10 years. Furthermore, the findings suggest that there is a negative correlation between increasing age and performance, especially in the medium term but also in the long term. Due to the logarithmisation of this variable, however, only general statements can be made regarding this effect. The results also showed a negative effect of the unemployment rate over the medium and long term. The influence of the education level could only be described on the basis of mean and median values. Accordingly, the more qualified the executive board members, the better the performance of a bank. Notably, banks with executive board members who only hold a degree and have no banking apprenticeship or management training show the lowest performance. The variables gender, board composition, insolvency rate and gross value added showed no verifiable correlations with performance.

7.7 Achievement of the research objectives

Three objectives were derived from the overall research goal. The first was to examine the extent to which the variables related to executive board member qualities, board size and board composition influence performance and thus contribute to the sustainability of cooperative banks. The second was to make a theoretical contribution to existing knowledge by filling existing research gaps, with the third being to make a practical contribution to existing knowledge by providing guidance for supervisory boards when hiring new executive board members. This section contains a discussion of whether and to what extent these have been achieved.

The thesis examined the concept of the cooperative bank and the importance of this type of bank to the German banking system and economy. There then followed an overview of potential influencing factors, with the variables board size and board composition as well as age, gender, education and experience chosen as manager qualities for further investigation. The measurement of bank performance was also discussed. Quantitative methods (multiple linear regression) were used to examine the connections between the selected variables and performance.

This research objective has been fully achieved for the purposes of the current work. However, it was not possible to identify all the influencing variables. There are several reasons for this. One reason is that the subjects of investigation, executive board members of German cooperative banks, are individuals with changing characteristics, influences and motivations. Consequently, the framework conditions can change (e.g. due to Covid-19) and influence the economic situation and the results. On the other hand, managers' demographic profiles change (e.g. through ageing). In addition, soft facts, such as the managers' personal attitudes, were left out. In order to make a complex reality investigable, some interactions had to be simplified.

The initial aim was for the thesis to contribute to the existing body of theoretical and practical knowledge. Several theories were examined, including Principal Agent Theory, Signalling Theory, Screening Theory, Upper Echelon Theory, SCT, trait theory, and manager competencies, along with their relevance to the subject at hand. This research objective was achieved by first presenting the different theories and then relating them to the research question. The results supported some of the arguments postulated in the literature, thus contributing to theoretical knowledge. The research objective could not be achieved in full due to the different areas of focus of the literature itself, as it deals with different contexts, political circumstances, economic influences and so on.

A further objective was to give practical guidance to the supervisory boards of German cooperative banks to help them optimise the appointment of new executive board members. Above all, the empirical analyses and the results obtained from them provided some indicators of characteristics with influence on performance. These indicators can guide supervisory boards when hiring new executive board members in German cooperative banks. In this respect, this research objective was fully achieved.

7.8 Concluding summary

It was found that increasing board member age negatively affects bank performance. One possible explanation for this is an age-related decline in board members' openness to change, which goes hand in hand with a stronger adherence to tradition and established values. One factor here could be the long-standing existence of cooperative banks and the resulting importance attributed to tradition and heritage. This may also have an impact on gender representation, as discussed below.

Not surprisingly, banks that employ board members with a higher level of education perform better than banks that employ board members with a lower level of education. Perhaps the most surprising finding in this regard is that banks employing board members with only an academic education perform significantly worse than would have been expected. In the context of the subjects studied, it is clear that a classical education in banking that is supplemented by (part-time) further training or study is superior to a university education alone.

Contrary to the expectation that board members with several previous board positions would have a positive influence on performance, the opposite was found. One explanation here could be that even though experience gained from previous positions is likely to be positive in and of itself, it takes an extended period of time for this experience to be evident in terms of positive effects on bank performance.

Although it is considered "normal" for an executive board to have 8–10 members in other industries, boards of German cooperative banks tend to be much smaller. The results presented in this thesis show that the legally required board size of two members also produces the most effective business performance.

In terms of board composition, it can be stated that the representation of women on German cooperative bank executive boards is still in its infancy. The traditional nature of the German cooperative banking sector may represent a barrier to progress in this regard. It could be that, in the future, promotional missions change to reflect a desire to appoint more female executive board members.

The findings of this thesis described above contribute to several areas of the existing body of knowledge. The main contribution is the identification of significant, measurable factors influencing the performance and therefore the sustainability of German cooperative banks. One group of factors contains the manager qualities of age, gender,

education and experience. The other group comprises board size and board composition. In addition, the macroeconomic variables unemployment rate, insolvency rate and gross value added were taken into account.

The results of the research presented in this thesis also make a significant contribution to existing practical knowledge. The findings can be used by supervisory boards of German cooperative banks as practical guidance in navigating the process of appointing new board members.

7.9 Summary of key findings

The aim of the current work was to establish the influence board characteristics and manager qualities have on the performance and thus sustainability of German cooperative banks. For this purpose, six hypotheses were developed.

The hypotheses were statistically evaluated using quantitative methods. The key findings of the current work can be summarised as follows.

The research shows that there is a negative correlation between increased average executive board age and medium-term and long-term performance. Furthermore, there are no verifiable correlations between the presence of women on the executive board and medium-term and long-term performance. Moreover, the research indicates that there is a negative correlation between a bank having more than two executive board members and its performance. However, the results of the current work revealed no correlation between the number of CEOs and bank performance. The results suggest that the higher the level of education of an executive board member, the better the medium and the long-term performance of the cooperative bank. In terms of experience, the results indicate a negative correlation between the number of previous positions a board member has held and the medium- and long-term performance of the cooperative bank. Although the insolvency rate and gross value added show no significant correlation on performance, there is a significant negative correlation between the unemployment rate and performance, especially over the long term.

Appendices

Appendix 1: Balance sheet and profit and loss account, providing basic financial information, according to the Deutsche Bundesbank

Formblatt 1

Jahresbilanz zum
der

Aktivseite				Passivseite			
		Euro	Euro		Euro	Euro	Euro
1.	Barreserve			1. Verbindlichkeiten gegenüber Kredit-			
	a) Kassenbestand		.....	instituten ⁹⁾			
	b) Guthaben bei Zentralno-		.....	a) täglich fällig			
tenbanken	darunter:			b) mit vereinbarter Laufzeit		.....	
	bei der Deut-			oder Kün-			
schen Bundesbank	 Euro			digungsfrist		.....	.....
	c) Guthaben bei Postgiroäm-			2. Verbindlichkeiten gegenüber Kun-			
tern	.....	.....	.....	den ⁷⁾			
2. Schuldtitel öffentlicher Stellen und				a) Spareinlagen			
	Wechsel, die zur Refinanzie-			aa) mit verein-			
rung bei	Zentralnotenbanken zuge-			barter Kündigungsfrist	.....		
lassen sind	a) Schatzwechsel und unver-			von			
zinsliche	Schatzanweisungen		.....	drei Monaten			
und ähnliche	Schuldtitel öffent-			ab) mit verein-			
licher Stellen	darunter:			barter Kündigungsfrist			
	Bei der Deut-			von			
schen Bundesbank	refinanzierbar			mehr als drei Monaten	.....		
..... Euro	b) Wechsel	.....	.....	b) andere Verbindlichkeiten			
3. Forderungen an Kreditinstitute ¹⁾				ba) täglich fällig	.....		
a) täglich fällig		.....		bb) mit verein-			
b) andere Forderungen		.....	.....	barter Laufzeit oder			
4. Forderungen an Kunden ²⁾				Kündigungsfrist	.....	.....	.....
	darunter:		.....	8)			
	durch Grundpfandrechte ge-			3. Verbriefte Verbindlichkeiten ⁹⁾			
sichert	 Euro			a) begebene Schuldver-			
	Kommunalkredite Euro			schreibungen		.....	
5. Schuldverschreibungen und andere				b) andere verbrieft Ver-		.....	
festverzinsliche Wertpapiere				bindlichkeiten		.....	
a) Geldmarktpapiere				darunter:			
aa) von öffentli-				Geldmarktpa-			
chen Emittenten	da-	.....		piere Euro			
	runter:			eigene Akzepte			
	leihbar bei der Deutschen			und Solawechsel			
	Bun-			im Umlauf Euro			
desbank Euro	ab) von anderen			3a. Handelsbestand		.....	
Emittenten	da-	.....	.....	4. Treuhandverbindlichkeiten			.....
runter:				darunter:			
				Treuhandkredite Euro			
				5. Sonstige Verbindlichkeiten			.....
				6. Rechnungsabgrenzungsposten ¹⁰⁾			
				6a. Passive latente Steuern			.....

13. Eingefordertes, noch nicht eingezahltes Kapital	.....		
14.)			
14. Sonstige Vermögensgegenstände	.....		
15. Rechnungsabgrenzungsposten ⁵⁾			
16. Aktive latente Steuern	.....		
17. Aktiver Unterschiedsbetrag aus der Vermögensverrechnung	.....		
18. Nicht durch Eigenkapital gedeckter Fehlbetrag	.....		
Summe der Aktiva	.....	Summe der Passiva	.....
		1. Eventualverbindlichkeiten	
		a) Eventualverbindlichkeiten	
		aus	.....
		weitergegebene	
		abgerechneten	
		Wechseln	
		b) Verbindlichkeiten aus	
		Bürgschaften	.....
		und Gewährleistungsverträgen	
		c) Haftung aus der Bestellung von	
		fremde Verbindlichkeiten	.....
		Sicherheiten für	
		lichkeiten	.....
		2. Andere Verpflichtungen	
		a) Rücknahmeverpflichtungen aus	
		unechten Pensionsgeschäften	.....
		b) Platzierungs- und Übernahme-	
		verpflichtungen	.....
		c) Unwiderrufliche Kreditzusagen	.....

¹⁾ Folgende Arten von Instituten haben den Posten 3 Forderungen an Kreditinstitute in der Bilanz wie folgt zu untergliedern:

Pfandbriefbanken:	„a) Hypothekendarlehen	 Euro	
	b) Kommunalkredite	 Euro	
	c) andere Forderungen	 Euro	 Euro
	darunter:		
	täglich fällig	 Euro	
	gegen Beleihung von Wertpapieren	.....	
	Euro“,		
Bausparkassen:	„a) Bauspardarlehen	 Euro	
	b) Vor- und Zwischenfinanzierungskredite	 Euro	
	c) sonstige Baudarlehen	 Euro	
	d) andere Forderungen	 Euro	 Euro
	darunter:		
	täglich fällig	 Euro“.	

²⁾ Folgende Arten von Instituten haben den Posten 4 Forderungen an Kunden in der Bilanz wie folgt zu untergliedern:

Pfandbriefbanken:	„a) Hypothekendarlehen	 Euro	
	b) Kommunalkredite	 Euro	
	c) andere Forderungen	 Euro	 Euro
	darunter:		
	gegen Beleihung von Wertpapieren	.....	
	Euro“,		
Bausparkassen:	„a) Baudarlehen		
	aa) aus Zuteilungen (Bauspardarlehen)	 Euro	
	ab) zur Vor- und Zwischenfinanzierung	 Euro	

ac) sonstige	 Euro	 Euro
	darunter:	
	durch Grundpfand-	
rechte gesichert	Euro	
d) andere Forderungen	 Euro	 Euro."

Kreditgenossenschaften, die das Warengeschäft betreiben, haben in den Posten 4 Forderungen an Kunden in der Bilanz zusätzlich folgenden Darunterposten einzufügen:

„Warenforderungen Euro“.

Finanzdienstleistungsinstitute sowie Kreditinstitute, sofern letztere Skontroführer im Sinne des § 27 Abs. 1 des Börsengesetzes und nicht Einlagenkreditinstitute im Sinne des § 1 Abs. 3d Satz 1 des Gesetzes über das Kreditwesen sind, haben den Posten 4 Forderungen an Kunden in der Bilanz wie folgt zu untergliedern:

„darunter:
an Finanzdienstleistungsinstitute Euro

- 3) Kreditgenossenschaften, die das Warengeschäft betreiben, haben nach dem Posten 6 Aktien und andere nicht festverzinsliche Wertpapiere in der Bilanz folgenden Posten einzufügen:

„6aa. Warenbestand Euro“.

- 4) Institute in genossenschaftlicher Rechtsform und genossenschaftliche Zentralbanken haben den Posten 7 Beteiligungen in der Bilanz wie folgt zu untergliedern:

„a) Beteiligungen Euro
darunter:
an Kreditinstituten Euro
an Finanzdienstleistungsinstituten Euro
b) Geschäftsguthaben bei Genossenschaften Euro
darunter:
bei Kreditgenossenschaften Euro
bei Finanzdienstleistungsinstituten Euro“.

- 5) Pfandbriefbanken haben den Posten 15 Rechnungsabgrenzungsposten in der Bilanz wie folgt zu untergliedern:

„a) aus dem Emissions- und Darlehensgeschäft Euro
b) andere Euro
..... Euro“.

- 6) Folgende Arten von Instituten haben den Posten 1 Verbindlichkeiten gegenüber Kreditinstituten in der Bilanz wie folgt zu untergliedern:

Pfandbriefbanken: „a) begebene Hypotheken-Namenspfandbriefe Euro
b) begebene öffentliche Namenspfandbriefe Euro
c) andere Verbindlichkeiten Euro
darunter:
täglich fällig Euro
zur Sicherstellung aufgenommener Darlehen
an den Darlehensgeber
ausgehändigte Hypotheken-Namenspfand-
briefeEuro
und öffentliche Namenspfandbriefe
Euro“,

Bausparkassen: „a) Bauspareinlagen Euro
darunter:
auf gekündigte Verträge Euro
auf zugeteilte Verträge Euro
b) andere Verbindlichkeiten Euro
..... Euro
darunter:
täglich fällig Euro“.

- 7) Pfandbriefbanken haben den Posten 2 Verbindlichkeiten gegenüber Kunden in der Bilanz wie folgt zu untergliedern:

„a) begebene Hypotheken-Namenspfandbriefe Euro
b) begebene öffentliche Namenspfandbriefe Euro
c) Spareinlagen Euro
ca) mit vereinbarter Kündigungsfrist
von drei Monaten Euro
cb) mit vereinbarter Kündigungsfrist
von mehr als drei Mo-
naten Euro
d) andere Verbindlichkeiten Euro
..... Euro
darunter:

täglich fällig Euro
zur Sicherstellung aufgenommener Darlehen
an den Darlehensgeber
ausgehändigte Hypotheken-Namenspfand-
briefeEuro
und öffentliche Namenspfandbriefe Euro".

Bausparkassen haben statt des Unterpostens a Spareinlagen in der Bilanz folgenden Unterposten auszuweisen:

„a) Einlagen aus dem Bauspargeschäft und Spareinlagen		
aa) Bauspareinlagen	 Euro	
darunter:		
auf gekündigte Verträge	 Euro	
auf zugeteilte Verträge	 Euro	
ab) Abschlusseinlagen	 Euro	
ac) Spareinlagen mit vereinbarter Kündi-		
gungsfrist	 Euro	
von drei Monaten		
ad) Spareinlagen mit vereinbarter Kündi-		
gungsfrist	 Euro	 Euro".
von mehr als drei Mo-		
naten		

Finanzdienstleistungsinstitute sowie Kreditinstitute, sofern letztere Skontroführer im Sinne des § 27 Abs. 1 des Börsengesetzes und nicht Einlagenkreditinstitute im Sinne des § 1 Abs. 3d Satz 1 des Gesetzes über das Kreditwesen sind, haben den Posten 2 Verbindlichkeiten gegenüber Kunden in der Bilanz wie folgt zu untergliedern:

„darunter:
gegenüber Finanzdienstleistungsinstituten Euro

- 8) Kreditgenossenschaften, die das Warengeschäft betreiben, haben nach dem Posten 2 Verbindlichkeiten gegenüber Kunden in der Bilanz folgenden Posten einzufügen:

„2a. Verpflichtungen aus Warengeschäften und
aufgenommenen Warenkrediten
..... Euro".

- 9) Pfandbriefbanken haben den Posten 3 Verbriefte Verbindlichkeiten in der Bilanz wie folgt zu untergliedern:

„a) begebene Schuldverschreibungen			
aa) Hypothekendarlehen	 Euro		
ab) öffentliche Pfandbriefe	 Euro		
ac) sonstige Schuldverschreibungen	 Euro	 Euro	
b) andere verbrieft	 Euro	 Euro	 Euro
darunter:			
Geldmarktpapiere	 Euro".		

Kreditgenossenschaften, die das Warengeschäft betreiben, haben im Posten 3 Verbriefte Verbindlichkeiten zu dem Darunterposten 3b Eigene Akzepte und Solawechsel im Umlauf folgenden zusätzlichen Darunterposten einzufügen:

„aus dem Warengeschäft Euro".

- 10) Pfandbriefbanken haben den Posten 6 Rechnungsabgrenzungsposten in der Bilanz wie folgt zu untergliedern:

„a) aus dem Emissions- und Darlehensgeschäft	 Euro	
b) andere	 Euro	... Euro".

- 11) Bausparkassen haben nach dem Posten 7 Rückstellungen in der Bilanz folgenden Posten einzufügen:

„7a. Fonds zu bauspartechischen Absicherung Euro".

- 12) Genossenschaften haben in der Bilanz beim Unterposten a gezeichnetes Kapital sowohl die Geschäftsguthaben der Genossen als auch die Einlagen stiller Gesellschafter auszuweisen.

- 13) Genossenschaften haben in der Bilanz an Stelle der Gewinnrücklagen die Ergebnisrücklagen auszuweisen und wie folgt aufzugliedern:

„ca) gesetzliche Rücklage	 Euro	
cb) andere Ergebnisrücklagen	 Euro	... Euro".

Die Ergebnisrücklage nach § 73 Abs. 3 des Gesetzes betreffend die Erwerbs- und Wirtschaftsgenossenschaften und die Beträge, die aus dieser Ergebnisrücklage an ausgeschiedene Genossen auszuzahlen sind, müssen vermerkt werden.

- 14) Finanzdienstleistungsinstitute im Sinne des § 1 Absatz 1a Nummer 10 des Kreditwesengesetzes haben Gegenstände, die seitens des Instituts verleast werden und die dem Leasinggeber zuzurechnen sind, in dem gesonderten Aktivposten 10a. Leasingvermögen vor dem Posten 11. Immaterielle Anlagewerte auszuweisen.

Formblatt 2 (Kontoform)

Gewinn- und Verlustrechnung

der
für die Zeit vom bis

Aufwendungen				Erträge	
	Euro	Euro	Euro	Euro	Euro
1. Zinsaufwendungen ¹⁾				1. Zinserträge aus ²⁾	
				a) Kredit- und Geldmarktgeschäften	.....
2. Provisionsaufwendungen ⁴⁾				b) festverzinslichen Wertpapieren und Schuldbuchforderungen	.....
3. Nettoaufwand des Handelsbestands				2. Laufende Erträge aus	
6), 7)				a) Aktien und anderen nicht festver- zins- lichen Wertpapieren	.....
4. Allgemeine Verwaltungsaufwendungen				b) Beteiligungen ³⁾	
a) Personalaufwand				c) Anteilen an verbundenen Unternehmen	.....
aa) Löhne und Gehälter					
ab) Soziale Abgaben und Auf- wendungen für Altersversorgung				3. Erträge aus Gewinngemeinschaften, Gewinnabführungs- oder Teilgewinnabführungsverträgen	.....
für Unterstützung					
darunter: für Altersversor- gung Euro				4. Provisionserträge ⁵⁾	
b) andere Verwaltungsaufwendungen				5. Nettoertrag des Handelsbestands	.....
5. Abschreibungen und Wertberichtigungen auf immaterielle Anlagewerte und Sachanlagen				6), 7)	
6. Sonstige betriebliche Aufwendungen				6. Erträge aus Zuschreibungen zu Forderungen und bestimmten Wertpapieren sowie aus der Auflösung von Rückstellungen im Kreditgeschäft	.....
7. Abschreibungen und Wertberichtigungen auf Forderungen und bestimmte Wertpapiere sowie Zuführungen zu Rückstellungen im Kreditgeschäft				7. Erträge aus Zuschreibungen zu Beteiligungen, Anteilen an verbunden Unternehmen und wie Anlagevermö- gen behandelten Wertpapiere	.....
8. Abschreibungen und Wertberichtigungen auf Beteiligungen, Anteile an verbunde- nen Unternehmen und wie Anlagevermögen behandelte Wertpapiere				8. Sonstige betriebliche Erträge	.....
9. Aufwendungen aus Verlustübernahme				9. (weggefallen)	
10. (weggefallen)				10. Außerordentliche Erträge	.....
11. Außerordentliche Aufwendungen				11. Erträge aus Verlustübernahme	.....
12. Steuern vom Einkommen und vom Ertrag				12. Jahresfehlbetrag	.....
13. Sonstige Steuern, soweit nicht unter Posten 6 ausgewiesen					
14. Auf Grund einer Gewinnngemeinschaft, eines Gewinnabführungs- oder eines Teilgewinnabführungsvertrags abgeführte Gewinne					
15. Jahresüberschuss					
Summe der Aufwendungen				Summe der Erträge	.....

noch Gewinn- und Verlustrechnung (Kontoform)

	Euro	Euro
1. Jahresüberschuss / Jahresfehlbetrag		
2. Gewinnvortrag / Verlustvortrag aus dem Vorjahr		

3.	Entnahmen aus der Kapitalrücklage	.....	
4.	Entnahmen aus Gewinnrücklagen		
a)	aus der gesetzlichen Rücklage	.....	
b)	aus der Rücklage für Anteile an einem herrschenden oder mehrheitlich beteiligten Unternehmen	.....	
c)	aus satzungsmäßigen Rücklagen	.....	
d)	aus anderen Gewinnrücklagen	<u>.....</u>	.....
5.	Entnahmen aus Genussrechtskapital		.....
6.	Einstellungen in Gewinnrücklagen		
a)	in die gesetzliche Rücklage	.....	
b)	in die Rücklage für Anteile an einem herrschenden oder mehrheitlich beteiligten Unternehmen	.....	
c)	in satzungsmäßige Rücklagen	.....	
d)	in andere Gewinnrücklagen	<u>.....</u>	.....
7.	Wiederauffüllung des Genussrechtskapitals		.....
8.	Bilanzgewinn / Bilanzverlust		<u>.....</u>

1) Bausparkassen haben den Posten 1 Zinsaufwendungen in der Gewinn- und Verlustrechnung wie folgt zu untergliedern:

"a) für Bauspareinlagen	 Euro	
b) andere Zinsaufwendungen	<u>..... Euro</u>	 Euro."

2) Bausparkassen haben im Ertragsposten 1 den Unterposten a Zinserträge aus Kredit- und Geldmarktgeschäften in der Gewinn- und Verlustrechnung wie folgt zu untergliedern:

"aa) Bauspardarlehen	 Euro	
ab) Vor- und Zwischenfinanzierungskrediten	 Euro	
ac) sonstigen Baudarlehen	 Euro	
ad) sonstigen Kredit- und Geldmarktgeschäften	<u>..... Euro</u>	 Euro".

3) Institute in genossenschaftlicher Rechtsform und genossenschaftliche Zentralbanken haben im Ertragsposten 2 den Unterposten b Laufende Erträge aus Beteiligungen in der Gewinn- und Verlustrechnung um die Worte "und aus Geschäftsguthaben bei Genossenschaften" zu ergänzen.

4) Bausparkassen haben den Posten 2 Provisionsaufwendungen in der Gewinn- und Verlustrechnung wie folgt zu untergliedern:

"a) Provisionen für Vertragsabschluss und -vermittlung	 Euro	
b) andere Provisionsaufwendungen	<u>..... Euro</u>	 Euro".

Institute, die Skontroführer im Sinne des § 27 Abs. 1 des Börsengesetzes und nicht Einlagenkreditinstitute im Sinne des § 1 Abs. 3d Satz 1 des Gesetzes über das Kreditwesen sind, haben den Aufwandposten 2 Provisionsaufwendungen wie folgt zu untergliedern:

"davon:	
a) Courtageaufwendungen	 Euro
b) Courtage für Poolausgleich	 Euro".

5) Bausparkassen haben den Posten 4 Provisionserträge in der Gewinn- und Verlustrechnung wie folgt zu untergliedern:

„a) aus Vertragsabschluss und -vermittlung	 Euro	
b) aus der Darlehensregelung nach der Zuteilung	 Euro	
c) aus Bereitstellung und Bearbeitung von Vor- und Zwischenfinanzierungskrediten	 Euro	
d) andere Provisionserträge	<u>..... Euro</u>	 Euro".

Institute, die Skontroführer im Sinne des § 27 Abs. 1 des Börsengesetzes und nicht Einlagenkreditinstitute im Sinne des § 1 Abs. 3d Satz 1 des Gesetzes über das Kreditwesen sind, haben den Ertragsposten 4 Provisionserträge wie folgt zu untergliedern:

"davon:	
a) Courtageerträge	 Euro
b) Courtage für Poolausgleich	 Euro".

6) Kreditgenossenschaften, die das Warengeschäft betreiben, haben nach dem Aufwandsposten 3 Nettoaufwand des Handelsbestands oder nach dem Ertragsposten 5 Nettoertrag des Handelsbestands in der Gewinn- und Verlustrechnung folgenden Posten einzufügen:

"3a. / 5a. Rohergebnis aus Warenverkehr und Nebenbetrieben	 Euro".
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7) Finanzdienstleistungsinstitute, sofern sie nicht Skontroführer im Sinne des § 27 Abs. 1 des Börsengesetzes sind, haben anstatt des Aufwandspostens 3 Nettoaufwand des Handelsbestands in der Gewinn- und Verlustrechnung folgenden Posten aufzuführen:

"3. Aufwand des Handelsbestands	 Euro"
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und anstatt des Ertragspostens 5 Nettoertrag des Handelsbestands folgenden Posten aufzuführen:

"5. Ertrag des Handelsbestands	 Euro".
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Institute, die Skontroführer im Sinne des § 27 Abs. 1 des Börsengesetzes und nicht Einlagenkreditinstitute im Sinne des § 1 Abs. 3d Satz 1 des Gesetzes über das Kreditwesen sind, haben anstatt des Aufwandspostens 3 Nettoaufwand des Handelsbestands in der Gewinn- und Verlustrechnung folgende Posten aufzuführen:

3. Aufwand des Handelsbestands	 Euro
--------------------------------	-----------

davon:
a) Wertpapiere Euro
b) Futures Euro
c) Optionen Euro
d) Kursdifferenzen aus Aufgabegeschäften Euro

und anstatt des Ertragspostens 5 Nettoertrag des Handelsbestands folgende Posten aufzuführen:

5. Ertrag des Handelsbestands Euro
davon:
a) Wertpapiere Euro
b) Futures Euro
c) Optionen Euro
d) Kursdifferenzen aus Aufgabegeschäften Euro".

Formblatt 3 (Staffelform)

Gewinn- und Verlustrechnung

der
für die Zeit vombis.....

	Euro	Euro	Euro
1. Zinserträge aus ^{1),9)}			
a) Kredit- und Geldmarktgeschäften			
b) festverzinslichen Wertpapieren und Schuldbuchforderungen			
2. Zinsaufwendungen ^{2),9)}			
3. Laufende Erträge aus			
a) Aktien und anderen nicht festverzinslichen Wertpapieren			
b) Beteiligungen ³⁾			
c) Anteilen an verbundenen Unternehmen			
4. Erträge aus Gewinngemeinschaften, Gewinnabführungs- oder Teilgewinnabführungsverträgen			
5. Provisionserträge ⁴⁾			
6. Provisionsaufwendungen ⁵⁾			
7. Nettoertrag oder Nettoaufwand des Handelsbestands ^{6),7)}			
8. Sonstige betriebliche Erträge			
9. (weggefallen)			
10. Allgemeine Verwaltungsaufwendungen			
a) Personalaufwand			
aa) Löhne und Gehälter			
ab) Soziale Abgaben und Aufwendungen für Altersversorgung und für Unterstützung			
darunter:			
für Altersversorgung Euro			
b) andere Verwaltungsaufwendungen			
11. Abschreibungen und Wertberichtigungen auf immaterielle Anlagewerte und Sachanlagen ⁸⁾			
12. Sonstige betriebliche Aufwendungen			
13. Abschreibungen und Wertberichtigungen auf Forderungen und bestimmte Wertpapiere sowie Zuführungen zu Rückstellungen im Kreditgeschäft			
14. Erträge aus Zuschreibungen zu Forderungen und bestimmten Wertpapieren sowie aus der Auflösung von Rückstellungen im Kreditgeschäft			
15. Abschreibungen und Wertberichtigungen auf Beteiligungen, Anteile an verbundenen Unternehmen und wie Anlagevermögen behandelte Wertpapiere			
16. Erträge aus Zuschreibungen zu Beteiligungen, Anteilen an verbundenen Unternehmen und wie Anlagevermögen behandelten Wertpapieren			
17. Aufwendungen aus Verlustübernahme			
18. (weggefallen)			
19. Ergebnis der normalen Geschäftstätigkeit			
20. Außerordentliche Erträge			
21. Außerordentliche Aufwendungen			
22. Außerordentliches Ergebnis			
23. Steuern vom Einkommen und vom Ertrag			
24. Sonstige Steuern, soweit nicht unter Posten 12 ausgewiesen			
25. Erträge aus Verlustübernahme			
26. Auf Grund einer Gewinngemeinschaft, eines Gewinnabführungs- oder eines Teilgewinnabführungsvertrags abgeführte Gewinne			
noch Gewinn- und Verlustrechnung (Staffelform)			
27. Jahresüberschuss / Jahresfehlbetrag			
28. Gewinnvortrag / Verlustvortrag aus dem Vorjahr			

29. Entnahmen aus der Kapitalrücklage	.....	.....
30. Entnahmen aus Gewinnrücklagen		.....
a) aus der gesetzlichen Rücklage	.....	
b) aus der Rücklage für Anteile an einem herrschenden oder mehrheitlich beteiligten Unternehmen	.....	
c) aus satzungsmäßigen Rücklagen	.....	
d) aus anderen Gewinnrücklagen	.....	.....
31. Entnahmen aus Genussrechtskapital	.....	.....
32. Einstellungen in Gewinnrücklagen		.....
a) in die gesetzliche Rücklage	.....	
b) in die Rücklage für Anteile an einem herrschenden oder mehrheitlich beteiligten Unternehmen	.....	
c) in satzungsmäßige Rücklagen	.....	
d) in andere Gewinnrücklagen	.....	.....
33. Wiederauffüllung des Genussrechtskapitals	.....	.....
34. Bilanzgewinn / Bilanzverlust	.....	.....
1) Bausparkassen haben im Ertragsposten 1 den Unterposten a Zinserträge aus Kredit- und Geldmarktgeschäften in der Gewinn- und Verlustrechnung wie folgt zu untergliedern:		
"aa) Bauspardarlehen	 Euro	
ab) Vor- und Zwischenfinanzierungskrediten	 Euro	
ac) sonstigen Baudarlehen	 Euro	
ad) sonstigen Kredit- und Geldmarktgeschäften	 Euro	 Euro".
2) Bausparkassen haben den Posten 2 Zinsaufwendungen in der Gewinn- und Verlustrechnung wie folgt zu untergliedern:		
"a) für Bauspareinlagen	 Euro	
b) andere Zinsaufwendungen	 Euro	 Euro."
3) Institute in genossenschaftlicher Rechtsform und genossenschaftliche Zentralbanken haben im Ertragsposten 3 den Unterposten b Laufende Erträge aus Beteiligungen in der Gewinn- und Verlustrechnung um die Worte "und aus Geschäftsguthaben bei Genossenschaften" zu ergänzen.		
4) Bausparkassen haben den Posten 5 Provisionserträge in der Gewinn- und Verlustrechnung wie folgt zu untergliedern:		
"a) aus Vertragsabschluss und -vermittlung	 Euro	
b) aus Darlehensregelungen nach der Zuteilung	 Euro	
c) aus Bereitstellung und Bearbeitung von Vor- und Zwischenfinanzierungskrediten	 Euro	
d) andere Provisionserträge	 Euro	 Euro".
Institute, die Skontroführer im Sinne des § 27 Abs. 1 des Börsengesetzes und nicht Einlagenkreditinstitute im Sinne des § 1 Abs. 3d Satz 1 des Gesetzes über das Kreditwesen sind, haben den Ertragsposten 5 Provisionserträge wie folgt zu untergliedern:		
„davon:		
a) Courtageerträge	 Euro	
b) Courtage aus Poolausgleich	.....	.....
Euro".		
5) Bausparkassen haben den Posten 6 Provisionsaufwendungen in der Gewinn- und Verlustrechnung wie folgt zu untergliedern:		
„a) Provisionen für Vertragsabschluss und -vermittlung	 Euro	
b) andere Provisionsaufwendungen	 Euro	 Euro".
Institute, die Skontroführer im Sinne des § 27 Abs. 1 des Börsengesetzes und nicht Einlagenkreditinstitute im Sinne des § 1 Abs. 3d Satz 1 des Gesetzes über das Kreditwesen sind, haben den Aufwandposten 6 Provisionsaufwendungen wie folgt zu untergliedern:		
„davon:		
a) Courtageaufwendungen	 Euro	
b) Courtage für Poolausgleich	.....	.....
Euro".		
6) Kreditgenossenschaften, die das Warengeschäft betreiben, haben nach dem Aufwand- oder Ertragsposten 7 Nettoertrag oder Nettoaufwand des Handelsbestands in der Gewinn- und Verlustrechnung folgenden Posten einzufügen:		
"7a. Rohergebnis aus Warenverkehr und Nebenbetrieben	 Euro".	
7) Finanzdienstleistungsinstitute, sofern sie nicht Skontroführer im Sinne des § 27 Abs. 1 des Börsengesetzes sind, haben anstatt des Aufwand- oder Ertragsposten 7 Nettoertrag oder Nettoaufwand des Handelsbestands in der Gewinn- und Verlustrechnung folgende Posten aufzuführen:		
"7a. Ertrag des Handelsbestands	 Euro	
7b. Aufwand des Handelsbestands	 Euro".	
Institute, die Skontroführer im Sinne des § 27 Abs. 1 des Börsengesetzes und nicht Einlagenkreditinstitute im Sinne des § 1 Abs. 3d Satz 1 des Gesetzes über das Kreditwesen sind, haben anstatt des Aufwand- oder Ertragspostens 7 Nettoertrag oder Nettoaufwand des Handelsbestands in der Gewinn- und Verlustrechnung folgende Posten aufzuführen:		
"7a. Ertrag des Handelsbestands	 Euro	
davon:		

aa) Wertpapiere	 Euro	
ab) Futures	 Euro	
ac) Optionen	 Euro	
ad) Kursdifferenzen aus Aufgabegeschäften	 Euro	
7b. Aufwand des Handelsbestands		 Euro
davon:		
ba) Wertpapiere	 Euro	
bb) Futures	 Euro	
bc) Optionen	 Euro	
bd) Kursdifferenzen aus Aufgabegeschäften	 Euro	

⁸⁾ Finanzdienstleistungsinstitute im Sinne des § 1 Absatz 1a Nummer 10 des Kreditwesengesetzes haben den Aufwandposten Nummer 11 wie folgt zu untergliedern:

11. Abschreibungen und Wertberichtigungen		
a) auf Leasingvermögen	 Euro	
b) auf immaterielle Anlagewerte und Sachanlagen	 Euro	 Euro.

⁹⁾ Finanzdienstleistungsinstitute im Sinne des § 1 Absatz 1a Nummer 10 des Kreditwesengesetzes haben vor dem Ertragsposten 1. Zinserträge den Posten 01. Leasingerträge und 02. Leasingaufwendungen auszuweisen.

Source: (Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin, 2019)

Note: Appendix 1 is a BaFin form and is publicly accessible, i.e. can be retrieved by anyone. Due to an almost identical structure of the annual financial statements and the profit and loss account at all banks in Germany, the text of the form can be found in hundreds of sources. A statement as “ matching “ in Turnitin is logical, but nevertheless not correct.

Appendix 2: Profit and loss account – Example “Raiffeisenbank Bühlertal”

Raiffeisenbank Bühlertal eG

Vellberg

Jahresabschluss zum 31. Dezember 2018

Lagebericht für das Geschäftsjahr 2018

I. Geschäftsverlauf

1. Entwicklung der Gesamtwirtschaft und der Kreditgenossenschaften

Konjunktur in Deutschland: Wachstumsdynamik lässt nach

Die deutsche Wirtschaft setzte im Jahr 2018 ihren Aufschwung fort. Allerdings fiel der Anstieg des preisbereinigten Bruttoinlandsprodukts gegenüber dem Vorjahr mit 1,4 % merklich schwächer aus als 2017 (+2,2 %). Grund hierfür waren sowohl nachfrageseitige als auch angebotsseitige Faktoren. Einerseits sahen sich die Unternehmen vermehrt angebotsseitigen Engpässen gegenübergestellt, vor allem bei Arbeitskräften und bei Vorleistungsgütern. Zudem beeinträchtigten Sonderfaktoren die Produktion, wie Streiks und eine schwere Grippewelle im Frühjahr sowie ein Pkw-Zulassungsstau (infolge von Problemen mit dem neuen Abgastestverfahren WLTP), der die gesamtwirtschaftliche Entwicklung in der zweiten Jahreshälfte erheblich belastete. Andererseits verlor der Welthandel im Vergleich zum Vorjahr etwas an Schwung, was sich nachfrageseitig dämpfend auswirkte.

Ursache für die schwächere Gangart des Welthandels war insbesondere, dass die globale Konjunkturentwicklung ihren Höhepunkt überschritten hatte und dass sich das handelspolitische Klima verschlechterte. Letzteres lag in erster Linie an der Handelspolitik der US-Regierung. So belegte US-Präsident Donald Trump schrittweise den Import von verschiedenen Produkten wie Stahl und Aluminium mit neuen Zöllen. In Reaktion darauf führten die betroffenen Handelspartner, hier vor allem China, aber auch die europäischen Staaten, Gegenzölle ein. Dennoch wurde das Wirtschaftswachstum hierzulande nur wenig durch die Handelskonflikte beeinträchtigt, nicht zuletzt, weil die Binnennachfrage weiterhin robust expandierte.

Ähnlich wie bereits im Vorjahr trugen die Konsumausgaben spürbar zum Anstieg des BIP bei. Das Ausgabenwachstum blieb aber deutlich hinter dem Zuwachs von 2017 zurück (+1,0 % gegenüber +1,7 %). Der Privatkonsum wurde erneut ausgeweitet (+1,0 %), begünstigt durch die nach wie vor solide Arbeitsmarktentwicklung und die vielfach kräftigen Lohnzuwächse. Zusätzliche Impulse gingen von der zu Jahresbeginn vorgenommenen Verminderung der Beitragssätze zur gesetzlichen Renten- und Krankenversicherung sowie den Entlastungen bei der Einkommensteuer aus. Die Konsumausgaben des Staates legten vor dem Hintergrund höherer Personalaufwendungen und Sachleistungen für Gesundheit und Pflege ebenfalls zu (+1,0 %). Ihr Beitrag zum gesamtwirtschaftlichen Wachstum fiel mit 0,2 Prozentpunkten jedoch geringer aus als der Beitrag der privaten Konsumausgaben mit 0,5 Prozentpunkten.

Finanzmärkte: Katerstimmung an den Finanzmärkten 2018

Nach einem zunächst aussichtsreichen Start in das Jahr 2018 mehrten sich im Jahresverlauf die Risiken für die Kapitalmärkte. Zunächst bot das robuste Wirtschaftswachstum insbesondere in den USA Rückendeckung für steigende Kurse an den Aktienmärkten. Der Dow Jones markierte noch im Oktober ein Allzeithoch bei fast 27.000 Punkten. Geopolitische Risiken überkompensierten jedoch das positive Momentum. Ein wesentlicher Herd für Unsicherheit war die US-Handelspolitik. Insbesondere in der zweiten Jahreshälfte spitzte sich der Handelskonflikt mit China zu, nachdem bereits im Frühjahr Strafzölle auf Aluminium und Stahl eingeführt wurden. Dies, aber auch eine hohe Verschuldung bei den Unternehmen in China belasteten das Wachstum in der Volksrepublik. Hinzu kamen weitere Schwellenländer mit reduziertem Wirtschaftswachstum, was entsprechende Auswirkungen auf den globalen Handel hatte. Neben dem sich abkühlenden Welthandel nahmen weitere politische Risiken die Kapitalmärkte in ihren Bann. Die letzten Hoffnungen auf einen geregelten Brexit wurden von den Marktteilnehmern zum Jahresende weitestgehend begraben.

Die Europäische Zentralbank (EZB) hat zum Jahresende 2018 das Ankaufprogramm für Anleihen beendet – die ultra-lockere Geldpolitik somit gedrosselt. Die Leitzinsen beließen die europäischen Notenbanker jedoch unverändert auf deren historisch niedrigen Niveaus. So blieb der EZB-Hauptrefinanzierungssatz für die Finanzinstitute des Euroraumes bei 0,0 % und der Einlagensatz mit -0,4 % im negativen Bereich.

Die US-amerikanische Zentralbank Fed hat in 2018 den Leitzins weiter erhöht. Mit vier Zinsschritten hoben die Notenbanker den Leitzins von dem Zielkorridor 1,25-1,5 % bis auf 2,25-2,5 % an. Auch die historisch beispiellosen Versuche des US-Präsidenten, Entscheidungen der Fed zu beeinflussen brachte die Fed nicht von ihrem Pfad ab. Die aufgeblähte Bilanz, als Folge früherer Anleihekäufe, reduziert die Fed bereits seit Ende 2017.

Geschäftsentwicklung der Kreditgenossenschaften: Auf hohem Niveau wachsend

Die deutsche Wirtschaft setzte im Jahr 2018 ihren Aufschwung fort. Allerdings fiel der Anstieg des preisbereinigten Bruttoinlandsprodukts gegenüber dem Vorjahr merklich schwächer aus. Auch wenn die wirtschaftliche Entwicklung leicht an Schwung verlor, konnten die 875 Volksbanken und Raiffeisenbanken, PSD Banken, Sparda-Banken sowie die sonstigen Genossenschaftsbanken im zurückliegenden Geschäftsjahr weiter kräftig zulegen. Die positive Geschäftsentwicklung — in den letzten

Jahren mit einem deutlich marktüberdurchschnittlichen Wachstum — zeigt einmal mehr, dass es den Kreditgenossenschaften gelungen ist, das Vertrauen der Kunden in ihr Geschäftsmodell weiter zu stärken und diese mit ihren Leistungen zu überzeugen.

Angesichts der robusten Konjunktur in Deutschland vergaben die Genossenschaftsbanken im Jahr 2018 weiterhin mehr Kredite und konnten maßgeblich zur stabilen Finanzierung der mittelständischen Wirtschaft (in Deutschland) sowie der Privatpersonen beitragen. Treiber hierfür war die nach wie vor rege Nachfrage nach langfristigen Wohnungsbaukrediten, die durch die extrem niedrigen Kreditzinsen, den moderaten Verschuldungsgrad sowie die guten Einkommenszuwächse der Haushalte und das hohe Maß an Arbeitsplatzsicherheit bedingt sein dürfte. Neben den Buchkrediten an private Haushalte weiteten die Banken überdies ihre Kreditvergabe an Unternehmen und wirtschaftlich Selbständige aus.

Das Einlagengeschäft der Genossenschaftsbanken zeigt ebenfalls ein erfreuliches und weiterhin stabiles Wachstum. Im konstanten Umfeld der Niedrigzinsphase fällt die Entwicklung jedoch ausgesprochen heterogen aus. Liquide Bankeinlagen, wie Sichteinlagen, machten den überwiegenden Teil der Zuflüsse bei den Einlagen aus. Sie verzeichneten eine Zunahme von 34,3 Milliarden EUR. Länger laufende und daher weniger liquide Bankeinlagen, wie Sparbriefe verzeichneten hingegen deutliche Abflüsse im knapp einstelligen Milliardenbereich. Termineinlagen und Spareinlagen nahmen erstmals wieder leicht zu. Die weitere Verkürzung der Fristigkeiten der Kundeneinlagen ist auch darin begründet, dass Kunden in Erwartung steigender Zinsen nicht bereit sind, langfristige Zinsbindungen im Einlagenbereich einzugehen. Dieser Trend dürfte sich im kommenden Jahr fortsetzen.

2. Entwicklung der Raiffeisenbank Bühlertal eG

Die Entwicklung der Raiffeisenbank Bühlertal eG im Jahre 2018 war geprägt von deutlichen Zuflüssen bei den Kundeneinlagen sowie einem angemessenen Wachstum der Kundenforderungen und deutlichen Zuwächsen bei den Wertpapieranlagen.

	Berichtsjahr	2017	Veränderung	
	TEUR	TEUR	TEUR	%
Bilanzsumme	211.184	194.624	16.560	8,5
Außerbilanzielle Geschäfte ^{*)}	8.482	8.987	-505	-5,6

^{*)} Hierunter fallen die Posten unter dem Bilanzstrich 1 (Eventualverbindlichkeiten), 2 (Andere Verpflichtungen)

Durch den klaren Fokus auf die Bedürfnisse der Kunden wurden im Kundeneinlagengeschäft überdurchschnittliche und im Kundenkreditgeschäft gute Wachstumsraten erreicht. Die Bilanzsumme hat sich daher im Geschäftsjahr um 16,6 Mio. EUR oder 8,5% erhöht.

Aktivgeschäft	Berichtsjahr	2017	Veränderung	
	TEUR	TEUR	TEUR	%
Kundenforderungen	128.720	122.614	6.106	5,0
Wertpapieranlagen	67.122	57.821	9.301	16,1
Forderungen an Kreditinstitute	5.753	5.580	173	3,1

Getrieben von dem niedrigen Zinsniveau und der anhaltend hohen Beschäftigungsquote besteht weiterhin eine lebhaftere Bautätigkeit in unserem Geschäftsgebiet. Auch im gewerblichen Bereich war eine verstärkte Investitionsbereitschaft zu verzeichnen, weshalb sich die Kundenforderungen von 122,6 Mio. EUR auf 128,7 Mio. EUR wesentlich erhöht haben. Ein weiterer Treiber dieser erfreulichen Entwicklung ist unsere geschäftspolitische Entscheidung, Finanzierungen bis 10 Jahre in die eigenen Bücher zu nehmen.

Dabei verteilen sich die Kundenforderungen zum 31. Dezember 2018 auf über 2.000 Kreditnehmer und setzen sich damit nach wie vor aus kleinteiligen Krediten mit einer sehr hohen Risikostreuung zusammen. Wir haben sowohl nach der Branche als auch nach der Höhe der einzelnen Kreditengagements eine solide und ausgewogene Kreditstruktur. Die Risiken im Kreditgeschäft sind durch Wertberichtigungen in ausreichendem Maße abgedeckt.

Den hohen Zufluss an Kundengeldern auf der Passivseite haben wir nicht in vollem Umfang für das Kundenkreditgeschäft benötigt. In der Folge haben sich unsere Wertpapieranlagen deutlich um 16,1% auf 67,1 Mio. EUR erhöht.

Passivgeschäft	Berichtsjahr	2017	Veränderung	
	TEUR	TEUR	TEUR	%
Verbindlichkeiten gegenüber Kreditinstituten	24.404	24.096	308	1,3
Spareinlagen	42.852	44.069	-1.217	-2,8

andere Einlagen	120.976	104.562	16.414	15,7
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Erfreulicherweise waren im Bereich der Kundeneinlagen überdurchschnittliche Zuwächse von insgesamt 15,2 Mio. EUR zu verzeichnen. Durch das weiterhin niedrige Zinsniveau waren - wie im Vorjahr - Zuflüsse von Kundengeldern insbesondere im kurzfristigen Bereich zu verzeichnen. Darüber hinaus konnten wir ein deutliches Wachstum bei unseren Kündigungsgeldern auf ca. 5 Mio. EUR verzeichnen.

Dienstleistungsgeschäft	Berichtsjahr	2017	Veränderung	
	TEUR	TEUR	TEUR	%
Erträge aus Wertpapierdienstleistungs- und Depotgeschäften	196	230	-34	-14,8
Vermittlungserträge	407	354	53	15,0
darunter				
- Bausparen	115	132	-17	-12,9
- Versicherungen	193	151	42	27,8
Erträge aus Zahlungsverkehr	577	550	27	4,9

Die rückläufigen Erträge aus dem Wertpapiergeschäft konnten wir durch die übrigen Vermittlungserträge insbesondere im Bereich Immobilien und Versicherungen in 2018 kompensieren. Dies ist u.a. das Resultat unserer konsequenten Ausrichtung auf die Kundenbedürfnisse und unsere anlegergerechte Beratung (ganzheitliche Beratung), wobei die Schwerpunkte der Kunden dieses Jahr anders verteilt waren.

Warengeschäft	Berichtsjahr	2017	Veränderung	
	TEUR	TEUR	TEUR	%
Warenumsatz	896	911	-15	-1,6
Warenbestand	136	97	39	40,2
Rohergebnis	116	129	-13	-10,1

Der Umsatz im Warenbereich war in 2018 auf Grund des trockenen Sommers leicht rückläufig. Dies wirkt sich entsprechend auch auf den Rohertrag aus. Umfangreichere Investitionen im Warenbereich sind nicht notwendig.

Investitionen

Investitionen wurden im üblichen Umfang vorgenommen, um die betriebliche Substanz zu erhalten.

Personal- und Sozialbereich

Die Zahl der beschäftigten Arbeitnehmer betrug insgesamt 44 Mitarbeiter, davon 2 Mitarbeiter im Warengeschäft. Der Anteil der weiblichen und männlichen Beschäftigten ist in etwa gleich groß.

Als Arbeitgeber legen wir sehr großen Wert darauf, dass sich unsere Mitarbeiter weiterbilden und ihre Fachkenntnisse auf dem hohem Niveau halten. Die Aus- und Weiterbildung wurde durch innerbetriebliche Schulungen sowie Teilnahme an Kursen und Tagesseminaren bei den genossenschaftlichen Bildungseinrichtungen, beim Baden-Württembergischen Genossenschaftsverband und den Verbundpartnern durchgeführt.

Wir sichern damit den hohen Qualitätsstand unserer Mitarbeiter und sehen dies als Investition in die Zukunft.

Um den weiter ansteigenden Anforderungen der Regulatorik gerecht zu werden, werden wir unseren Personalbestand erhöhen.

Sonstige wichtige Vorgänge im Geschäftsjahr

Wesentliche Vorgänge sowie bedeutende Ereignisse sind im Geschäftsjahr nicht eingetreten.

II. Darstellung der Lage sowie der Chancen und Risiken der voraussichtlichen Entwicklung der Raiffeisenbank Bühleretal eG

1. Gesamtbanksteuerung, Risikomanagement

In unserer Unternehmenskonzeption haben wir uns klar auf die Bedarfssituation unserer Mitglieder ausgerichtet und daraus eine langfristige Unternehmensplanung entwickelt, die eine dauerhafte Begleitung unserer Mitglieder in allen Finanzierungs- und Vermögensanlagenfragen sicherstellt.

Durch eine Eckwertplanung über einen Zeitraum von fünf Jahren und mit Hilfe von Kennzahlen- und Limitsystemen planen und steuern wir die Entwicklung unseres Instituts. Der Begrenzung der Risiken aus unserer Geschäftstätigkeit messen wir besondere Bedeutung bei. Durch Funktionstrennungen in den Arbeitsabläufen und die Tätigkeit unserer funktionsfähigen Internen Revision haben wir die Zuverlässigkeit der Steuerungsinformationen aus der ordnungsgemäßen Geschäftsabwicklung sichergestellt.

Das Risikomanagement zur Früherkennung von Risiken ist vor dem Hintergrund wachsender Komplexität der Märkte im Bankgeschäft von großer Wichtigkeit. Wir verstehen dies als eine zentrale Aufgabe. Die hierfür zuständigen Organisationseinheiten berichten direkt dem Vorstand.

Im Management der Risiken unterscheiden wir zwischen Adressenausfall-, Marktpreis-, Liquiditäts- und operationellen Risiken, wobei die Adressenausfallrisiken einen Schwerpunkt bilden. Das Kreditrisikomanagement, d. h. die Steuerung und Kontrolle der Adressenausfallrisiken nach den Grundsätzen und Leitlinien für die Kreditpolitik des Vorstandes, ist beim Vorstand angesiedelt.

Daneben nehmen wir die Dienste der Genoba bei der Abwicklung problembehafteter Kredite in Anspruch.

Für die Steuerung der Marktpreisrisiken (z. B. Zinsänderungsrisiken) ist der Vorstand verantwortlich. Mit Hilfe eines Limitsystems werden die Marktpreisrisiken der Gesamtbank gesteuert.

Direkte Auswirkungen aus Turbulenzen an den Finanzmärkten reduzieren wir, indem wir im Rahmen unserer Steuerung die Risikopositionen gering halten und unverändert nur bonitätsmäßig einwandfreie Wertpapieranlagen tätigen.

Das Liquiditätsrisiko wird durch die Liquidity Coverage Ratio (LCR) begrenzt. Im Geschäftsjahr war die Zahlungsfähigkeit jederzeit gegeben. Weiterhin wird das Liquiditätsrisiko entsprechenden Stresstests unterworfen.

Den operationellen Risiken begegnen wir mit laufenden Investitionen in neue DV-Systeme über die von uns beauftragte Rechenzentrale und der Optimierung der Arbeitsabläufe. Im Bereich der Handelstätigkeit wird die Minimierung des Betriebsrisikos darüber hinaus durch die klare funktionale Trennung von Handel, Abwicklung, Rechnungswesen und Überwachung unterstützt. Im Kreditgeschäft trägt ebenfalls die funktionale Trennung in die Bereiche "Markt" und "Marktfolge" und der danach ausgerichteten Organisation dieses Bereiches zur Minimierung operationeller Risiken bei. Durch die Verwendung der im Verbund entwickelten Formulare begegnen wir dem Rechtsrisiko. Bei Rechtsstreitigkeiten binden wir die Rechtsabteilung unseres Verbandes bzw. externe Rechtsanwaltskanzleien frühzeitig in die Abwicklung ein.

Über die Steuerung bzw. Minimierung dieser Risikoarten hinaus prüft die eigene Innenrevision, die mit einem Mitarbeiter besetzt ist und von einem externen Dienstleister unterstützt wird, regelmäßig die Systeme und Verfahren sowie die wichtigsten Arbeitsabläufe.

Dieser umfassende Steuerungsansatz erlaubt sowohl die frühzeitige Identifikation von Risiken, die wesentlichen Einfluss auf die Vermögens-, Finanz- und Ertragslage haben können, als auch die zeitnahe Einleitung von entsprechenden Gegenmaßnahmen.

2. Vermögenslage

Das bilanzielle Eigenkapital sowie die Eigenmittelausstattung und Kapitalquoten stellen sich gegenüber dem Vorjahr wie folgt dar:

	Berichtsjahr	2017	Veränderung	
	TEUR	TEUR	TEUR	%
Eigenkapital laut Bilanz 1)	21.647	20.742	905	4,4
Eigenmittel (Art. 72 CRR)	23.846	23.181	665	2,9
Harte Kernkapitalquote	14,1 %	15,1 %		
Kernkapitalquote	14,1 %	15,1 %		
Gesamtkapitalquote	16,4 %	17,7 %		

1) Hierzu rechnen die Passivposten 11 (Fonds für allgemeine Bankrisiken) und 12 (Eigenkapital).

Angemessene Eigenmittel, auch als Bezugsgröße für eine Reihe von Aufsichtsnormen, bilden neben einer stets ausreichenden Liquidität die unverzichtbare Grundlage einer soliden Geschäftspolitik. Die vorgegebenen Anforderungen der CRR und des KWG wurden von uns im Geschäftsjahr 2018 gut eingehalten.

Kundenforderungen

Struktur und räumlicher Umfang unseres Geschäftsgebietes ermöglichten uns weiterhin eine ausgewogene branchen- und größenmäßige Streuung unserer Ausleihungen.

Die durch die Generalversammlung festgesetzten Kredithöchstgrenzen für die einzelnen Kreditnehmer sowie sämtliche Kreditgrenzen der CRR und des KWG wurden während des gesamten Berichtszeitraumes eingehalten.

Die Forderungen an unsere Kunden haben wir auch zum Jahresende 2018 wieder mit besonderer Vorsicht bewertet. Die für erkennbare bzw. latente Risiken in angemessener Höhe gebildeten Einzel- und Pauschalwertberichtigungen wurden von den entsprechenden Aktivposten abgesetzt.

Durch unsere Liquiditätsplanung konnten wir allen vertretbaren und berechtigten Kreditwünschen unserer Kundschaft entsprechen.

Wertpapieranlagen

Die Wertpapieranlagen der Genossenschaft setzen sich wie folgt zusammen:

Wertpapieranlagen	Berichtsjahr	2017	Veränderung	
	TEUR	TEUR	TEUR	%
Anlagevermögen	33.940	32.456	1.484	4,6
Liquiditätsreserve	33.182	25.366	7.816	30,8

Im Jahr 2018 wurden wiederum Wertpapiere im Anlagevermögen auf den niedrigeren Einlöschungskurs (100%) abgeschrieben. Durch fällige Wertpapiere sowie die Kursentwicklung zum Jahresende hat sich der Bestand an versteuerten Kursreserven auf Wertpapiere des Anlagevermögens durch Über-Pari-Abschreibungen von TEUR 1.300 auf TEUR 978 insgesamt verringert.

Insgesamt hat sich der Bestand an Wertpapieren im Vorjahresvergleich deutlich erhöht.

Im Bestand befinden sich überwiegend festverzinsliche Wertpapiere, teilweise als Stufenzinsanleihen ausgestattet sowie verschiedene Investmentfonds. Es handelt sich um EURO Anleihen von Emittenten mit fast ausschließlich erstklassigem Rating (innerhalb Investment Grade). Auch im Jahr 2018 haben wir besonderen Wert auf eine ausgeglichene Laufzeitstruktur gelegt. Die Bewertung erfolgte nach dem strengen Niederstwertprinzip.

Mit den Fälligkeiten höherverzinslicher Wertpapiere im kommenden Jahr wird sich unsere Durchschnittsverzinsung im Depot A weiter vermindern. Die Zinsspanne wird dadurch weiter zurückgehen.

Zinsänderungsrisiko

Im momentanen Zinsumfeld gehen wir von einer länger anhaltenden Niedrigzinsphase aus. Als Ergebnis kann festgestellt werden, dass aus den offenen Festzinspositionen der Bank in den nächsten beiden Jahren entsprechende Zinsänderungsrisiken hervorgehen.

Operationelle Risiken / Sonstige Risiken

Wie jedes Unternehmen muss auch unsere Bank den operationellen Risiken begegnen. Diese können beispielsweise durch System- und Kommunikationsfehler, technische Fehler bei Buchungen, Fehler durch Mitarbeiter, Rechtsrisiken etc. entstehen. Um diese Risiken möglichst gering zu halten, sind wir bemüht, den Qualitätsstandard unserer Mitarbeiter ständig zu verbessern. Hierfür haben wir auch im laufenden Geschäftsjahr entsprechende Schulungsmaßnahmen vorgesehen.

Mitgliedschaft in der Sicherungseinrichtung des BVR

Unsere Bank ist der Sicherungseinrichtung des Bundesverbandes der Deutschen Volksbanken und Raiffeisenbanken e.V. (BVR-SE) angeschlossen. Mit der Zugehörigkeit zum Garantieverbund und durch die Abgabe einer Garantieerklärung haben wir eine Garantieverpflichtung gegenüber dem BVR übernommen.

Mit dem Inkrafttreten des Einlagensicherungsgesetzes (EinSiG) am 3. Juli 2015 ist die neue BVR Institutssicherung (BVR-ISG-Sicherungssystem), eine Einrichtung der BVR Institutssicherung GmbH, Berlin (BVR-ISG), als amtlich anerkanntes Einlagensicherungssystem neben die weiterhin bestehende Sicherungseinrichtung des BVR (BVR-SE) getreten. Die BVR-SE ist als zusätzlich, genossenschaftlicher Schutz im sogenannten dualen System parallel zum BVR-ISG-Sicherungssystem tätig. Zur Erfüllung von § 1 EinSiG i.V. m. § 1 Abs. 3d Satz 1 KWG ist unsere Bank mit Wirkung vom 3. Juli 2015 dem BVR-ISG-Sicherungssystem beigetreten.

3. Finanz- und Liquiditätslage

Die Zahlungsbereitschaft unserer Bank war im abgelaufenen Geschäftsjahr stets gegeben. Die Liquiditätskennzahl (Liquidity Coverage Ratio - LCR) haben wir eingehalten.

Aufgrund unserer Liquiditätslage und -steuerung, der Einbindung in den genossenschaftlichen Liquiditätsverbund und der unterhaltenen Bankguthaben, gehen wir davon aus, dass auch in den kommenden Jahren nicht mit einer Beeinträchtigung der Zahlungsbereitschaft zu rechnen ist.

4. Ertragslage

Die wesentlichen Erfolgskomponenten der Genossenschaft stellen sich im Vergleich zum Vorjahr wie folgt dar:

Erfolgskomponenten	Berichtsjahr	2017	Veränderung	
	TEUR	TEUR	TEUR	%
Zinsüberschuss 1)	4.383	4.366	17	0,4
Provisionsüberschuss 2)	1.128	1.059	69	6,5
Rohergebnis aus Warenverkehr und Nebenbetrieben	116	129	-13	-10,1
Verwaltungsaufwendungen	3.421	3.384	37	1,1
a) Personalaufwendungen	2.164	2.162	2	0,1
b) andere Verwaltungsaufwendungen	1.257	1.221	36	2,9
Betriebsergebnis vor Bewertung 3)	2.128	2.208	-80	-3,6
Bewertungsergebnis 4)	-675	-553	-122	22,1
Ergebnis der normalen Geschäftstätigkeit	1.453	1.656	-203	-12,3
Steueraufwand	441	645	-204	-31,6
Einstellungen in den Fonds für allgemeine Bankrisiken	500	500	0	0,0
Jahresüberschuss	512	510	2	0,4

1) GuV-Posten 1 abzüglich GuV-Posten 2 zuzüglich GuV-Posten 3

2) GuV-Posten 5 abzüglich GuV-Posten 6

3) Saldo aus den GuV-Posten 1 bis 12

4) Saldo aus den GuV-Posten 13 bis 16

Die Kapitalrendite (Jahresüberschuss nach Steuern/Bilanzsumme) betrug im Geschäftsjahr 0,24 % (Vorjahr 0,26 %). Mit dem Ergebnis unserer Gewinn- und Verlustrechnung im Geschäftsjahr 2018 sind wir zufrieden. Insgesamt gesehen ist die Ertragslage unserer Kreditgenossenschaft stabil auf einem soliden Niveau:

Der Zinsüberschuss erhöhte sich im Vorjahresvergleich um TEUR 17.

Der Provisionsüberschuss konnte in 2018 durch höhere Erlöse insbesondere im Versicherungs- und Immobilienvermittlungsbereich um TEUR 69 gesteigert werden.

Die Personalaufwendungen fallen in etwa in gleicher Höhe aus wie im Vorjahr, die anderen Verwaltungsaufwendungen haben sich durch Investitionen in den Betrieb leicht erhöht. Unsere ordentlichen Verwaltungsaufwendungen sind insgesamt als günstig zu bezeichnen.

Das Betriebsergebnis vor Bewertung liegt auf Grund von außerordentlichen Erlösen (Sonderfaktoren) im Vorjahr um TEUR 80 unter Vorjahr.

Auch dieses Jahr haben wir wiederum TEUR 500 in den Fonds für allgemeine Bankrisiken gem. § 340g HGB eingestellt.

Der verbleibende Jahresüberschuss liegt über dem des Vorjahres und erlaubt eine Dividendenzahlung von 5,0 % auf die Geschäftsguthaben unserer Mitglieder und eine weitere Dotierung unserer Rücklagen.

5. Zusammenfassende Beurteilung der Lage

Die künftige Entwicklung unserer Bank richtet sich vor allem nach den strukturellen Besonderheiten unseres Geschäftsgebietes und sonstigen verschiedenen Faktoren. Der Niedrigzinsphase begegnen wir durch weiteres Wachstum bei gleichzeitigen Maßnahmen auf der Kostenseite. Hier sehen wir noch Potenziale, um die Ertragslage im laufenden Geschäftsjahr zu stabilisieren. Unsere Risiken liegen weiterhin insbesondere im Bereich der Marktpreisrisiken, da wir hier von den externen, nicht beeinflussbaren Märkten abhängig sind. Im Kreditgeschäft sehen wir auf Grund der breiten Streuung keine besonderen Risiken auf uns zukommen.

Die vorhandene Liquidität der Bank ist ausreichend um berechnete Kreditwünsche unserer Kunden zu erfüllen und gleichzeitig die gesetzlichen Vorgaben einzuhalten. Mit der vorhandenen Eigenkapitalausstattung kann weiter eine solide Geschäftspolitik betrieben werden, die die Einhaltung der von der Bundesanstalt für Finanzdienstleistungsaufsicht nach den Bestimmungen des KWG/CRR aufgestellten Grundsätze gewährleistet. Besondere Risiken sind auf Grund der strukturellen Gegebenheiten der Bank nicht zu erwarten.

III. Voraussichtliche Entwicklung (Prognosebericht)

Unsere Prognose des letzten Jahres ist eingetroffen und wurde im Bereich des Kundengeschäfts übertroffen.

In den nächsten beiden Geschäftsjahren rechnen wir mit moderaten Zuwächsen bei den Kundenkrediten und -einlagen. Wir legen Wert auf qualitatives Wachstum und gehen von einer weiterhin anhaltenden Spartätigkeit der Privathaushalte, vor allem im Vorsorgesparsen, aus.

Mit einer Beeinträchtigung der Zahlungsbereitschaft ist nicht zu rechnen. Die Vermögenslage ist gut. Vorrangiges Ziel ist die Stabilisierung der Ertragslage, der wir größte Aufmerksamkeit schenken. Auf Grund der Niedrigzinsphase sowie der zunehmenden Regulatorik müssen hier größere Anstrengungen unternommen werden. Auch die Vereinheitlichung der Abläufe ist ein wesentlicher Punkt für Effizienzsteigerungen.

Nach unserer Ergebnisvorschaurechnung für 2019 wird die Ertragslage zwar weiterhin gut bleiben, wir rechnen mit einem leicht niedrigeren Betriebsergebnis vor Bewertung, wobei die Risiken der künftigen Entwicklung vornehmlich im Bereich der Zinsänderungsrisiken liegen. Der Zinsüberschuss kann bei der anhaltenden Niedrigzinspolitik der EZB im besten Fall stabil gehalten werden.

Die Erträge aus dem Dienstleistungsgeschäft wollen wir weiter ausbauen und sehen hierin Chancen in einer verstärkten Marktbearbeitung.

Abzuwarten bleibt, wie sich die EZB angesichts des sich verbessernden wirtschaftlichen Umfelds verhält. Die in den USA erfolgten Zinserhöhungen könnten sich auch bei uns widerspiegeln. Dem widerspricht allerdings die anhaltend hohe Staatsverschuldung in der Eurozone. Diese Entwicklung, zusammen mit der Inflation und der Zinspolitik der EZB, sind wesentliche Rahmenbedingungen, die auch unsere Entwicklung in Deutschland und damit die Entwicklung der Raiffeisenbank Bühlertal eG beeinflussen können.

Vellberg, 25. März 2019

Raiffeisenbank Bühlertal eG

Der Vorstand

Keil

Högel

1. Jahresbilanz zum 31. Dezember 2018

Raiffeisenbank Bühlertal eG, Vellberg

Genossenschaftsregisternummer 570004 beim Amtsgericht Stuttgart

Aktivseite

	Geschäftsjahr				Vorjahr
	EUR	EUR	EUR	EUR	TEUR
1. Barreserve					
a) Kassenbestand			2.581.497,01		2.170
b) Guthaben bei Zentralnotenbanken			766.520,00		134
darunter: bei der Deutschen Bundesbank	766.520,00				(134)
c) Guthaben bei Postgiroämtern			0,00	3.348.017,01	0
2. Schuldtitel öffentlicher Stellen und Wechsel, die zur Refinanzierung bei Zentralnotenbanken zugelassen sind					
a) Schatzwechsel und unverzinsliche Schatzanweisungen sowie ähnliche Schuldtitel öffentlicher Stellen			0,00		0

darunter: bei der Deutschen Bundesbank refinanzierbar	0,00		(0)
b) Wechsel		0,00	0
3. Forderungen an Kreditinstitute			
a) täglich fällig		5.009.854,20	4.844
b) andere Forderungen		743.075,82	5.752.930,02 736
4. Forderungen an Kunden			128.720.140,46 122.614
darunter:			
durch Grundpfandrechte gesichert	74.599.739,11		(69.547)
Kommunalkredite	112.446,08		(121)
Warenforderungen	12.882,11		(4)
5. Schuldverschreibungen und andere festverzinsliche Wertpapiere			
a) Geldmarktpapiere			
aa) von öffentlichen Emittenten	0,00		0
darunter: beleihbar bei der Deutschen Bundesbank	0,00		(0)
ab) von anderen Emittenten	998.732,59	998.732,59	0
darunter: beleihbar bei der Deutschen Bundesbank	0,00		(0)
b) Anleihen und Schuldverschreibungen			
ba) von öffentlichen Emittenten	6.064.753,76		4.545
darunter: beleihbar bei der Deutschen Bundesbank	5.053.219,51		(0)
bb) von anderen Emittenten	56.083.396,83	62.148.150,59	50.284
darunter: beleihbar bei der Deutschen Bundesbank	26.080.920,14		(30.499)
c) eigene Schuldverschreibungen		0,00	63.146.883,18 0
Nennbetrag	0,00		(0)
6. Aktien und andere nicht festverzinsliche Wertpapiere			3.975.353,31 2.992
6a. Handelsbestand		0,00	0
6aa. Warenbestand		136.121,99	97
7. Beteiligungen und Geschäftsguthaben bei Genossenschaften			
a) Beteiligungen		3.926.210,40	3.964
darunter:			
an Kreditinstituten	910.628,80		(911)

an Finanzdienstleistungsinstituten	0,00		(0)
b) Geschäftsguthaben bei Genossenschaften		275.750,00	4.201.960,40 276
darunter:			
bei Kreditgenossenschaften	105.000,00		(105)
bei Finanzdienstleistungsinstituten	0,00		(0)
8. Anteile an verbundenen Unternehmen		0,00	0
darunter:			
an Kreditinstituten	0,00		(0)
an Finanzdienstleistungsinstituten	0,00		(0)
9. Treuhandvermögen		16.748,25	25
darunter: Treuhandkredite	16.748,25		(25)
10. Ausgleichsforderungen gegen die öffentliche Hand einschließlich Schuldverschreibungen aus deren Umtausch		0,00	0
11. Immaterielle Anlagewerte			
a) Selbst geschaffene gewerbliche Schutzrechte und ähnliche Rechte und Werte	0,00		0
b) entgeltlich erworbene Konzessionen, gewerbliche Schutzrechte und ähnliche Rechte und Werte sowie Lizenzen an solchen Rechten und Werten	0,00		0
c) Geschäfts- oder Firmenwert	0,00		0
d) geleistete Anzahlungen	0,00	0,00	0
12. Sachanlagen		1.696.749,85	1.806
13. Sonstige Vermögensgegenstände		181.389,19	125
14. Rechnungsabgrenzungsposten		7.982,78	12
Summe der Aktiva		211.184.276,44	194.624

Passivseite

	Geschäftsjahr				Vorjahr
	EUR	EUR	EUR	EUR	TEUR
1. Verbindlichkeiten gegenüber Kreditinstituten					
a) täglich fällig			0,00		0
b) mit vereinbarter Laufzeit oder Kündigungsfrist			24.403.809,48	24.403.809,48	24.096

2. Verbindlichkeiten gegenüber Kunden

a) Spareinlagen				
aa) mit vereinbarter Kündigungsfrist von drei Monaten	40.449.385,67			40.721
ab) mit vereinbarter Kündigungsfrist von mehr als drei Monaten	2.402.810,38	42.852.196,05		3.348
b) andere Verbindlichkeiten				
ba) täglich fällig	110.314.338,67			99.130
bb) mit vereinbarter Laufzeit oder Kündigungsfrist	10.661.172,69	120.975.511,36	163.827.707,41	5.432
2a. Verpflichtungen aus Warengeschäften und aufgenommenen Warenkrediten			5.909,36	4
3. Verbriefte Verbindlichkeiten				
a) begebene Schuldverschreibungen		0,00		0
b) andere verbrieftete Verbindlichkeiten		0,00	0,00	0
darunter:				
Geldmarktpapiere	0,00			(0)
eigene Akzepte und Solawechsel im Umlauf	0,00			(0)
3a. Handelsbestand			0,00	0
4. Treuhandverbindlichkeiten			16.748,25	25
darunter: Treuhandkredite	16.748,25			(25)
5. Sonstige Verbindlichkeiten			607.978,18	212
6. Rechnungsabgrenzungsposten			49.347,51	16
6a. Passive latente Steuern			0,00	0
7. Rückstellungen				
a) Rückstellungen für Pensionen u. ähnliche Verpflichtungen		0,00		0
b) Steuerrückstellungen		230.572,03		473
c) andere Rückstellungen		394.997,90	625.569,93	425
8. [gestrichen]			0,00	0
9. Nachrangige Verbindlichkeiten			0,00	0
10. Genussrechtskapital			0,00	0
darunter: vor Ablauf von zwei Jahren fällig	0,00			(0)
11. Fonds für allgemeine Bankrisiken			7.250.000,00	6.750

darunter: Sonderposten nach § 340e Abs. 4 HGB	0,00	(0)
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12. Eigenkapital

a) Gezeichnetes Kapital	3.038.970,36	2.998
b) Kapitalrücklage	163.741,22	164
c) Ergebnissrücklagen		
ca) gesetzliche Rücklage	5.348.219,27	5.165
cb) andere Ergebnissrücklagen	5.334.300,00 10.682.519,27	5.154
d) Bilanzgewinn	511.975,47	14.397.206,32 510
Summe der Passiva	211.184.276,44	194.624

	Geschäftsjahr				Vorjahr
	EUR	EUR	EUR	EUR	TEUR

1. Eventualverbindlichkeiten

a) Eventualverbindlichkeiten aus weitergegebenen abgerechneten Wechseln	0,00	0
b) Verbindlichkeiten aus Bürgschaften und Gewährleistungsverträgen	1.548.514,73	2.475
c) Haftung aus der Bestellung von Sicherheiten für fremde Verbindlichkeiten	0,00	1.548.514,73 0

2. Andere Verpflichtungen

a) Rücknahmeverpflichtungen aus unechten Pensionsgeschäften	0,00	0
b) Platzierungs- u. Übernahmeverpflichtungen	0,00	0
c) Unwiderrufliche Kreditzusagen	6.933.377,77 6.933.377,77	6.512
darunter: Lieferverpflichtungen aus zinsbezogenen Termingeschäften	0,00	(0)

2. Gewinn- und Verlustrechnung für die Zeit vom 1. Januar 2018 bis 31. Dezember 2018

	Geschäftsjahr				Vorjahr
	EUR	EUR	EUR	EUR	TEUR

1. Zinserträge aus

a) Kredit- und Geldmarktgeschäften	3.283.326,37	3.387
b) festverzinslichen Wertpapieren und Schuldbuchforderungen	1.302.828,63 4.586.155,00	1.252

2. Zinsaufwendungen	382.766,40	4.203.388,60 457
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3. Laufende Erträge aus

a) Aktien und anderen nicht festverzinslichen Wertpapieren	75.995,16	80
b) Beteiligungen und Geschäftsguthaben bei Genossenschaften	103.707,15	104
c) Anteilen an verbundenen Unternehmen	0,00	179.702,31 0

4. Erträge aus Gewinngemeinschaften, Gewinnabführungs- oder Teilgewinnabführungsverträgen	0,00	0
5. Provisionserträge	1.242.803,31	1.176
6. Provisionsaufwendungen	115.034,05	1.127.769,26 117
7. Nettoertrag/-aufwand des Handelsbestands	0,00	0
7a. Rohergebnis aus Warenverkehr und Nebenbetrieben	115.969,84	129
8. Sonstige betriebliche Erträge	115.384,76	239
9. [gestrichen]	0,00	0
10. Allgemeine Verwaltungsaufwendungen		
a) Personalaufwand		
aa) Löhne und Gehälter	1.837.045,66	1.813
ab) Soziale Abgaben und Aufwendungen für Altersversorgung und für Unterstützung	326.493,94	2.163.539,60 350
darunter: für Altersversorgung	11.530,81	(16)
b) andere Verwaltungsaufwendungen	1.257.216,68	3.420.756,28 1.221
11. Abschreibungen und Wertberichtigungen auf immaterielle Anlagewerte und Sachanlagen	180.479,05	161
12. Sonstige betriebliche Aufwendungen	13.310,05	40
13. Abschreibungen und Wertberichtigungen auf Forderungen und bestimmte Wertpapiere sowie Zuführungen zu Rückstellungen im Kreditgeschäft	474.723,19	235
14. Erträge aus Zuschreibungen zu Forderungen und bestimmten Wertpapieren sowie aus der Auflösung von Rückstellungen im Kreditgeschäft	0,00	-474.723,19 0
15. Abschreibungen und Wertberichtigungen auf Beteiligungen, Anteile an verbundenen Unternehmen und wie Anlagevermögen behandelte Wertpapiere	200.173,05	317
16. Erträge aus Zuschreibungen zu Beteiligungen, Anteilen an verbundenen Unternehmen und wie Anlagevermögen behandelten Wertpapieren	0,00	-200.173,05 0
17. Aufwendungen aus Verlustübernahme	0,00	0
18. [gestrichen]	0,00	0
19. Ergebnis der normalen Geschäftstätigkeit	1.452.773,15	1.656
20. Außerordentliche Erträge	0,00	0
21. Außerordentliche Aufwendungen	0,00	0
22. Außerordentliches Ergebnis	0,00	(0)
23. Steuern vom Einkommen und vom Ertrag	433.601,70	638
darunter: latente Steuern	0,00	(0)
24. Sonstige Steuern, soweit nicht unter Posten 12 ausgewiesen	7.195,98	440.797,68 7

24a. Aufwendungen aus der Zuführung zum Fonds für allgemeine Bankrisiken	500.000,00	500
25. Jahresüberschuss	511.975,47	510
26. Gewinnvortrag aus dem Vorjahr	0,00	0
	511.975,47	510
27. Entnahmen aus Ergebnismrücklagen		
a) aus der gesetzlichen Rücklage	0,00	0
b) aus anderen Ergebnismrücklagen	0,00	0,00
	511.975,47	510
28. Einstellungen in Ergebnismrücklagen		
a) in die gesetzliche Rücklage	0,00	0
b) in andere Ergebnismrücklagen	0,00	0,00
29. Bilanzgewinn	511.975,47	510

3. Anhang für das Geschäftsjahr 2018

A. Allgemeine Angaben

Der Jahresabschluss wurde nach den Vorschriften des Handelsgesetzbuches (HGB) und der Verordnung über die Rechnungslegung der Kreditinstitute und Finanzdienstleistungsinstitute (RechKredV) aufgestellt. Gleichzeitig erfüllt der Jahresabschluss die Anforderungen des Genossenschaftsgesetzes (GenG) und der Satzung der Bank.

Gemäß Art. 67 Einführungsgesetz zum Handelsgesetzbuch (EGHGB) wird die (nachstehende) im Jahresabschluss 2010 angewandte Übergangsvorschrift des Bilanzrechtsmodernisierungsgesetzes (BilMoG) (hier: Beibehaltungs- und Fortführungswahlrechte für bestimmte Bilanzposten und Wertansätze) entsprechend der Rechtslage vor Inkrafttreten des BilMoG wie folgt fortgeführt:

- Beibehaltung der steuerrechtlichen Abschreibungen (§ 279 Abs. 2 i. V. m. § 254 Satz 1 HGB a. F.) nach Art. 67 Abs. 4 Satz 1 EGHGB

B. Erläuterungen zu den Bilanzierungs-, Bewertungs- und Umrechnungsmethoden

Die Bewertung der Vermögensgegenstände und Schulden entspricht den allgemeinen Bewertungsvorschriften der § 252 ff. HGB unter Berücksichtigung der für Kreditinstitute geltenden Sonderregelungen (§§ 340 ff. HGB).

Bei der Aufstellung der Bilanz und der Gewinn- und Verlustrechnung wurden folgende Bilanzierungs-, Bewertungs- und Umrechnungsmethoden angewandt:

Barreserve

Die auf EUR lautende Barreserve wurde mit dem Nennwert angesetzt. Die Bewertung der Sorten erfolgte zum Kassakurs am Bilanzstichtag.

Forderungen an Kreditinstitute und an Kunden

Forderungen an Kreditinstitute und an Kunden wurden mit dem Nennwert angesetzt, wobei der Unterschiedsbetrag zwischen dem höheren Nennwert und dem Auszahlungsbetrag - sofern Zinscharakter vorliegt - in den passiven Rechnungsabgrenzungsposten abgegrenzt wurde. Dieser Unterschiedsbetrag wird grundsätzlich planmäßig, und zwar zinsanteilig, aufgelöst.

Die bei den Forderungen an Kunden erkennbaren Bonitätsrisiken sind durch Bildung von Einzelwertberichtigungen abgedeckt. Für die latenten Kreditrisiken wurde unter Berücksichtigung der steuerlichen Richtlinien eine Pauschalwertberichtigung gebildet. Zusätzlich bestehen zur Sicherung gegen die besonderen Risiken des Geschäftszweigs Vorsorgereserven gemäß § 340f HGB und ein Sonderposten für allgemeine Bankrisiken gemäß § 340g HGB. Die Wahlrechte gemäß § 340f HGB und § 340c HGB wurden in Anspruch genommen.

Wertpapiere

Die wie Umlaufvermögen behandelten festverzinslichen Wertpapiere, Aktien und andere nicht festverzinsliche Wertpapiere wurden nach dem strengen Niederstwertprinzip bewertet. Dabei wurden die von den „Wertpapiermitteilungen“ (WM-Datenservice) zur Verfügung gestellten Jahresschlusskurse herangezogen.

Die wie Anlagevermögen behandelten Wertpapiere sind nach dem strengen Niederstwertprinzip bewertet. Anschaffungskosten über pari wurden auf den niedrigeren Einlösungskurs abgeschrieben.

Für die Credit Linked Notes der DZ Bank AG wurden die in Absprache mit den Verbänden von der DZ BANK gestellten Kurse verwendet.

Für ein bei Kauf abgezinste Commercial Paper erfolgte ein über die Laufzeit berechneter Kurswert von WM-Datenservice.

Es bestehen Vorsorgereserven nach § 340f HGB.

Derivative Finanzinstrumente

Strukturierte Finanzinstrumente, die keine wesentlich erhöhten oder zusätzlichen (andersartigen) Risiken oder Chancen aufweisen, werden als einheitlicher Vermögensgegenstand nach den allgemeinen Grundsätzen bilanziert und bewertet.

Die Finanzinstrumente des Zinsbuchs werden im Rahmen einer Gesamtbetrachtung aller zinstragenden bilanziellen und außerbilanziellen Positionen des Bankbuchs nach Maßgabe von IDW RS BFA 3 verlustfrei bewertet. Hierbei werden die zinsinduzierten Barwerte den Buchwerten gegenübergestellt und von dem positiven Überschuss die Risiko- und Bestandsverwaltungskosten abgezogen. Für einen danach eventuell verbleibenden Verlustüberhang wird eine Drohverlustrückstellung gebildet, die unter den anderen Rückstellungen ausgewiesen wird. Nach dem Ergebnis der Berechnungen zum 31. Dezember 2018 war keine Rückstellung zu bilden.

Strukturierte Finanzinstrumente, deren Tilgung zum Nennwert vom Nichteintritt eines Kreditereignisses bei einem Referenzaktivismus abhängt (Credit Linked Notes) und nach dem strengen Niederstwertprinzip auf Basis einer Notierung auf einem aktiven Markt bewertet werden, werden als einheitlicher Vermögensgegenstand bilanziert, auch wenn sie durch das eingebettete Derivat wesentlich erhöhte oder zusätzliche (andersartige) Risiken und Chancen aufweisen, weil die besonderen Risiken des strukturierten Finanzinstruments durch eine objektivierte Bewertung zutreffend dargestellt werden (nominal TEUR 16.000).

Warenbestand

Die Bewertung des Warenbestandes erfolgte zu den Anschaffungs- bzw. Herstellungskosten oder zum niedrigeren Marktpreis. Bei der Bewertung wurde der Grundsatz der verlustfreien Bewertung beachtet. Gleichartige und annähernd gleichwertige Warenartikel wurden für Zwecke der Bewertung zu einer Gruppe zusammengefasst.

Beteiligungen und Geschäftsguthaben bei Genossenschaften

Die Beteiligungen und die Geschäftsguthaben bei Genossenschaften wurden grundsätzlich zu fortgeführten Anschaffungskosten bilanziert.

Treuhandvermögen

Die Bewertung des Treuhandvermögens erfolgte zu den Anschaffungskosten bzw. zum Nennwert.

Sachanlagen

Die Sachanlagen wurden zu den Anschaffungskosten und, soweit abnutzbar, unter Berücksichtigung planmäßiger Abschreibungen bewertet. Die Abschreibungen wurden über die betriebsgewöhnliche Nutzungsdauer, die sich grundsätzlich an den von der Finanzverwaltung veröffentlichten Abschreibungstabellen orientiert, vorgenommen.

Abschreibungen gemäß § 6b EStG für vor dem 1. Januar 2010 angeschaffte Sachanlagen wurden weitergeführt.

Die angeschafften geringwertigen Wirtschaftsgüter mit einem Netto-Einzelwert bis zu EUR 250 wurden in voller Höhe als andere Verwaltungsaufwendungen erfasst. Sie wurden in voller Höhe abgeschrieben, sofern die Anschaffungs- oder Herstellungskosten, vermindert um einen darin enthaltenen Vorsteuerbetrag, für das einzelne Wirtschaftsgut über EUR 250, aber nicht über EUR 800 lagen.

Sonstige Vermögensgegenstände

Die Bewertung der sonstigen Vermögensgegenstände erfolgte nach den Grundsätzen des strengen Niederstwertprinzips.

Aktive latente Steuern

Aktive latente Steuern wurden in Ausübung des Wahlrechts nach § 274 Abs. 1 Satz 2 HGB nicht angesetzt.

Verbindlichkeiten

Die Passivierung der Verbindlichkeiten erfolgte zu dem jeweiligen Erfüllungsbetrag. Unterschiedsbeträge zwischen dem Erfüllungsbetrag einer Verbindlichkeit und dem niedrigeren Ausgabebetrag wurden in den aktiven Rechnungsabgrenzungsposten eingestellt. Der Unterschiedsbetrag wird planmäßig auf die Laufzeit der Verbindlichkeit verteilt.

Treuhandverbindlichkeiten

Die Bewertung der Treuhandverbindlichkeiten erfolgte zum Erfüllungsbetrag, der mit dem Nennwert der Verpflichtung übereinstimmt.

Passive latente Steuern

Passive latente Steuern bestehen nicht.

Rückstellungen

Der Belastung aus Einlagen mit steigender Verzinsung und aus Zuschlägen sowie sonstigen über den Basiszins hinausgehenden Vorteilen für Einlagen wurde durch Rückstellungsbildung in angemessenem Umfang Rechnung getragen.

Im Übrigen wurden für ungewisse Verbindlichkeiten Rückstellungen in angemessener Höhe gebildet.

Rückstellungen mit einer Restlaufzeit von über einem Jahr wurden gemäß § 253 Abs. 2 HGB abgezinst.

Währungsumrechnung

Aufwendungen und Erträge, die sich aus der Währungsumrechnung ergeben, sind in der Gewinn- und Verlustrechnung berücksichtigt.

Angaben zur Behandlung von negativen Zinsen

Negative Zinsen auf finanzielle Vermögenswerte bzw. finanzielle Verbindlichkeiten werden in der Gewinn- und Verlustrechnung bei den betreffenden Zinserträgen bzw. Zinsaufwendungen in Abzug gebracht.

Verwendung des Jahresergebnisses

Der Jahresabschluss wurde vor Verwendung des Jahresergebnisses aufgestellt.

C. Entwicklung des Anlagevermögens 2018

	Anschaffungs- / Herstellungskosten zu Beginn des Geschäftsjahres EUR	Zugang (a) Zuschreibungen (b) Im Geschäftsjahr EUR	Umbuchungen (a) Abgänge (b) EUR	Anschaffungs- / Herstellungskosten am Ende des Geschäftsjahres EUR
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Immaterielle Anlagenwerte

entgeltlich erworbene Konzessionen, gewerbliche Schutzrechte und ähnliche Rechte und Werte sowie Lizenzen an solchen Rechten und Werten	434,00	0,00 (a)	0,00 (a)	0,00
		0,00 (b)	434,00 (b)	

Sachanlagen

a) Grundstücke und Gebäude	2.798.638,18	0,00 (a)	0,00 (a)	2.798.638,18
		0,00 (b)	0,00 (b)	
b) Betriebs- und Geschäftsausstattung	897.978,58	71.442,05 (a)	0,00 (a)	952.159,87
		0,00 (b)	17.260,76 (b)	
Summe a	3.697.050,76	71.442,05 (a)	0,00 (a)	3.750.798,05
		0,00 (b)	17.694,76 (b)	
		Änderungen der gesamten Abschreibungen im Zusammenhang mit		
Abschreibungen zu Beginn des Geschäftsjahres	Abschreibungen Geschäftsjahr (a) Zuschreibungen	Zugängen (a) Zuschreibungen (b) EUR	Umbuchungen (a) Abgänge (b) EUR	Abschreibungen am Ende des Geschäftsjahres EUR
		Buchwerte Bilanzstichtag (Vorjahr) EUR		

	(gesamt) EUR	Geschäftsjahr (b)			(gesamt) EUR	
Immaterielle Anlagenwerte						
entgeltlich erworbene Konzessionen, gewerbliche Schutzrechte und ähnliche Rechte und Werte sowie Lizenzen an solchen Rechten und Werten	434,00	0,00 (a)	0,00 (a)	0,00 (a)	0,00	0,00
		0,00 (b)	0,00 (b)	434,00 (b)		(0,00)

Sachanlagen						
a) Grundstücke und Gebäude	1.339.926,33	81.267,00 (a)	0,00 (a)	0,00 (a)	1.421.193,33	1.377.444,85
		0,00 (b)	0,00 (b)	0,00 (b)		(1.458.711,85)
b) Betriebs- und Geschäftsausstattung	550.903,58	99.212,05 (a)	0,00 (a)	0,00 (a)	632.854,87	319.305,00
		0,00 (b)	0,00 (b)	17.260,76 (b)		(347.075,00)
Summe a	1.891.263,91	180.479,05 (a)	0,00 (a)	0,00 (a)	2.054.048,20	1.696.749,85
		0,00 (b)	0,00 (b)	17.694,76 (b)		(1.805.786,85)

	Anschaffungskosten zu Beginn des Geschäftsjahres EUR	Veränderungen (s) EUR
Wertpapiere des Anlagevermögens	33.689.400,00	-167.110,00
Beteiligungen und Geschäftsguthaben bei Genossenschaften	4.239.531,03	-37.570,63
Summe b	37.928.931,03	-204.680,63
Summe a und b	41.625.981,79	

D. Erläuterungen zur Bilanz

Forderungen an Kreditinstitute

In den Forderungen an Kreditinstitute sind EUR 4.976.740 Forderungen an die genossenschaftliche Zentralbank enthalten.

Forderungen an Kunden

In den Forderungen an Kunden (A 4) sind EUR 3.429.543 Forderungen mit unbestimmter Laufzeit enthalten.

Schuldverschreibungen und andere festverzinsliche Wertpapiere

Von den in der Bilanz ausgewiesenen Schuldverschreibungen und anderen festverzinslichen Wertpapieren (A 5) werden im auf den Bilanzstichtag folgenden Geschäftsjahr EUR 6.394.953 fällig.

In folgenden Posten sind enthalten:

	börsenfähig	davon:		
	EUR	börsennotiert EUR	nicht börsennotiert EUR	nicht mit dem Niederstwert bewertete börsenfähige Wertpapiere EUR
Schuldverschreibungen und andere festverzinsliche Wertpapiere (A 5)	63.146.883	45.545.107	17.601.776	0
Aktien und andere nicht festverzinsliche Wertpapiere (A 6)	3.975.353	0	3.975.353	0

Forderungen an Beteiligungsunternehmen

In den Forderungen sowie Schuldverschreibungen und andere festverzinsliche Wertpapiere sind folgende Beträge enthalten, die auch Forderungen an Beteiligungsunternehmen sind:

	Geschäftsjahr EUR	Vorjahr EUR
Forderungen an Kreditinstitute (A 3)	5.752.930	5.579.933
Schuldverschreibungen und andere festverzinsliche Wertpapiere (A 5)	11.410.185	9.034.054

Beteiligungen

Wir halten an folgenden Unternehmen Beteiligungen von nicht untergeordneter Bedeutung:

Name und Sitz	Anteil am Gesellschaftskapital %	Eigenkapital der Gesellschaft		Ergebnis des letzten vorliegenden Jahresabschlusses	
		Jahr	TEUR	Jahr	TEUR
a) DZ BANK AG Deutsche Zentralgenossenschaftsbank, Frankfurt am Main	0,01	2017	10.504.000	2017	570.000
b) DZ Beteiligungs-GmbH & Co. KG Baden-Württemberg, Stuttgart	0,05	2018	3.141.132	2018	85.679
c) Zweite DZ Beteiligungs-GmbH & Co. KG Baden-Württemberg, Stuttgart	0,03	2018	2.463.018	2018	55.281

Treuhandvermögen

Im Bilanzposten "Treuhandvermögen" sind ausschließlich Kredite ausgewiesen, die wir im eigenen Namen für fremde Rechnung halten.

Sachanlagen

Im Aktivposten "Sachanlagen" sind Grundstücke und Bauten, die wir im Rahmen eigener Tätigkeit nutzen, in Höhe von EUR 1.054.197 und Betriebs- und Geschäftsausstattung in Höhe von EUR 319.305 enthalten.

Sonstige Vermögensgegenstände

In dem Bilanzposten "Sonstige Vermögensgegenstände" sind folgende wesentliche Einzelbeträge enthalten:

	31.12.2018 EUR
Steuerforderungen	101.760
Provisionsforderungen	76.926

Aktiver Rechnungsabgrenzungsposten

Im aktiven Rechnungsabgrenzungsposten sind Unterschiedsbeträge zwischen dem Ausgabebetrag und dem höheren Erfüllungsbetrag von Verbindlichkeiten in Höhe von EUR 7.983 (Vorjahr EUR 12.131) enthalten.

Nachrangige Vermögensgegenstände

In dem folgenden Posten sind Vermögensgegenstände, für die eine Nachrangklausel besteht, enthalten:

Posten/Unterposten	Geschäftsjahr EUR	Vorjahr EUR
5 Schuldverschreibungen und andere festverzinsliche Wertpapiere (A 5)	5.738.406	4.202.299

Fremdwährungsposten

In den Vermögensgegenständen sind Fremdwährungsposten im Gegenwert von EUR 23.069 enthalten.

Restlaufzeitspiegel für Forderungen

Die in der Bilanz ausgewiesenen Forderungen haben folgende Restlaufzeiten:

	bis 3 Mo- nate EUR	mehr als 3 Monate bis ein Jahr EUR	mehr als ein Jahr bis 5 Jahre EUR	mehr als 5 Jahre EUR
Forderungen an Kunden (A 4)	4.408.203	10.233.762	40.878.056	69.657.827

Anteilige Zinsen, die erst nach dem Bilanzstichtag fällig werden, wurden nicht nach den Restlaufzeiten gegliedert.

Restlaufzeitspiegel für Verbindlichkeiten

Die in der Bilanz ausgewiesenen Verbindlichkeiten weisen folgende Restlaufzeiten auf:

	bis 3 Mo- nate EUR	mehr als 3 Monate bis ein Jahr EUR	mehr als ein Jahr bis 5 Jahre EUR	mehr als 5 Jahre EUR
Verbindlichkeiten gegenüber Kreditinstituten mit vereinbarter Laufzeit oder Kündigungsfrist (P 1b)	494.217	1.578.992	11.580.226	10.727.570
Spareinlagen mit vereinbarter Kündigungsfrist von mehr als drei Monaten (P 2ab)	236.051	1.354.685	803.854	8.220
Andere Verbindlichkeiten gegenüber Kunden mit vereinbarter Laufzeit oder Kündigungsfrist (P 2bb)	9.043.661	913.510	547.647	150.993

Anteilige Zinsen, die erst nach dem Bilanzstichtag fällig werden, wurden nicht nach den Restlaufzeiten gegliedert.

Verbindlichkeiten gegenüber Kreditinstituten

In den Verbindlichkeiten gegenüber Kreditinstituten sind EUR 24.099.719 Verbindlichkeiten gegenüber der genossenschaftlichen Zentralbank enthalten.

Treuhandverbindlichkeiten

Im Bilanzposten "Treuhandverbindlichkeiten" sind ausschließlich Kredite ausgewiesen, die wir im eigenen Namen für fremde Rechnung halten.

Passiver Rechnungsabgrenzungsposten

Im passiven Rechnungsabgrenzungsposten sind Disagioträge, die bei der Ausreichung von Forderungen in Abzug gebracht wurden, im Gesamtbetrag von EUR 10.193 (Vorjahr EUR 15.456) enthalten.

Verbindlichkeiten gegenüber Beteiligungsunternehmen

In den nachstehenden Verbindlichkeiten sind folgende Beträge enthalten, die auch Verbindlichkeiten gegenüber Beteiligungsunternehmen sind:

	Geschäftsjahr EUR	Vorjahr EUR
Verbindlichkeiten gegenüber Kreditinstituten (P 1)	24.099.719	23.677.024

Eigenkapital

Die unter Passivposten 12a "Gezeichnetes Kapital" ausgewiesenen Geschäftsguthaben gliedern sich wie folgt:

	EUR
Geschäftsguthaben	
a) der verbleibenden Mitglieder	2.983.076
b) der ausscheidenden Mitglieder	55.894
Rückständige fällige Pflichteinzahlungen auf Geschäftsanteile	47

Die Kapital- und Ergebnismrücklagen (P 12b und c) haben sich wie folgt entwickelt:

	Kapitalrücklage EUR	Gesetzliche Rücklage EUR	andere Ergebnismrücklagen EUR
Stand 01.01.2018	163.741	5.165.077	5.154.300
Einstellungen			
- aus Bilanzgewinn des Vorjahres	0	183.142	180.000
Stand 31.12.2018	163.741	5.348.219	5.334.300

Eventualverbindlichkeiten und andere Verpflichtungen

Die im Posten 1b) und 2c) unter dem Bilanzstrich ausgewiesenen Verpflichtungen unterliegen den für alle Kreditverhältnisse geltenden Risikoidentifizierungs- und -steuerungsverfahren, die eine rechtzeitige Erkennung der Risiken gewährleisten.

Akute Risiken einer Inanspruchnahme aus den unter dem Bilanzstrich ausgewiesenen Haftungsverhältnissen sind nicht erkennbar. Die ausgewiesenen Verpflichtungen betreffen ausschließlich breit gestreute Bürgschafts- und Gewährleistungsverträge für bzw. offene Kreditzusagen gegenüber Kunden.

Die ausgewiesenen Beträge unter 1b) zeigen nicht die zukünftig aus diesen Verträgen zu erwartenden tatsächlichen Zahlungsströme, da die überwiegende Anzahl der Eventualverbindlichkeiten nach unserer Einschätzung ohne Inanspruchnahme auslaufen wird.

Durch Übertragung von Vermögensgegenständen gesicherte Verbindlichkeiten

Von den Verbindlichkeiten und Eventualverbindlichkeiten sind durch Übertragung von Vermögensgegenständen gesichert:

Passivposten	Gesamtbetrag der als Sicherheit übertragenen Vermögenswerte in EUR
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Verbindlichkeiten gegenüber Kreditinstituten (P 1) 19.331.207

Termingeschäfte und derivative Finanzinstrumente

Es bestehen einheitlich zu bilanzierende strukturierte Produkte. Sie beinhalten neben einem Kassainstrument noch ein Kündigungsrecht bzw. Mehrfachkündigungsrecht des Emittenten.

E. Erläuterungen zur Gewinn- und Verlustrechnung

Zinserträge und Zinsaufwendungen

Negative Zinsen aus Aktivgeschäften sind in den Zinserträgen in Höhe von EUR 1.234 (Reduktion des Zinsertrags) bzw. in den Zinsaufwendungen aus Passivgeschäften in Höhe von EUR 1.110 (Reduktion des Zinsaufwands) enthalten.

Provisionserträge

Die Provisionserträge aus für Dritte erbrachte Dienstleistungen, insbesondere für die Vermittlung von Wertpapieren, Bausparverträgen, Versicherungen und Krediten nehmen in der Ertragsrechnung einen festen Bestandteil ein.

Sonstige betriebliche Erträge

In den sonstigen betrieblichen Erträgen (GuV-Posten 8) sind folgende nicht unwesentliche Einzelbeträge enthalten:

Miet- und Pachterträge

Die sonstigen betrieblichen Erträge betreffen mit EUR 3.106 (Vorjahr EUR 3.573) Erträge aus der Währungsumrechnung.

Sonstige betriebliche Aufwendungen

Die sonstige betrieblichen Aufwendungen betreffen mit EUR 2.373 (Vorjahr EUR 2.349) Aufwendungen aus der Währungsumrechnung.

F. Sonstige Angaben

Vorstand und Aufsichtsrat

Auf die Angabe der Gesamtbezüge des Vorstands wurde gemäß § 286 Abs. 4 HGB verzichtet.

Die Gesamtbezüge des Aufsichtsrates betrugen EUR 8.613.

Die Forderungen an und aus eingegangenen Haftungsverhältnissen betrugen für Mitglieder des Vorstands EUR 208.751 und für Mitglieder des Aufsichtsrats EUR 2.152.662.

Geschäfte zu marktunüblichen Bedingungen mit nahe stehenden Unternehmen und Personen

Geschäfte mit nahe stehenden Unternehmen und Personen zu nicht marktüblichen Bedingungen lagen nicht vor.

Sonstige finanzielle Verpflichtungen

Nicht in der Bilanz ausgewiesene oder vermerkte Verpflichtungen, die für die Beurteilung der Finanzlage von Bedeutung sind, bestehen in Form von Garantieverpflichtungen gegenüber der Sicherungseinrichtung des Bundesverbandes der Deutschen Volksbanken und Raiffeisenbanken e.V. (Garantieverbund) in Höhe von EUR 443.544.

Ferner besteht eine Beitragsgarantie gegenüber dem institutsbezogenen Sicherungssystem der BVR Institutssicherung GmbH. Diese betrifft Jahresbeiträge zum Erreichen der Zielausstattung bzw. Zahlungsverpflichtungen, Sonderbeiträge und Sonderzahlungen, falls die verfügbaren Finanzmittel nicht ausreichen, um die Einleger eines dem institutsbezogenen Sicherungssystem angehörigen CRR-Kreditinstituts im Entschädigungsfall zu entschädigen, sowie Auffüllungspflichten nach Deckungsmaßnahmen.

Personalstatistik

Die Zahl der 2018 durchschnittlich beschäftigten Arbeitnehmer betrug:

	Vollzeitbeschäftigte	Teilzeitbeschäftigte
Prokuristen	1	0
Sonstige kaufmännische Mitarbeiter	17	13
Gewerbliche Mitarbeiter	2	6
	20	19

Außerdem wurden durchschnittlich 3 Auszubildende beschäftigt.

Mitgliederbewegung im Geschäftsjahr

Nachfolgende Tabelle zeigt die Mitgliederbewegung im Geschäftsjahr:

	Anzahl der Mitglieder	Anzahl der Geschäftsanteile	Haftsummen EUR
Anfang 2018	4.449	12.092	3.023.000
Zugang 2018	181	329	82.250
Abgang 2018	88	228	57.000
Ende 2018	4.542	12.193	3.048.250
Die Geschäftsguthaben der verbleibenden Mitglieder haben sich im Geschäftsjahr vermehrt um			EUR 28.588
Die Haftsummen haben sich im Geschäftsjahr vermehrt um			EUR 25.250
Höhe des Geschäftsanteils			EUR 250
Höhe der Haftsumme je Anteil			EUR 250

Besondere Offenlegungspflichten

Gemäß Teil 8 der CRR (Art. 435 bis 455) offenzulegende Inhalte sind zum Teil im Lagebericht enthalten. Wir beabsichtigen, die weiteren Angaben in einem separaten Offenlegungsbericht zu machen und auf unserer Homepage zu veröffentlichen.

Name und Anschrift des zuständigen Prüfungsverbandes**Der Name und die Anschrift des zuständigen Prüfungsverbandes lauten:**

Baden-Württembergischer Genossenschaftsverband e. V.

Am Rüppurrer Schloss 40

76199 Karlsruhe

Mitglieder des Vorstands und des Aufsichtsrats**Mitglieder des Vorstands, ausgeübter Beruf**

Keil, Jürgen, Geschäftsleiter

Högel, Hermann, Geschäftsleiter

Mitglieder des Aufsichtsrats, ausgeübter Beruf

Wollmershäuser, Manfred, - Vorsitzender - , Geschäftsführer, ETW GmbH

Straub, Wolfgang, - stellvertretender Vorsitzender - , Schreinermeister, selbständig

Fischer, Uwe, Steuerberater, selbständig

Häckh, Oliver, Oberstudienrat, Land Baden-Württemberg

Kurz, Armin, Geschäftsführer, Autopark Kurz & Brenner GmbH

Kurz, Franz, Kraftfahrer, ZTN Neckar-Franken

Mann, Gerhard, Landwirt, selbständig

Rapp, Jürgen, Kfm. Leiter, Konfektion E Elektronik GmbH

Schmid, Bernhard, staatlich geprüfter Techniker für Landbau, selbständig

Schwerdt, Christian, Rechtsanwalt, selbständig

Stephan, Reiner, Bankkaufmann, Bausparkasse Schwäbisch Hall AG

Zoll, Ute, Bürgermeisterin, Stadt Vellberg

Vorschlag für die Ergebnisverwendung

Der Vorstand schlägt im Einvernehmen mit dem Aufsichtsrat vor, den Jahresüberschuss von EUR 511.975,47 wie folgt zu verwenden:

	EUR
Ausschüttung einer Dividende von 5,00 %	150.068,80
Zuweisung zu den Ergebnismrücklagen	
a) Gesetzliche Rücklage	171.906,67
b) Andere Ergebnismrücklagen	190.000,00
	511.975,47

Vellberg, 25. März 2019

Raiffeisenbank Bühlertal eG

Der Vorstand

Keil

Högel

Bestätigungsvermerk des unabhängigen Abschlussprüfers

An die Raiffeisenbank Bühlertal eG, Vellberg

Vermerk über die Prüfung des Jahresabschlusses und des Lageberichts

Prüfungsurteile

Wir haben den Jahresabschluss der Raiffeisenbank Bühlertal eG, Vellberg (im Folgenden "Genossenschaft") - bestehend aus der Bilanz zum 31. Dezember 2018 und der Gewinn- und Verlustrechnung für das Geschäftsjahr vom 1. Januar bis 31. Dezember 2018 sowie dem Anhang, einschließlich der Darstellung der Bilanzierungs- und Bewertungsmethoden - geprüft. Darüber hinaus haben wir den Lagebericht der Genossenschaft für das Geschäftsjahr vom 1. Januar bis 31. Dezember 2018 geprüft.

Nach unserer Beurteilung aufgrund der bei der Prüfung gewonnenen Erkenntnisse

- entspricht der beigefügte Jahresabschluss in allen wesentlichen Belangen den deutschen, für Kreditgenossenschaften geltenden handelsrechtlichen Vorschriften und vermittelt unter Beachtung der deutschen Grundsätze ordnungsmäßiger Buchführung ein den tatsächlichen Verhältnissen entsprechendes Bild der Vermögens- und Finanzlage der Genossenschaft zum 31. Dezember 2018 sowie ihrer Ertragslage für das Geschäftsjahr vom 1. Januar bis 31. Dezember 2018 und

- vermittelt der beigefügte Lagebericht insgesamt ein zutreffendes Bild von der Lage der Genossenschaft. In allen wesentlichen Belangen steht dieser Lagebericht in Einklang mit dem Jahresabschluss, entspricht den deutschen gesetzlichen Vorschriften und stellt die Chancen und Risiken der zukünftigen Entwicklung zutreffend dar.

Gemäß § 322 Abs. 3 S. 1 HGB erklären wir, dass unsere Prüfung zu keinen Einwendungen gegen die Ordnungsmäßigkeit des Jahresabschlusses und des Lageberichts geführt hat.

Grundlage für die Prüfungsurteile

Wir haben unsere Prüfung des Jahresabschlusses und des Lageberichts in Übereinstimmung mit § 53 Abs. 2 GenG, §§ 340k, 317 HGB und der EU-Abschlussprüferverordnung (Nr. 537/2014; im Folgenden "EU-APrVO") unter Beachtung der vom Institut der Wirtschaftsprüfer (IDW) festgestellten deutschen Grundsätze ordnungsmäßiger Abschlussprüfung durchgeführt. Unsere Verantwortung nach diesen Vorschriften und Grundsätzen ist im Abschnitt "Verantwortung des Abschlussprüfers für die Prüfung des Jahresabschlusses und des Lageberichts" unseres Bestätigungsvermerks weitergehend beschrieben. Wir sind von der Genossenschaft unabhängig in Übereinstimmung mit den europarechtlichen sowie den deutschen handelsrechtlichen und berufsrechtlichen Vorschriften und haben unsere sonstigen deutschen Berufspflichten in Übereinstimmung mit diesen Anforderungen erfüllt. Darüber hinaus erklären wir gemäß Artikel 10 Abs. 2 Buchst. f) EU-APrVO i. V. m. §§ 55 Abs. 2, 38 Abs. 1a GenG, dass alle bei uns beschäftigten Personen, die das Ergebnis der Prüfung beeinflussen können, keine verbotenen Nichtprüfungsleistungen nach Artikel 5 Abs. 1 EU-APrVO erbracht haben. Wir sind der Auffassung, dass die von uns erlangten Prüfungsnachweise ausreichend und geeignet sind, um als Grundlage für unsere Prüfungsurteile zum Jahresabschluss und zum Lagebericht zu dienen.

Besonders wichtige Prüfungssachverhalte in der Prüfung des Jahresabschlusses

Besonders wichtige Prüfungssachverhalte sind solche Sachverhalte, die nach unserem pflichtgemäßen Ermessen am bedeutsamsten in unserer Prüfung des Jahresabschlusses für das Geschäftsjahr vom 1. Januar bis 31. Dezember 2018 waren. Diese Sachverhalte wurden im Zusammenhang mit unserer Prüfung des Jahresabschlusses als Ganzem und bei der Bildung unseres Prüfungsurteils hierzu berücksichtigt; wir geben kein gesondertes Prüfungsurteil zu diesen Sachverhalten ab.

Nachfolgend stellen wir den aus unserer Sicht besonders wichtigen Prüfungssachverhalt dar:

a) Sachverhalt und Problemstellung

Die Forderungen an Kunden, saldiert mit den gebildeten Risikovorsorgen, belaufen sich auf 128,7 Mio. EUR. Dies entspricht 61,0 % der Bilanzsumme. Zudem bestehen Eventualverbindlichkeiten in Höhe von 1,5 Mio. EUR und andere Verpflichtungen in Höhe von 6,9 Mio. EUR.

Innerhalb des Postens nehmen die gewerblichen Kredite eine bedeutende Rolle ein.

Die Identifizierung von Wertminderungen und die Ermittlung von Einzelwertberichtigungen unterliegen wesentlichen Schätzungsunsicherheiten und Ermessensspielräumen. Das Risiko für den Jahresabschluss liegt darin, dass Wertberichtigungsbedarf nicht rechtzeitig identifiziert wird bzw. die Höhe der Wertberichtigung von der wirtschaftlichen Lage und Entwicklung der jeweiligen Kreditnehmer sowie von der Bewertung der Kreditsicherheiten beeinflusst wird. Daher ist die zutreffende Bewertung der Kundenforderungen, insbesondere im gewerblichen Kreditgeschäft, für den Jahresabschluss und insbesondere die Ertragslage von entscheidender Bedeutung und stellt nach unserer Einschätzung einen besonders wichtigen Prüfungssachverhalt dar.

b) Prüferisches Vorgehen und Erkenntnisse

Wir haben zunächst beurteilt, ob die Systeme bzw. Prozesse der Bank derart ausgestaltet sind, dass akute Risiken mit hinreichender Sicherheit rechtzeitig erkannt werden und gegebenenfalls eine Risikovorsorge in ausreichendem Umfang gebildet wird. Unsere Prüfungshandlungen umfassten die für die Bewertung der Kundenforderungen relevanten Bereiche und Prozesse.

In Folge haben wir uns von der Funktionsfähigkeit der Regelungen bzw. Prozesse durch Prüfung in Stichproben überzeugt. Hierbei stellen wir auf die eingerichteten relevanten Kontrollen der Bank ab.

Des Weiteren haben wir analytische Prüfungshandlungen durchgeführt. Dabei wurde der Datenbestand der Bank in Hinblick auf vordefinierte Prüfkriterien ausgewertet. In diesem Zuge wurden neben den Ratingeinstufungen insbesondere die Höhe der ungesicherten Kreditteile, die Zugehörigkeit zu bestimmten Branchen und die Gesamtzusage berücksichtigt.

Hierauf aufbauend haben wir bewusst ausgewählte Kreditengagements hinsichtlich der Notwendigkeit und - soweit erforderlich - der Angemessenheit einer Risikovorsorge einer Einzelfallprüfung unterzogen.

c) Verweis auf weitergehende Informationen

Weitere Angaben der Bank zur Bilanzierung und Bewertung von Forderungen im Kreditgeschäft sind im Anhang im Abschnitt Bilanzierungs-, Bewertungs- und Umrechnungsmethoden enthalten.

Im Lagebericht sind Ausführungen zu den Kreditstrukturen und Verfahren der Risikoerkennung enthalten.

Sonstige Informationen

Die gesetzlichen Vertreter sind für die sonstigen Informationen verantwortlich.

Unsere Prüfungsurteile zum Jahresabschluss und zum Lagebericht erstrecken sich nicht auf die sonstigen Informationen, und dementsprechend geben wir weder ein Prüfungsurteil noch irgendeine andere Form von Prüfungsschlussfolgerung hierzu ab.

Im Zusammenhang mit unserer Prüfung haben wir die Verantwortung, die sonstigen Informationen zu lesen und dabei zu würdigen, ob die sonstigen Informationen

- wesentliche Unstimmigkeiten zum Jahresabschluss, zum Lagebericht oder unseren bei der Prüfung erlangten Kenntnissen aufweisen oder

- anderweitig wesentlich falsch dargestellt erscheinen.

Verantwortung der gesetzlichen Vertreter und des Aufsichtsrats für den Jahresabschluss und den Lagebericht

Die gesetzlichen Vertreter der Genossenschaft sind verantwortlich für die Aufstellung des Jahresabschlusses, der den deutschen, für Kreditgenossenschaften geltenden handelsrechtlichen Vorschriften in allen wesentlichen Belangen entspricht, und dafür, dass der Jahresabschluss unter Beachtung der deutschen Grundsätze ordnungsmäßiger Buchführung ein den tatsächlichen Verhältnissen entsprechendes Bild der Vermögens-, Finanz- und Ertragslage der Genossenschaft vermittelt. Ferner sind die gesetzlichen Vertreter verantwortlich für die internen Kontrollen, die sie in Übereinstimmung mit den deutschen Grundsätzen ordnungsmäßiger Buchführung als notwendig bestimmt haben, um die Aufstellung eines Jahresabschlusses zu ermöglichen, der frei von wesentlichen - beabsichtigten oder unbeabsichtigten - falschen Darstellungen ist.

Bei der Aufstellung des Jahresabschlusses sind die gesetzlichen Vertreter dafür verantwortlich, die Fähigkeit der Genossenschaft zur Fortführung der Unternehmenstätigkeit zu beurteilen. Des Weiteren haben sie die Verantwortung, Sachverhalte in Zusammenhang mit der Fortführung der Unternehmenstätigkeit, sofern einschlägig, anzugeben. Darüber hinaus sind sie dafür verantwortlich, auf der Grundlage des Rechnungslegungsgrundsatzes der Fortführung der Unternehmenstätigkeit zu bilanzieren, sofern dem nicht tatsächliche oder rechtliche Gegebenheiten entgegenstehen.

Außerdem sind die gesetzlichen Vertreter verantwortlich für die Aufstellung des Lageberichts, der insgesamt ein zutreffendes Bild von der Lage der Genossenschaft vermittelt sowie in allen wesentlichen Belangen mit dem Jahresabschluss in Einklang steht, den deutschen gesetzlichen Vorschriften entspricht und die Chancen und Risiken der zukünftigen Entwicklung zutreffend darstellt. Ferner sind die gesetzlichen Vertreter verantwortlich für die Vorkehrungen und Maßnahmen (Systeme), die sie als notwendig erachtet haben, um die Aufstellung eines Lageberichts in Übereinstimmung mit den anzuwendenden deutschen gesetzlichen Vorschriften zu ermöglichen, und um ausreichende geeignete Nachweise für die Aussagen im Lagebericht erbringen zu können.

Der Aufsichtsrat ist verantwortlich für die Überwachung des Rechnungslegungsprozesses der Genossenschaft zur Aufstellung des Jahresabschlusses und des Lageberichts.

Verantwortung des Abschlussprüfers für die Prüfung des Jahresabschlusses und des Lageberichts

Unsere Zielsetzung ist, hinreichende Sicherheit darüber zu erlangen, ob der Jahresabschluss als Ganzes frei von wesentlichen - beabsichtigten oder unbeabsichtigten - falschen Darstellungen ist, und ob der Lagebericht insgesamt ein zutreffendes Bild von der Lage der Genossenschaft vermittelt sowie in allen wesentlichen Belangen mit dem Jahresabschluss sowie mit den bei der Prüfung gewonnenen Erkenntnissen in Einklang steht, den deutschen gesetzlichen Vorschriften entspricht und die Chancen und Risiken der zukünftigen Entwicklung zutreffend darstellt, sowie einen Bestätigungsvermerk zu erteilen, der unsere Prüfungsurteile zum Jahresabschluss und zum Lagebericht beinhaltet.

Hinreichende Sicherheit ist ein hohes Maß an Sicherheit, aber keine Garantie dafür, dass eine in Übereinstimmung mit § 53 Abs. 2 GenG, §§ 340k, 317 HGB und der EU-APrVO unter Beachtung der vom Institut der Wirtschaftsprüfer (IDW) festgestellten deutschen Grundsätze ordnungsmäßiger Abschlussprüfung durchgeführte Prüfung eine wesentliche falsche Darstellung stets aufdeckt. Falsche Darstellungen können aus Verstößen oder Unrichtigkeiten resultieren und werden als wesentlich angesehen, wenn vernünftigerweise erwartet werden könnte, dass sie einzeln oder insgesamt die auf der Grundlage dieses Jahresabschlusses und Lageberichts getroffenen wirtschaftlichen Entscheidungen von Adressaten beeinflussen.

Während der Prüfung üben wir pflichtgemäßes Ermessen aus und bewahren eine kritische Grundhaltung. Darüber hinaus

- identifizieren und beurteilen wir die Risiken wesentlicher - beabsichtigter oder unbeabsichtigter - falscher Darstellungen im Jahresabschluss und im Lagebericht, planen und führen Prüfungshandlungen als Reaktion auf diese Risiken durch sowie erlangen Prüfungsnachweise, die ausreichend und geeignet sind, um als Grundlage für unsere Prüfungsurteile zu dienen. Das Risiko, dass wesentliche falsche Darstellungen nicht aufgedeckt werden, ist bei Verstößen höher als bei Unrichtigkeiten, da Verstöße betrügerisches Zusammenwirken, Fälschungen, beabsichtigte Unvollständigkeiten, irreführende Darstellungen bzw. das Außerkraftsetzen interner Kontrollen beinhalten können.

- gewinnen wir ein Verständnis von dem für die Prüfung des Jahresabschlusses relevanten internen Kontrollsystem und den für die Prüfung des Lageberichts relevanten Vorkehrungen und Maßnahmen, um Prüfungshandlungen zu planen, die unter den gegebenen Umständen angemessen sind, jedoch nicht mit dem Ziel, ein Prüfungsurteil zur Wirksamkeit dieser Systeme abzugeben.

- beurteilen wir die Angemessenheit der von den gesetzlichen Vertretern angewandten Rechnungslegungsmethoden sowie die Vertretbarkeit der von den gesetzlichen Vertretern dargestellten geschätzten Werte und damit zusammenhängenden Angaben.

- ziehen wir Schlussfolgerungen über die Angemessenheit des von den gesetzlichen Vertretern angewandten Rechnungslegungsgrundsatzes der Fortführung der Unternehmenstätigkeit sowie, auf der Grundlage der erlangten Prüfungsnachweise, ob eine wesentliche Unsicherheit im Zusammenhang mit Ereignissen oder Gegebenheiten besteht, die bedeutsame Zweifel an der Fähigkeit der Genossenschaft zur Fortführung der Unternehmenstätigkeit aufwerfen können. Falls wir zu dem Schluss kommen, dass eine wesentliche Unsicherheit besteht, sind wir verpflichtet, im Bestätigungsvermerk auf die dazugehörigen Angaben im Jahresabschluss und im Lagebericht aufmerksam zu machen oder, falls diese Angaben unangemessen sind, unser jeweiliges Prüfungsurteil zu modifizieren. Wir ziehen unsere Schlussfolgerungen auf der Grundlage der bis zum Datum unseres Bestätigungsvermerks erlangten Prüfungsnachweise. Zukünftige Ereignisse oder Gegebenheiten können jedoch dazu führen, dass die Genossenschaft ihre Unternehmenstätigkeit nicht mehr fortführen kann.

- beurteilen wir die Gesamtdarstellung, den Aufbau und den Inhalt des Jahresabschlusses einschließlich der Angaben sowie ob der Jahresabschluss die zugrunde liegenden Geschäftsvorfälle und Ereignisse so darstellt, dass der Jahresabschluss unter Beachtung der deutschen Grundsätze ordnungsmäßiger Buchführung ein den tatsächlichen Verhältnissen entsprechendes Bild der Vermögens-, Finanz- und Ertragslage der Genossenschaft vermittelt.

- beurteilen wir den Einklang des Lageberichts mit dem Jahresabschluss, seine Gesetzesentsprechung und das von ihm vermittelte Bild von der Lage der Genossenschaft.

- führen wir Prüfungshandlungen zu den von den gesetzlichen Vertretern dargestellten zukunftsorientierten Angaben im Lagebericht durch. Auf Basis ausreichender geeigneter Prüfungsnachweise vollziehen wir dabei insbesondere die den zukunftsorientierten Angaben von den gesetzlichen Vertretern zugrunde gelegten bedeutsamen Annahmen nach und beurteilen die sachgerechte Ableitung der zukunftsorientierten Angaben aus diesen Annahmen. Ein eigenständiges Prüfungsurteil zu den zukunftsorientierten Angaben sowie zu den zugrunde liegenden Annahmen geben wir nicht ab. Es besteht ein erhebliches unvermeidbares Risiko, dass künftige Ereignisse wesentlich von den zukunftsorientierten Angaben abweichen.

Wir erörtern mit dem Aufsichtsrat unter anderem den geplanten Umfang und die Zeitplanung der Prüfung sowie bedeutsame Prüfungsfeststellungen, einschließlich etwaiger Mängel im internen Kontrollsystem, die wir während unserer Prüfung feststellen.

Wir geben gegenüber dem Aufsichtsrat eine Erklärung ab, dass wir die relevanten Unabhängigkeitsanforderungen eingehalten haben, und erörtern mit ihm alle Beziehungen und sonstigen Sachverhalte, von denen vernünftigerweise angenommen werden kann, dass sie sich auf unsere Unabhängigkeit auswirken, und die hierzu getroffenen Schutzmaßnahmen.

Wir bestimmen von den Sachverhalten, die wir mit dem Aufsichtsrat erörtert haben, diejenigen Sachverhalte, die in der Prüfung des Jahresabschlusses für den aktuellen Berichtszeitraum am bedeutsamsten waren und daher die besonders wichtigen Prüfungssachverhalte sind. Wir beschreiben diese Sachverhalte im Bestätigungsvermerk, es sei denn, Gesetze oder andere Rechtsvorschriften schließen die öffentliche Angabe des Sachverhalts aus.

Sonstige gesetzliche und andere rechtliche Anforderungen

Übrige Angaben gemäß Artikel 10 EU-APrVO

Wir sind als zuständiger Prüfungsverband gesetzlicher Abschlussprüfer der Genossenschaft.

Wir erklären, dass die in diesem Bestätigungsvermerk enthaltenen Prüfungsurteile mit unserer Berichterstattung an den Aufsichtsrat nach Artikel 11 EU-APrVO i. V. m. § 58 Abs. 3 GenG (Prüfungsbericht) in Einklang stehen.

Bei uns beschäftigte Personen, die das Ergebnis der Prüfung beeinflussen können, haben folgende Leistungen, die nicht im Jahresabschluss oder im Lagebericht der geprüften Genossenschaft angegeben wurden, zusätzlich zur Abschlussprüfung für die geprüfte Genossenschaft erbracht:

- Sonstige separate Bestätigungsleistungen an die Bankenaufsicht bzw. die Deutsche Bundesbank
- Sonstige separate Bestätigungsleistungen im genossenschaftlichen Finanzverbund
- Einreichung der erforderlichen Unterlagen beim elektronischen Bundesanzeiger

Verantwortlicher Wirtschaftsprüfer

Der für die Prüfung verantwortliche Wirtschaftsprüfer ist Arnold Nied.

Stuttgart, 24. April 2019

Baden-Württembergischer Genossenschaftsverband e. V.

Arnold Nied, Wirtschaftsprüfer

Bericht des Aufsichtsrates

Der Aufsichtsrat hat im Berichtsjahr die ihm nach Gesetz, Satzung und Geschäftsordnung obliegenden Aufgaben erfüllt. Er nahm seine Überwachungsfunktion wahr und traf die in seinen Zuständigkeitsbereich fallenden Beschlüsse, dies beinhaltet auch die Befassung mit der Prüfung nach § 53 GenG.

Der Vorstand informierte den Aufsichtsrat und die Ausschüsse des Aufsichtsrates in regelmäßig stattfindenden Sitzungen über die Geschäftsentwicklung, die Vermögens-, Finanz- und Ertragslage sowie über besondere Ereignisse. Darüber hinaus stand der Aufsichtsratsvorsitzende in einem engen Informations- und Gedankenaustausch mit dem Vorstand.

Der Aufsichtsrat hat aus seiner Mitte unverändert Ausschüsse eingerichtet.

Der Anlageausschuss tagte im Berichtsjahr ein Mal, wesentliches Thema bildeten die Durchsicht und Beurteilung der Eigenanlagen der Bank.

Der Prüfungsausschuss und der Personalausschuss haben im Jahr 2018 nicht getagt.

Der vorliegende Jahresabschluss 2018 mit Lagebericht wurde vom Baden-Württembergischen Genossenschaftsverband e. V. geprüft. Über das Prüfungsergebnis wird in der Generalversammlung berichtet.

Den Jahresabschluss, den Lagebericht und den Vorschlag für die Verwendung des Jahresüberschusses hat der Aufsichtsrat geprüft und in Ordnung befunden. Der Vorschlag für die Verwendung des Jahresüberschusses - unter Einbeziehung des Gewinnvortrages - entspricht den Vorschriften der Satzung.

Der Aufsichtsrat empfiehlt der Generalversammlung, den vom Vorstand vorgelegten Jahresabschluss zum 31.12.2018 festzustellen und die vorgeschlagene Verwendung des Jahresüberschusses zu beschließen.

Durch Ablauf der Wahlzeit scheiden in diesem Jahr die Herren Uwe Fischer, Oliver Häckh, Armin Kurz, Jürgen Rapp und Bernhard Schmid aus dem Aufsichtsrat aus. Gemäß Beschluss des Aufsichtsrates soll das Gremium in 2019 auf 10 Mandate verkleinert werden. Aus diesem Grund stellen sich die Herren Armin Kurz und Uwe Fischer nicht zur Wiederwahl. Herr Gerhard Mann scheidet aus persönlichen Gründen vorzeitig aus dem Aufsichtsrat aus. Die Wiederwahl der Herren Oliver Häckh, Jürgen Rapp und Bernhard Schmid ist zulässig. Zukunftsorientiert schlägt der Aufsichtsrat Herrn Holger Wüllems (Vellberg) zur Wahl in das Gremium vor.

Der Aufsichtsrat dankt den ausscheidenden Herren für die geleistete Tätigkeit.

Der Aufsichtsrat spricht dem Vorstand und den Mitarbeitern Dank für die geleistete Arbeit aus.

Vellberg, 7. Mai 2019

Der Aufsichtsrat

Manfred Wollmershäuser, Vorsitzender

Anlage zum Jahresabschluss gemäß § 26a Abs. 1 Satz 2 KWG zum 31. Dezember 2018

(„Länderspezifische Berichterstattung“)

Die Raiffeisenbank Bühlertal eG hat keine Niederlassungen im Ausland. Sämtliche nachfolgende Angaben entstammen dem Jahresabschluss zum 31. Dezember 2018 und beziehen sich ausschließlich auf ihre Geschäftstätigkeit als regional tätige Kreditgenossenschaft in der Bundesrepublik Deutschland. Die Tätigkeit der Raiffeisenbank Bühlertal eG besteht darin, Einlagen oder andere rückzahlbare Gelder von Privat- und Firmenkunden entgegenzunehmen und Kredite für eigene Rechnung zu gewähren. Im Rahmen Ihrer Tätigkeit betreibt die Raiffeisenbank Bühlertal eG auch den Verkauf der für die Erzeugung landwirtschaftlicher Produkte benötigten Güter.

Die Raiffeisenbank Bühlertal eG definiert den Umsatz aus der Summe folgender Komponenten der Gewinn- und Verlustrechnung nach HGB: Zinserträge, Zinsaufwendungen, laufende Erträge aus Aktien etc., Erträge aus Gewinngemeinschaften etc., Provisionserträge, Provisionsaufwendungen, Rohergebnis aus Warenverkehr und Nebenbetrieben und sonstige betriebliche Erträge. Der Umsatz beträgt für den Zeitraum 1. Januar bis 31. Dezember 2018 TEUR 5.742.

Die Anzahl der Lohn- und Gehaltsempfänger in Vollzeitäquivalenten zum Jahresende beträgt 29,5.

Der Gewinn vor Steuern beträgt TEUR 1.453.

Die Steuern auf Gewinn betragen TEUR 434 und betreffen laufende Steuern.

Die Raiffeisenbank Bühlertal eG hat im Geschäftsjahr keine öffentlichen Beihilfen erhalten.

Feststellung des Jahresabschlusses und Beschlussfassung über die Ergebnisverwendung

Die Generalversammlung vom 28.05.2019 hat den Jahresabschluss zum 31.12.2018 festgestellt und die Verwendung des Jahresüberschusses in Höhe von EUR 511.975,47 wie vom Vorstand vorgeschlagen beschlossen.

Source: www.bundesanzeiger.de; Raiffeisenbank Bühlertal eG, 2018

Note: The information presented in Appendix 2 is available to everyone on the website of www.bundesanzeiger.de. In this respect, this is not data that is relevant to data protection.

Appendix 3: List of all cooperative banks in Germany as of the end of 2018

All German Cooperative Banks as of the End of 2018 (Figures in Thousand Euro)

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
1	9	Deutsche Apotheker- und Ärztebank eG	Düsseldorf	45.588.640	27.424.238	90.531	34.893.766
2	9	Berliner Volksbank eG	Berlin	14.116.137	11.982.356	734.646	10.049.592
3	16	Sparda-Bank Baden-Württemberg eG	Stuttgart	13.787.174	12.299.879	3.055.126	10.586.878
4	9	FRANKFURTER VOLKS-BANK EG	Frankfurt a.M.	12.397.097	9.968.732	2.274.204	6.727.865
5	16	Sparda-Bank West eG	Düsseldorf	12.283.351	10.874.326	3.147.146	6.358.316
6	1	BBBank eG	Karlsruhe	12.004.823	10.418.687	2.395.967	6.752.188
7	16	Sparda-Bank Südwest eG	Mainz	10.176.985	8.578.182	1.687.737	6.462.191
8	9	Bank für Sozialwirtschaft AG	Köln	8.826.996	6.681.721	670.192	5.091.239
9	16	Sparda-Bank München eG	München	8.267.738	7.537.132	1.494.540	4.661.350
10	9	Volksbank Mittelhessen eG	Gießen	7.868.883	6.284.934	1.398.923	4.828.029
11	9	Evangelische Bank eG	Kassel	7.725.878	6.180.161	1.815.088	4.563.161
12	9	Dortmunder Volksbank eG	Dortmund	7.167.941	5.190.097	1.615.200	4.949.991
13	1	Volksbank Stuttgart eG	Stuttgart	7.128.034	5.656.251	1.580.887	4.280.967
14	16	Sparda-Bank Hessen eG	Frankfurt	6.676.413	5.845.301	932.822	2.888.863
15	9	VerbundVolksbank OWL eG	Paderborn	6.494.442	4.438.738	1.293.316	4.353.659
16	9	Mainzer Volksbank eG	Mainz	6.366.457	5.077.381	1.081.427	5.107.366
17	16	Sparda-Bank Berlin eG	Berlin	6.343.316	5.698.474	1.140.274	2.479.167
18	9	Bank für Kirche und Diakonie eG - KD-Bank	Dortmund	5.740.211	4.797.261	1.019.817	1.785.173
19	9	GLS Gemeinschaftsbank eG	Bochum	5.737.571	4.656.404	715.283	3.424.198
20	3	LIGA Bank eG, Regensburg	Regensburg	5.655.946	4.268.737	415.426	2.120.875
21	9	Hannoversche Volksbank eG	Hannover	5.614.066	4.220.780	996.520	3.977.392
22	3	Volksbank Raiffeisenbank Rosenheim-Chiemsee eG	Rosenheim	5.209.362	3.895.884	1.211.530	3.846.165
23	9	Bank für Kirche und Caritas eG	Paderborn	5.192.335	4.516.163	453.892	1.353.775
24	9	BANK IM BISTUM ESSEN eG	Essen	5.150.061	3.592.430	310.981	3.299.029
25	9	Volksbank Köln Bonn eG	Bonn	5.128.034	4.034.582	687.489	3.303.623
26	16	Sparda-Bank Hannover eG	Hannover	5.056.012	4.222.921	1.393.217	3.293.906
27	9	Volksbank Darmstadt - Südhessen eG	Darmstadt	4.680.849	3.678.307	215.040	3.495.880
28	9	Wiesbadener Volksbank eG	Wiesbaden	4.628.404	3.558.125	815.877	3.562.566
29	1	Volksbank eG, Villingen-Schwenningen	Villingen-Schwenningen	4.553.910	2.918.967	560.323	2.609.622

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
30	1	Volksbank Kraichgau eG	Wiesloch	4.513.318	3.487.390	692.533	2.981.428
31	9	Volksbank Bielefeld-Gütersloh eG	Gütersloh	4.510.521	3.005.549	453.222	3.145.238
32	9	DKM Darlehnskasse Münster eG	Münster	4.448.362	3.370.971	364.242	1.584.750
33	1	VR Bank Rhein-Neckar eG	Mannheim	4.230.311	3.482.188	502.753	2.216.615
34	16	Sparda-Bank Nürnberg eG	Nürnberg	4.214.993	3.787.275	438.314	2.585.523
35	3	Volksbank Raiffeisenbank Bayern Mitte eG, Ingolstadt	Ingolstadt	4.105.880	3.135.957	1.273.482	2.839.112
36	9	VR Bank Nord eG	Flensburg	3.916.700	1.537.828	411.140	3.295.345
37	16	Sparda-Bank Hamburg eG	Hamburg	3.844.393	3.517.942	932.331	2.040.735
38	9	Volksbank Alzey-Worms eG	Worms	3.794.403	2.913.865	585.052	2.817.341
39	9	Volksbank eG Braunschweig Wolfsburg	Braunschweig	3.759.142	2.823.436	387.806	2.673.202
40	17	PSD Bank Nürnberg eG	Nürnberg	3.725.695	2.924.943	862.382	2.855.629
41	17	PSD Bank Rhein-Ruhr eG	Düsseldorf	3.723.254	2.631.456	1.370.790	3.065.275
42	9	Volksbank Kur- und Rheinpfalz eG	Speyer	3.672.092	2.540.690	132.261	2.757.895
43	9	Volksbank in Südwestfalen eG	Siegen	3.671.611	2.571.736	976.149	2.155.531
44	3	VR meine Raiffeisenbank eG, Altötting	Altötting	3.633.105	2.871.368	893.149	2.571.922
45	9	Hamburger Volksbank eG	Hamburg	3.543.229	2.573.241	293.855	1.958.806
46	9	Volksbank Oberberg eG	Wiehl	3.541.377	2.230.121	594.515	2.814.917
47	9	Volksbank Lüneburger Heide eG	Winsen	3.381.534	2.614.466	722.956	1.848.857
48	9	Bank 1 Saar eG	Saarbrücken	3.372.030	2.488.313	659.474	2.097.440
49	3	Hausbank München eG Bank für Haus- und Grundbesitz	München	3.354.158	3.016.015	1.334.999	1.239.538
50	3	VR-Bank Rottal-Inn eG	Eggenfelden und Pfarrkirchen	3.334.943	2.211.932	837.985	2.605.886
51	1	Volksbank Freiburg eG	Freiburg	3.248.092	2.432.275	446.438	2.080.141
52	3	Münchner Bank eG	München	3.224.741	2.694.054	794.805	2.245.574
53	9	Volksbank Gronau-Ahaus eG	Gronau	3.196.466	1.579.935	695.349	2.695.461
54	9	VR-Bank Kreis Steinfurt eG	Rheine	3.099.156	2.185.528	793.486	2.272.113
55	9	Westerwald Bank eG Volks- und Raiffeisenbank	Hachenburg	3.092.824	2.502.574	751.164	1.860.812
56	1	Volksbank Karlsruhe eG	Karlsruhe	3.048.516	2.184.748	390.553	2.170.169
57	1	Volksbank in der Ortenau eG	Offenburg	3.045.554	2.087.084	743.400	2.379.878
58	9	Vereinigte Volksbank Raiffeisenbank eG	Reinheim	3.014.601	2.456.796	864.674	2.186.677
59	9	VR Bank Main-Kinzig-Büdingen eG	Linsengericht	2.967.254	2.272.525	484.788	2.092.512
60	3	Volksbank Raiffeisenbank Nordoberpfalz eG, Weiden	Weiden	2.955.374	2.221.877	688.743	1.986.584
61	9	Volksbank Kassel Göttingen eG	Kassel	2.888.865	2.349.912	621.032	1.727.713

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
62	1	Volksbank Ulm-Biberach eG	Ulm	2.845.560	2.142.683	855.455	2.035.704
63	9	Pax-Bank eG	Köln	2.784.620	2.326.271	603.364	1.524.962
64	1	Volksbank Pforzheim eG	Pforzheim	2.772.253	1.918.471	546.858	1.572.465
65	9	VR-Bank Rhein-Sieg eG	Siegburg	2.726.683	2.138.431	418.980	2.019.352
66	16	Sparda-Bank Ostbayern eG	Regensburg	2.712.620	2.406.908	859.744	1.415.258
67	9	Volksbank RheinAhrEifel eG	Bad Neu-enahr-Ahrweiler	2.708.651	2.107.266	657.782	1.770.264
68	1	Vereinigte Volksbank eG	Böblingen	2.706.126	2.059.861	354.728	1.977.458
69	9	Vereinigte Volksbank Münster eG	Münster	2.601.418	1.860.460	280.501	1.753.553
70	2	EDEKABANK AG	Hamburg	2.598.695	1.246.334	63.748	1.726.901
71	9	VR-Bank Westmünsterland eG	Coesfeld	2.586.611	1.564.300	630.398	2.022.474
72	3	Volksbank Raiffeisenbank Starnberg-Herrsching-Landsberg eG	Starnberg	2.581.886	2.150.832	738.280	1.679.595
73	3	Genossenschaftsbank eG München	München	2.530.454	1.932.055	1.309.229	2.232.088
74	1	Volksbank Lahr eG	Lahr	2.527.823	1.681.840	612.577	1.579.458
75	3	Raiffeisenbank Aschaffenburg eG	Aschaffenburg	2.519.468	2.007.317	604.038	1.322.270
76	9	Volksbank an der Niers eG	Geldern	2.465.799	1.836.181	733.052	1.808.444
77	1	Volksbank Göppingen eG	Göppingen	2.455.065	2.001.118	815.001	1.207.301
78	9	Volksbank eG, Hildesheim	Hildesheim	2.406.133	1.888.173	643.804	1.248.467
79	9	Volksbank im Bergischen Land eG	Remscheid	2.388.364	1.689.468	278.771	1.436.912
80	1	Volksbank Allgäu-Oberschwaben eG	Leutkirch im Allgäu	2.374.749	1.713.725	638.308	1.650.929
81	1	Volksbank Herrenberg-Nagold-Rottenburg eG	Nagold	2.365.771	1.731.170	350.620	1.834.446
82	9	Volksbank Pinneberg-Elmsborn eG	Pinneberg	2.317.406	1.694.098	542.872	1.412.156
83	1	Volksbank Baden-Baden Rastatt eG	Baden-Baden	2.273.174	1.546.853	166.793	1.330.468
84	9	Volksbank Bad Oeynhausen-Herford eG	Herford	2.248.731	1.539.870	392.620	1.240.585
85	1	VR Bank Schwäbisch Hall-Crailsheim eG	Schwäbisch Hall	2.233.000	1.501.130	406.878	1.266.688
86	9	Volksbank Ruhr Mitte eG	Gelsenkirchen	2.202.446	1.678.737	539.119	1.434.488
87	9	VR Bank Südpfalz eG	Landau/Pfalz	2.201.988	1.652.546	244.742	1.646.157
88	3	VR-Bank Handels- und Gewerbebank eG, Gersthofen	Gersthofen	2.201.455	1.699.214	507.094	1.349.259
89	9	VR Bank HessenLand eG	Alsfeld	2.198.332	1.047.758	258.879	955.225
90	1	Volksbank Ludwigsburg eG	Ludwigsburg	2.185.386	1.681.662	567.096	1.162.940
91	3	VR Bank Bayreuth-Hof eG	Bayreuth	2.175.907	1.774.199	502.532	1.195.987
92	9	Ostfriesische Volksbank eG	Leer	2.172.002	1.333.952	382.572	1.618.070
93	3	Volksbank Raiffeisenbank Dachau eG	Dachau	2.155.570	1.626.643	659.459	1.593.360

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
94	9	Volksbank Dresden-Bautzen eG	Dresden	2.139.455	1.866.299	338.535	900.261
95	1	Volksbank Neckartal eG	Eberbach	2.136.903	1.624.049	705.852	1.372.454
96	1	Volksbank Kirchheim-Nürtingen eG	Nürtingen	2.106.616	1.587.426	301.113	1.367.076
97	1	Volksbank Schwarzwald-Donau-Neckar eG	Tuttlingen	2.096.698	1.646.172	384.998	1.124.325
98	1	Volksbank Heilbronn eG	Heilbronn	2.095.032	1.658.537	376.927	1.338.918
99	17	PSD Bank München eG	Augsburg	2.078.916	1.855.126	1.323.715	1.175.246
100	9	VR-Bank eG Bergisch Gladbach-Leverkusen	Bergisch Gladbach	2.061.957	1.559.610	420.940	1.422.425
101	9	Volksbank eG; Wolfenbüttel	Wolfenbüttel	2.060.048	1.580.015	322.277	1.261.105
102	1	Volksbank Main-Tauber eG	Tauberbischofsheim	2.058.638	1.499.479	397.146	1.295.048
103	17	PSD Bank Nord eG	Hamburg	2.051.791	1.360.833	873.329	1.494.275
104	17	PSD Bank RheinNeckarSaar eG	Stuttgart	2.034.158	1.543.653	594.359	1.416.509
105	3	VR Bank München Land eG, Oberhaching	Oberhaching, Landkreis München	2.027.505	1.607.117	515.032	1.681.566
106	9	Volksbank Rhein-Lahn-Limburg eG	Diez	2.010.638	1.404.779	287.860	1.556.267
107	9	Volksbank Beckum-Lippstadt eG	Lippstadt	1.981.017	1.246.135	262.493	1.406.174
108	9	Vereinigte Volksbank eG Saarlouis - Sulzbach/Saar	Saarlouis	1.965.845	1.606.827	497.174	1.458.140
109	1	Volksbank Breisgau Nord eG	Emmendingen	1.963.337	1.515.918	465.794	1.205.755
110	3	VR-Bank Neu-Ulm eG	Neu-Ulm	1.948.654	1.487.889	493.956	1.471.438
111	9	VR Bank Lahn-Dill eG	Dillenburg	1.941.603	1.474.898	542.244	1.179.030
112	3	Volksbank Raiffeisenbank Würzburg eG	Würzburg	1.939.546	1.533.643	442.572	1.297.182
113	9	VR Bank Fulda eG	Fulda	1.938.395	1.449.031	443.544	1.130.485
114	9	Volksbank Krefeld eG	Krefeld	1.937.538	1.527.261	189.130	1.203.771
115	9	Volksbank Mönchengladbach eG	Mönchengladbach	1.927.719	1.387.672	530.795	1.123.003
116	17	PSD Bank Karlsruhe-Neustadt eG	Karlsruhe	1.920.861	1.366.617	952.810	1.247.459
117	9	Volksbank Bigge-Lenne eG	Schmallenberg	1.913.031	1.253.408	447.404	1.335.980
118	1	Volksbank Backnang eG	Backnang	1.887.326	1.376.397	290.299	1.446.919
119	17	PSD Bank Berlin-Brandenburg eG	Berlin	1.881.328	1.389.977	437.135	1.153.300
120	1	Volksbank Breisgau-Markgräflerland eG	Eschbach	1.879.084	1.360.348	504.741	1.097.890
121	13	Grafschafter Volksbank eG	Nordhorn	1.875.872	1.082.878	236.486	1.428.219
122	3	VR Bank Kaufbeuren-Ostallgäu eG	Marktobersdorf	1.852.579	1.362.111	331.472	1.236.466
123	1	VR-Bank Ostalb eG	Aalen	1.835.118	1.374.618	303.123	1.205.047
124	3	VR-Bank Mittelfranken West eG, Ansbach	Ansbach	1.832.465	1.322.233	312.097	1.238.638

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
125	9	Volksbank in Schaumburg eG	Bückeburg	1.815.296	1.287.524	149.596	1.251.578
126	9	Volksbank Mittweida eG	Mittweida	1.809.528	1.116.492	137.950	1.525.016
127	1	Volksbank Bruchsal-Bretten eG	Bretten	1.809.069	1.357.643	425.684	1.271.906
128	13	Raiffeisen-Volksbank eG, Aurich	Aurich	1.807.263	1.175.273	472.388	1.187.078
129	1	VR-Bank Neckar-Enz eG	Bönnigheim	1.804.780	1.400.501	312.771	1.048.983
130	3	Raiffeisenbank Kempten-Oberallgäu eG, Sonthofen	Sonthofen/Allgäu	1.790.014	1.355.189	361.425	1.128.468
131	9	Volksbank Chemnitz eG	Chemnitz	1.771.506	1.533.849	431.653	803.864
132	3	Volksbank Raiffeisenbank Fürstenfeldbruck eG	Fürstenfeldbruck	1.751.928	1.405.701	720.928	1.247.902
133	9	Volksbank Rhein-Nahe-Hunsrück eG	Bad Kreuznach	1.751.737	1.291.762	364.028	1.196.447
134	3	Volksbank Raiffeisenbank Oberbayern Südost eG, Bad Reichenhall	Bad Reichenhall	1.748.348	1.366.881	468.749	1.267.808
135	1	HEIDELBERGER VOLKS-BANK	Heidelberg	1.743.967	1.382.532	476.157	1.162.214
136	9	Volksbank Brilon-Büren-Salzkotten eG	Salzkotten	1.732.672	1.204.860	305.220	1.258.055
137	1	Volksbank am Württemberg eG	Fellbach	1.719.048	1.322.714	323.801	1.112.959
138	2	VR-Bank Niederbayern-Oberpfalz eG	Regensburg	1.670.827	1.417.519	424.434	875.924
139	9	Volksbank Rhein-Ruhr eG	Duisburg	1.669.410	1.121.057	304.046	1.088.532
140	1	Volksbank Kurpfalz eG	Heidelberg	1.665.493	1.370.551	501.145	1.081.257
141	3	VR-Bank Erlangen-Höchstadt-Herzogenaurach eG	Erlangen	1.664.372	1.329.116	256.740	935.784
142	3	VR-Bank Werdenfels eG, Garmisch-Partenkirchen	Garmisch-Partenkirchen	1.662.450	1.348.761	433.814	1.194.553
143	9	Volksbank Niederrhein eG	Alpen	1.642.420	1.243.894	391.409	1.121.593
144	9	VR Bank Ostholstein Nord - Plön eG	Lensahn	1.637.829	1.132.615	323.288	1.117.067
145	3	Raiffeisen-Volksbank Donauwörth eG	Donauwörth	1.635.052	1.267.561	371.491	1.049.873
146	9	Volksbank eG, Warendorf	Warendorf	1.631.618	1.123.508	458.208	1.207.247
147	9	Volksbank Dreieich eG	Langen	1.627.028	1.360.344	184.278	1.375.886
148	1	Volksbank Ermstal-Alb eG	Metzingen	1.624.435	1.296.784	302.166	908.247
149	1	Volksbank Esslingen eG	Esslingen	1.622.187	1.218.330	311.244	1.162.678
150	9	Volksbank Erft eG	Elsdorf	1.610.076	1.199.875	368.522	1.014.480
151	3	VR GenoBank DonauWald eG, Viechtach	Viechtach	1.605.218	1.246.050	542.367	971.600
152	17	PSD Bank Köln eG	Köln	1.603.992	1.326.223	674.346	1.074.319
153	1	Volksbank Hohenlohe eG	Öhringen	1.598.371	1.157.776	444.327	615.522
154	9	Volksbank Hellweg eG	Soest	1.591.110	1.163.514	422.840	1.140.511
155	9	Volksbank Trier eG	Trier	1.584.378	1.210.600	482.806	1.321.149
156	17	PSD Bank Hessen-Thüringen eG	Eschborn	1.578.528	1.134.512	615.414	947.706
157	9	Volksbank Sauerland eG	Arnsberg	1.574.110	1.075.116	318.664	1.072.336

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
158	3	Augusta-Bank eG Raiffeisen-Volksbank, Augsburg	Augsburg	1.571.375	1.354.484	485.293	842.866
159	1	Volksbank Plochingen eG	Plochingen	1.568.170	1.323.969	337.456	799.934
160	3	VR-Bank Donau-Mindel eG, Dillingen	Dillingen a.d. Donau	1.567.139	1.259.581	408.322	868.617
161	13	Emsländische Volksbank eG	Meppen/Ems	1.554.873	951.086	255.074	1.110.596
162	9	Vereinte Volksbank eG, Dorsten	Dorsten	1.551.311	1.109.154	363.101	867.642
163	1	Volksbank Leonberg-Strohgäu eG	Leonberg	1.551.305	1.249.051	331.316	879.703
164	1	Volksbank eG, Überlingen	Überlingen	1.545.241	1.116.910	386.313	1.077.345
165	16	Sparda-Bank Augsburg eG	Augsburg	1.544.007	1.365.408	297.372	632.139
166	3	Raiffeisenbank Main-Spessart eG, Lohr am Main	Lohr am Main	1.541.302	1.235.095	361.666	823.442
167	9	Volksbank Hameln-Stadt-hagen eG	Hameln	1.530.112	1.184.843	389.858	828.498
168	9	Volksbank eG Südheide - Isenhamer Land - Altmark	Celle	1.523.842	1.124.697	335.774	1.099.783
169	9	Volksbank eG Gera · Jena · Rudolstadt	Jena	1.507.181	1.144.898	335.448	861.940
170	1	Volksbank Hochrhein eG	Waldshut-Tiengen	1.506.459	1.079.060	276.111	774.369
171	9	Volksbank Mindener Land eG	Minden	1.505.286	988.254	242.750	863.996
172	9	Volksbank Düsseldorf Neuss eG	Düsseldorf	1.489.167	1.063.074	356.280	893.735
173	9	VR-Bank eG, Würselen	Würselen	1.485.109	1.159.550	421.208	896.067
174	3	VR-Bank Coburg eG	Coburg	1.482.227	1.195.679	323.918	535.548
175	9	VR Bank Westküste eG	Husum	1.474.631	790.868	221.484	1.176.270
176	9	Raiffeisenbank Frechen-Hürth eG	Hürth	1.473.625	1.149.852	375.131	903.267
177	3	Raiffeisenbank Weißenburg-Gunzenhausen eG	Weißenburg i. Bay.	1.445.372	1.040.781	360.457	775.798
178	1	VBU Volksbank im Unterland eG	Brackenheim	1.431.435	1.102.473	386.648	824.291
179	9	Volksbank Heinsberg eG	Heinsberg	1.429.906	1.007.779	441.246	863.375
180	3	Volksbank Raiffeisenbank Regensburg-Schwandorf eG	Regensburg	1.429.311	1.039.934	372.945	907.750
181	9	Volksbank Euskirchen eG	Euskirchen	1.426.261	1.185.018	384.587	818.457
182	9	Volksbank Rhein-Lippe eG	Wesel	1.421.822	1.000.588	365.281	1.062.679
183	3	VR meine Bank eG, Neustadt a.d.Aisch	Neustadt a.d.Aisch	1.420.170	1.088.304	339.441	795.776
184	1	VR Bank Enz plus eG	Remchingen	1.419.845	1.084.401	229.534	1.023.555
185	9	Märkische Bank eG	Hagen	1.411.180	1.067.161	378.442	965.082
186	3	Volksbank Raiffeisenbank Nürnberg eG	Nürnberg	1.409.175	1.185.325	447.104	976.203
187	9	Volksbank Kaiserslautern eG	Kaiserslautern	1.409.135	1.062.034	214.402	935.662
188	1	Volksbank Reutlingen eG	Reutlingen	1.406.623	1.135.770	202.390	1.020.480

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
189	3	Raiffeisenbank Schwaben Mitte eG, Krumbach	Krumbach (Schwaben)	1.395.159	1.112.879	286.693	957.599
190	9	Volksbank Eifel eG	Bitburg	1.393.601	1.068.493	308.840	939.990
191	1	VR Bank Tübingen eG	Tübingen	1.388.450	1.110.651	275.089	919.649
192	9	Volksbank Bochum Witten eG	Bochum	1.383.269	864.718	213.985	947.223
193	9	Volksbank Raiffeisenbank eG	Itzehoe	1.379.687	1.018.038	357.203	845.853
194	9	Volksbank eG, Osterholz-Scharmbeck	Osterholz-Scharmbeck	1.373.282	1.008.290	439.920	1.024.323
195	2	VR DISKONTBANK GmbH	Eschborn	1.371.000	32.000	0	1.072.000
196	9	VR Bank Südliche Weinstraße-Wasgau eG	Bad Bergzabern	1.359.758	1.079.755	196.659	968.112
197	9	VR Bank Neumünster eG	Neumünster	1.348.757	941.213	344.121	875.484
198	9	Volks- und Raiffeisenbank eG	Wismar	1.341.224	1.068.667	285.431	796.066
199	1	Volksbank Friedrichshafen-Tett nang eG	Tett nang	1.332.646	1.068.647	284.945	941.782
200	9	Volksbank Bocholt eG	Bocholt	1.326.415	867.856	291.380	1.030.243
201	1	Volksbank Dreiländereck eG	Lörrach	1.320.601	996.155	234.499	826.324
202	3	Raiffeisenbank Kreis Kelheim eG	Kelheim	1.317.577	1.070.346	346.300	870.854
203	9	Volksbank Hunsrück-Nahe eG	Simmern	1.315.507	1.001.127	308.147	596.310
204	3	VR-Bank Feuchtwangen-Dinkelsbühl eG	Dinkelsbühl	1.305.794	950.657	383.766	754.317
205	3	VR Bank Neuburg-Rain eG	Neuburg a.d. Donau	1.303.338	979.509	331.558	723.990
206	3	VR-Bank Passau eG	Passau	1.301.661	961.213	203.123	897.476
207	9	RV Bank Rhein-Haardt eG	Lambsheim	1.289.527	1.063.450	58.173	942.930
208	1	Volksbank Weinheim eG	Weinheim	1.280.704	989.484	231.829	731.126
209	1	VR-Bank Asperg-Markgröningen eG	Möglingen	1.279.601	924.062	284.512	704.374
210	9	Volksbank Stade-Cuxhaven eG	Stade	1.277.646	899.380	270.819	985.774
211	1	Volksbank Hohenzollern-Balingen eG	Balingen	1.274.717	992.938	329.171	694.372
212	3	VR-Bank Landau-Mengkofen eG	Landau a.d. Isar	1.264.139	886.539	270.892	767.900
213	1	Volksbank eG, Konstanz	Konstanz	1.259.340	860.001	168.966	959.151
214	3	Raiffeisenbank im Oberland eG, Bad Tölz	Bad Tölz	1.256.220	966.010	272.596	941.929
215	9	VR PartnerBank eG Chat-tengau-Schwalm-Eder	Melsungen	1.239.394	953.635	278.753	717.256
216	9	Kieler Volksbank eG	Kiel	1.239.187	880.991	213.495	916.773
217	9	VR Bank eG, Monheim	Monheim	1.235.127	971.860	346.572	823.170
218	1	Volksbank Mittlerer Schwarzwald eG	Wolfach	1.233.513	880.213	331.440	785.255
219	9	Volksbank eG Bremerha-ven-Cuxland	Beverstedt	1.228.883	885.081	372.916	856.220

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
220	1	Volksbank Raiffeisenbank Laupheim-Iltert eG	Laupheim	1.228.319	894.041	411.567	708.415
221	3	VR Bank Oberfranken Mitte eG, Kulmbach	Kulmbach	1.228.297	951.400	338.630	460.912
222	9	Aachener Bank eG	Aachen	1.219.096	952.835	272.280	784.256
223	1	Volksbank Albstadt eG	Albstadt	1.218.257	914.897	185.544	598.940
224	3	Raiffeisenbank München-Süd eG	München-Forstenried	1.212.114	822.346	279.029	1.021.782
225	9	Volksbank Mitte eG	Duderstadt	1.209.870	996.577	319.525	535.057
226	1	Volksbank Bühl eG	Bühl	1.206.620	945.538	250.265	613.453
227	1	Heidenheimer Volksbank eG	Heidenheim	1.200.523	938.001	286.992	694.867
228	9	Volksbank Berg eG	Wipperfürth	1.197.547	840.695	187.996	817.065
229	9	Volksbank Lübbecke Land eG	Lübbecke	1.190.779	837.888	239.663	715.684
230	13	Volksbank Vechta eG	Vechta	1.187.407	822.768	318.123	872.921
231	9	Volksbank eG, Nienburg	Nienburg	1.183.460	836.305	232.531	708.838
232	9	Volksbank eG, Seesen	Seesen	1.182.647	914.815	366.062	647.360
233	3	Raiffeisenbank im Allgäuer Land eG, Altusried	Dietmannsried	1.170.246	870.364	146.266	726.427
234	9	Vereinigte Volksbank eG	Brakel	1.169.684	902.303	341.027	763.644
235	9	VR-Bank Rhein-Erft eG	Brühl	1.166.648	877.500	303.684	663.687
236	1	Donau-Iller Bank eG	Ehingen	1.164.019	849.479	402.336	731.077
237	9	VR-Bank Werra-Meißner eG	Hessisch Lichtenau	1.163.890	647.519	115.520	548.846
238	3	Volksbank Straubing eG	Straubing	1.158.388	874.259	256.062	721.491
239	17	PSD Bank Hannover eG	Hannover	1.155.710	764.609	275.407	896.569
240	9	Volksbank Marl-Recklinghausen eG	Marl	1.150.912	915.282	228.331	619.514
241	9	Raiffeisenbank Voreifel eG	Rheinbach	1.147.761	886.587	256.776	697.303
242	9	VR-Bank in Südniedersachsen eG	Holzminden	1.142.799	769.476	146.389	526.501
243	3	VR-Bank Erding eG	Erding	1.141.439	869.522	246.329	815.668
244	1	Volksbank Bad Saulgau eG	Bad Saulgau	1.141.300	866.013	314.250	686.244
245	9	Volksbank eG, Sulingen	Sulingen	1.134.152	689.613	203.267	785.792
246	1	Volksbank Rhein-Wehra eG	Bad Säckingen	1.118.505	770.959	259.882	613.471
247	9	VR-Bank NordRhön eG	Hünfeld	1.117.832	816.192	322.213	578.482
248	3	VR-Bank Schweinfurt eG	Schweinfurt	1.102.672	888.029	216.037	644.132
249	3	Raiffeisen-Volksbank Ries eG, Nördlingen	Nördlingen	1.097.199	788.531	369.259	657.443
250	17	PSD Bank Westfalen-Lippe eG	Münster	1.096.849	730.015	210.568	545.974
251	3	Raiffeisenbank Chamer Land eG, Cham	Cham	1.096.218	891.182	427.111	525.028
252	3	Volksbank Raiffeisenbank Rhön-Grabfeld eG, Bad Neustadt	Bad Neustadt a. d. Saale	1.086.922	835.944	310.118	456.419
253	13	Volksbank Lingen eG	Lingen	1.083.533	718.349	232.241	778.548

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Re- ceivables
254	3	Raiffeisenbank Oberpfalz Süd eG, Donaustauf	Donaustauf	1.082.480	866.823	281.475	633.615
255	3	Volksbank Forchheim eG	Forchheim	1.081.150	894.485	268.665	628.423
256	9	Leipziger Volksbank eG	Leipzig	1.080.358	927.131	280.617	456.670
257	3	Genossenschaftsbank Unter- allgäu eG, Bad Wörisho- fen	Mindelheim	1.076.072	853.240	275.723	636.300
258	3	Volksbank Raiffeisenbank Bad Kissingen eG	Bad Kissingen	1.074.830	837.551	298.652	363.723
259	3	Raiffeisenbank Neumarkt i.d.OPf. eG	Neumarkt i.d.OPf	1.071.053	852.017	308.766	500.742
260	9	Bremische Volksbank eG	Bremen	1.066.807	658.340	86.964	712.984
261	9	Vereinigte Volksbank Raif- feisenbank eG	Wittlich	1.050.644	800.246	183.693	644.253
262	9	vr bank Untertaunus eG	Idstein	1.045.898	822.909	131.281	748.898
263	9	Rheingauer Volksbank eG	Geisenheim	1.045.746	782.739	164.384	705.838
264	3	VR Bank Bamberg eG Raif- feisen-Volksbank	Bamberg	1.040.290	881.111	280.061	412.567
265	3	VR-Bank Isar-Vils eG	Vilsbiburg	1.033.115	835.090	301.067	650.334
266	3	Freisinger Bank eG Volks- bank-Raiffeisenbank	Freising	1.026.980	773.863	182.238	758.571
267	3	VR-Bank Memmingen eG	Memmingen	1.026.280	737.919	182.584	539.521
268	3	VR-Bank Ismaning Hall- bergmoos Neufahrn eG	Ismaning, Landkreis München	1.025.583	790.160	174.562	715.823
269	1	VR Bank Ravensburg- Weingarten eG	Ravensburg	1.022.324	711.800	223.515	667.962
270	1	Volksbank Franken eG	Buchen	1.015.880	770.610	269.074	669.140
271	13	Volksbank Jever eG	Jever	991.830	662.914	249.482	744.039
272	3	Raiffeisenbank Roth- Schwabach eG	Roth	990.445	767.290	259.637	604.341
273	9	Waldecker Bank eG	Korbach	986.024	654.827	204.461	487.332
274	1	Volksbank Bruhrain-Kraich- hardt eG	Oberhausen- Rheinhausen	982.786	817.150	296.186	622.717
275	9	Volksbank Lübeck eG	Lübeck	939.068	661.531	207.013	570.554
276	9	VR-Bankverein Bad Hers- feld-Rotenburg eG	Bad Hersfeld	938.018	707.345	99.606	515.123
277	9	Volksbank eG, Waltrop	Waltrop	937.711	691.280	183.832	633.155
278	1	Volksbank Rottweil eG	Rottweil	936.149	731.285	350.072	505.905
279	1	VR-Bank in Mittelbaden eG	Iffezheim	934.150	640.057	210.789	533.210
280	9	GENO BANK ESSEN eG	Essen	931.977	671.994	54.810	463.742
281	1	Volksbank eG Mosbach	Mosbach	931.500	644.905	237.840	650.893
282	3	Raiffeisenbank Kissing-Me- ring eG	Mering	928.453	604.117	170.118	782.992
283	9	Volksbank eG, VBS	Bad Oldesloe	927.623	710.031	189.700	525.624
284	2	VR-Bank Bad Salzungen- Schmalkalden eG	Bad Salz- ungen	926.622	620.796	207.832	489.815
285	1	Volksbank Filder eG	Neuhausen	923.804	668.253	145.548	728.745
286	3	VR-Bank Taufkirchen-Dor- fen eG	Taufkir- chen/Vils	922.375	709.173	223.805	606.913

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
287	9	Harzer Volksbank eG	Wernigerode	902.436	737.924	284.086	489.881
288	3	Vereinigte Raiffeisenbanken Gräfenberg-Forchheim-Eschenau-Heroldsberg eG	Gräfenberg	899.789	736.310	226.891	582.951
289	9	Volksbank Dortmund-Nord-west eG	Dortmund	896.628	512.270	89.276	543.181
290	3	Raiffeisenbank eG Deggendorf-Plattling-Sonnenwald	Deggendorf	884.422	720.918	353.472	488.548
291	9	Volksbank Emmerich-Rees eG	Emmerich	881.723	454.382	253.959	768.310
292	1	Raiffeisenbank Biberach eG	Warthausen	878.773	676.190	339.783	546.182
293	3	VR-Bank Landsberg-Ammersee eG	Landsberg am Lech	878.732	727.618	228.340	551.451
294	9	VR PLUS Altmark-Wendland eG	Lüchow	872.630	585.192	163.888	396.899
295	9	Volks- und Raiffeisenbank Neuwied-Linz eG	Neuwied	868.200	710.792	249.360	570.935
296	1	Volksbank eG Horb-Freudenstadt	Freudenstadt	860.345	660.274	159.431	417.600
297	9	Volksbank Viersen eG	Viersen	858.228	635.583	187.254	495.159
298	9	Pommersche Volksbank eG	Stralsund	854.698	679.436	223.870	301.117
299	3	Volksbank-Raiffeisenbank Vilshofen eG	Vilshofen an der Donau	853.996	658.736	192.326	496.422
300	9	Volks- und Raiffeisenbank Prignitz eG	Perleberg	851.059	639.802	153.717	540.439
301	1	Volksbank Staufien eG	Staufen	850.340	546.289	139.203	313.987
302	1	Volksbank Ettlingen eG	Ettlingen	846.520	719.446	87.111	485.199
303	1	VR-Bank Ellwangen eG	Ellwangen	842.983	641.945	115.903	500.521
304	3	VR-Bank Lichtenfels-Ebern eG	Lichtenfels	834.350	669.455	287.544	369.282
305	9	Volksbank eG, Bassum	Bassum	831.093	603.994	157.851	511.738
306	3	Raiffeisenbank Straubing eG	Straubing	830.835	701.755	240.107	451.905
307	3	Raiffeisenbank Obermain Nord eG, Altenkunstadt	Altenkunstadt	830.289	569.677	155.931	329.132
308	13	Volksbank Süd-Emsland eG	Spelle	829.036	604.744	238.006	685.343
309	9	Volksbank Magdeburg eG	Magdeburg	823.665	520.401	56.102	675.289
310	9	Volksbank Koblenz Mittelrhein eG	Koblenz	821.433	563.141	223.048	561.277
311	9	VR Bank Westthüringen eG	Mühlhausen/Thür.	816.850	619.319	207.168	297.323
312	3	Volksbank-Raiffeisenbank Amberg eG	Amberg	814.253	660.099	192.504	379.411
313	3	Raiffeisenbank München-Nord eG, Unterschleißheim	Unterschleißheim, Landkreis München	810.897	629.984	177.160	379.125
314	9	Volksbank Uelzen-Salzwedel eG	Uelzen	807.366	561.356	216.130	528.833
315	13	Raiffeisen-Volksbank Varel-Nordenham eG	Varel	806.759	548.813	216.240	533.805
316	9	Volksbank Rietberg eG	Rietberg	806.362	528.101	123.697	633.414

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
317	13	Raiffeisen-Volksbank Fresena eG	Norden	804.888	613.073	242.744	548.899
318	13	Volksbank Osnabrück eG	Osnabrück	803.677	598.075	135.181	542.787
319	1	VR Bank Hohenneuffen-Teck eG	Frickenhausen	801.812	629.574	242.339	532.591
320	9	Volksbank Halle (Saale) eG	Halle	800.522	690.664	224.125	297.556
321	3	Raiffeisen-Volksbank Ebersberg eG	Grafing	793.116	586.112	94.976	485.387
322	3	Raiffeisenbank Pfaffenwinkel eG, Peiting	Peiting	792.209	557.233	185.752	430.750
323	9	Volksbank Delbrück-Hövelhof eG	Delbrück	783.670	560.024	186.654	466.312
324	9	VR-Bank Bonn eG	Bonn	777.255	570.388	212.072	568.716
325	9	VR-Bank Südwestpfalz eG Pirmasens - Zweibrücken	Pirmasens	762.961	638.682	184.979	459.195
326	1	Volksbank Stutensee-Weingarten eG	Stutensee	758.970	548.487	212.937	599.874
327	9	Schleswiger Volksbank eG Volksbank Raiffeisenbank	Schleswig	758.930	477.984	197.097	541.156
328	9	Volksbank Bad Salzuflen eG	Bad Salzuflen	758.487	592.005	262.689	299.749
329	9	VR-Bank Mittelsachsen eG	Freiberg	758.130	625.584	203.830	374.545
330	1	Volksbank Möckmühl eG	Möckmühl	752.867	524.149	157.022	533.323
331	9	Raiffeisenbank Südstormarn Mölln eG	Trittau	752.439	512.940	78.542	426.485
332	9	Nordthüringer Volksbank eG	Nordhausen	749.751	556.026	177.778	277.284
333	9	Gladbacher Bank AG von 1922	Mönchengladbach	748.792	552.657	159.862	418.950
334	13	Volksbank Oldenburg eG	Oldenburg	748.051	569.991	194.618	542.976
335	9	Volksbank Aller-Weser eG	Hoya	747.452	535.794	144.439	435.065
336	3	Raiffeisen - meine Bank eG, Hilpoltstein	Hilpoltstein	747.387	589.262	121.765	427.871
337	9	Unsere Volksbank eG St. Wendeler Land	St. Wendel	744.984	588.482	162.795	515.708
338	3	Raiffeisenbank im Naabtal eG, Nabburg	Nabburg	743.996	570.305	284.051	373.231
339	9	Rostocker Volks- und Raiffeisenbank eG	Rostock	742.958	653.706	109.902	207.719
340	1	Volksbank Brenztal eG	Giengen	739.284	537.643	136.569	538.336
341	9	Volksbank Kleverland eG	Kleve	738.431	521.249	167.030	577.797
342	9	Volks- und Raiffeisenbank Saarpfalz eG	Homburg	734.962	650.174	245.423	395.753
343	1	Raiffeisenbank Kocher-Jagst eG	Ingelfingen	731.103	523.046	101.399	456.235
344	3	VR Bank Kitzingen eG	Kitzingen	725.129	537.056	259.986	375.374
345	9	Volksbank Olpe-Wenden-Drolshagen eG	Olpe	724.681	522.229	232.284	482.419
346	9	levoBank eG	Lebach	722.071	540.326	153.025	550.190
347	9	Volksbank-Raiffeisenbank im Kreis Rendsburg eG	Osterrönfeld	717.852	508.687	197.259	348.647
348	3	Rottaler Raiffeisenbank eG, Pocking	Pocking	715.880	555.972	258.012	467.882

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Re- ceivables
349	9	Raiffeisenbank eG, Bauna- tal	Baunatal	713.928	523.499	210.265	282.226
350	1	VR-Bank Langenau-Ulmer Alb eG	Langenau	709.506	524.669	184.506	401.971
351	3	Raiffeisenbank Südl. Bayer- ischer Wald eG, Hauzen- berg	Hauzenberg	704.467	550.736	117.602	432.969
352	9	VR-Bank Uckermark-Ran- dow eG	Prenzlau	698.347	569.331	213.991	248.242
353	9	VR-Bank Altenburger Land eG	Schmölln	689.808	557.917	119.553	251.858
354	13	Volksbank Bramgau- Wittlage eG	Bramsche	680.311	524.556	139.574	391.124
355	9	VR-Bank Nordeifel eG	Schleiden	676.251	521.842	116.006	483.454
356	9	Volksbank Rhede eG	Rhede	674.458	425.413	153.343	558.518
357	9	Volksbank Greven eG	Greven	672.145	418.870	84.914	510.279
358	3	Raiffeisenbank Augsburg Land West eG, Zusmar- shausen	Zusmarshau- sen	672.129	568.297	295.801	336.335
359	13	Vereinigte Volksbank eG, Ganderkesee - Hude - Bookholzberg - Lemwerder	Hude	668.435	486.352	147.531	487.354
360	9	Rüsselsheimer Volksbank eG	Rüsselsheim	668.196	514.534	124.353	474.484
361	9	VR Bank Rhein-Mosel eG	Ochtendung	666.324	482.151	114.086	255.563
362	9	Dithmarscher Volks- und Raiffeisenbank eG	Heide	666.297	424.815	169.270	385.748
363	17	PSD Bank Koblenz eG	Koblenz	662.618	510.580	251.322	527.497
364	17	PSD Bank Kiel eG	Kiel	661.259	429.488	171.403	527.117
365	1	Raiffeisenbank Ehingen- Hochsträß eG	Ehingen	659.341	464.285	207.952	436.152
366	13	Raiffeisenbank Oldenburg eG	Oldenburg	658.109	523.185	226.304	489.057
367	3	Raiffeisenbank Regens- burg-Wenzenbach eG	Regensburg	658.062	543.031	188.965	344.967
368	9	VR-Bank Fläming eG	Luckenwalde	651.335	529.297	173.348	183.349
369	3	VR-Bank Fichtelgebirge- Frankenwald eG, Marktred- witz	Marktredwitz	649.551	464.532	196.566	332.821
370	9	Volksbank Ochtrup-Laer eG	Ochtrup	648.318	421.246	150.213	474.189
371	9	Volksbank Hildesheimer Börde eG	Söhlde	648.174	471.057	49.887	429.684
372	9	Raiffeisenbank HessenNord eG	Wolfhagen	647.427	527.877	144.876	417.061
373	1	Volksbank Klettgau- Wutöschingen eG	Wutöschingen	646.382	411.382	150.873	444.780
374	3	VR-Bank Landshut eG	Landshut	643.705	514.753	109.621	372.009
375	17	PSD Bank Braunschweig eG	Braunschweig	643.506	479.854	161.553	443.418
376	9	Volksbank eG, Sottrum	Sottrum	635.596	409.667	149.495	423.808
377	1	Volksbank-Raiffeisenbank Riedlingen eG	Riedlingen	622.570	444.031	215.854	342.631

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
378	9	Erfurter Bank eG	Erfurt	620.308	495.759	136.798	256.656
379	3	Raiffeisenbank Neumarkt-St. Veit - Reischach eG	Reischach	610.500	435.535	175.192	447.261
380	1	Volksbank Zuffenhausen eG	Stuttgart	609.081	474.061	155.676	270.560
381	9	Volksbank Mainspitze eG	Ginsheim-Gustavsburg	604.506	491.463	60.277	443.160
382	9	Brandenburger Bank Volksbank-Raiffeisenbank eG	Brandenburg	603.458	452.953	139.798	365.492
383	9	Raiffeisenbank eG, Hagenow	Hagenow	601.169	406.922	171.621	452.772
384	3	Raiffeisenbank Altdorf-Ergolding eG	Ergolding	599.266	503.497	194.979	296.605
385	9	Zevener Volksbank eG	Zeven	598.300	410.241	121.532	369.755
386	9	Volksbank Lauterbach-Schlitz eG	Lauterbach/Hess.	597.376	348.459	77.873	293.225
387	13	VR-Bank eG Osnabrücker Nordland	Fürstenau	593.478	377.061	142.027	415.749
388	9	Volksbank Baumberge eG	Billerbeck	591.519	373.682	148.949	348.777
389	9	Volksbank Sprockhövel eG	Sprockhövel	591.020	459.070	108.937	423.274
390	9	Volksbank Untere Saar eG	Losheim am See	590.202	442.997	103.331	375.618
391	9	Volksbank Löbau-Zittau eG	Ebersbach-Neugersdorf	590.016	447.326	112.911	260.726
392	3	Raiffeisenbank Isar-Loisachtal eG, Wolfratshausen	Wolfratshausen, Landkreis Bad Tölz-Wolfr	584.550	453.727	160.869	418.396
393	9	Volksbank Glan-Münchweiler eG	Glan-Münchweiler	579.747	424.763	118.935	472.308
394	9	Volksbank Raiffeisenbank eG	Greifswald	576.907	430.323	146.141	188.319
395	9	VR Bank Lausitz eG	Cottbus	573.971	498.429	195.417	243.015
396	3	Raiffeisenbank Erding eG	Erding	571.323	448.967	174.904	405.074
397	9	VR-Bank eG, Schwerin	Schwerin	565.869	439.538	142.417	325.745
398	9	vr bank Südthüringen eG	Suhl	563.034	480.607	123.928	300.610
399	9	Raiffeisenbank eG, Bad Bramstedt	Bad Bramstedt	560.324	433.914	100.646	400.704
400	9	VR Bank Mittelhaardt eG	Bad Dürkheim	556.422	443.515	82.220	371.783
401	13	Volksbank Dammer Berge eG	Damme	554.905	313.945	90.211	470.693
402	9	Volksbank im Ostmünsterland eG	Harsewinkel	553.654	398.123	116.981	403.453
403	9	Volksbank Geest eG	Apensen	547.034	413.738	133.078	377.797
404	13	Volksbank Emstal eG	Lathen	545.094	330.729	119.935	397.872
405	13	Volksbank GMHütte-Hagen-Bissendorf eG (GHB)	Georgsmarienhütte	544.483	385.878	88.577	311.928
406	3	Raiffeisenbank Gaimersheim-Buxheim eG	Gaimersheim	543.643	421.864	59.780	376.981
407	9	Volksbank Halle/Westf. eG	Halle	542.043	365.418	124.422	381.269
408	3	Raiffeisenbank Altdorf-Feucht eG	Feucht	541.200	440.165	153.064	377.135

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
409	3	Raiffeisenbank Hersbruck eG	Hersbruck	540.497	419.543	115.029	381.715
410	1	Volksbank Laichinger Alb eG	Laichingen	540.121	365.546	101.620	360.113
411	9	Bensberger Bank eG	Bergisch Gladbach	531.555	374.949	107.785	319.685
412	9	Volksbank Hohenlimburg eG	Hagen	531.548	350.858	95.449	405.511
413	3	Raiffeisen-Volksbank Haßberge eG	Haßfurt	526.787	403.520	139.914	267.259
414	9	Volksbank in der Hohen Mark eG	Reken	525.384	333.483	127.555	372.006
415	9	Volksbank Haltern eG	Haltern am See	522.299	394.479	119.898	268.904
416	9	Volksbank Lüdinghausen-Olfen eG	Lüdinghausen	521.717	344.153	136.113	387.080
417	9	Raiffeisenbank Oberursel eG	Bad Homburg	519.258	222.814	49.856	424.599
418	13	Volksbank eG Bad Laer-Borgloh-Hilter-Melle	Hilter	517.984	338.645	46.522	422.115
419	1	Raiffeisenbank im Kreis Calw eG	Neubulach	516.019	406.340	155.679	336.596
420	9	Volksbank Schermbeck eG	Schermbeck	511.829	299.144	93.403	426.982
421	1	VR-Bank Dornstetten-Horb eG	Dornstetten	510.229	380.463	123.466	243.494
422	1	VR-Bank eG, Schopfheim	Schopfheim	509.109	359.826	124.556	429.572
423	9	Volksbank Eutin Raiffeisenbank eG	Eutin	508.074	409.802	82.553	272.458
424	3	ALLGÄUER VOLKSBANK EG KEMPTEN - SONTHO-FEN	Kempten (Allgäu)	507.747	363.890	63.629	304.588
425	3	Raiffeisenbank Essenbach eG	Essenbach	502.196	385.277	78.404	371.982
426	3	Raiffeisenbank Volkacher Mainschleife - Wiesentheid eG	Volkach	500.830	369.965	81.720	266.955
427	9	Volksbank Vogtland eG	Plauen	498.323	417.155	92.009	274.616
428	3	Raiffeisenbank Riedenburg-Lobsing eG	Riedenburg	497.368	357.627	98.353	310.042
429	3	Raiffeisenbank Zorneding eG	Zorneding	496.905	389.820	49.545	392.263
430	3	RAIFFEISEN Spar + Kreditbank eG, Lauf a. d. Pegnitz	Lauf a. d. Pegn.	496.493	354.803	145.366	346.088
431	9	Volksbank Heuchelheim eG	Heuchelheim	495.694	405.597	89.084	261.094
432	9	Volksbank Raiffeisenbank Meißen Großenhain eG	Meißen	494.500	404.330	84.840	306.166
433	9	Volksbank Nottuln eG	Nottuln	493.253	347.843	153.529	348.570
434	13	Raiffeisenbank Emsland-Mitte eG	Klein-Berßen	489.633	189.339	63.275	367.213
435	13	VR BANK Dinklage-Steinfeld eG	Dinklage	488.519	342.556	127.624	353.729
436	13	Volksbank Lohne-Mühlen eG	Lohne	487.086	346.377	105.401	376.355

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Re- ceivables
437	9	VR Bank Bad Orb- Gelnhausen eG	Gelnhausen	486.421	394.306	70.950	254.515
438	1	Volksbank Altshausen eG	Altshausen	486.395	306.621	103.990	275.242
439	9	Volks- und Raiffeisenbank Muldentale eG	Grimma	480.895	377.894	38.937	230.211
440	13	Volksbank Cloppenburg eG	Cloppenburg	480.415	326.115	100.777	326.939
441	3	Raiffeisenbank Hemau-Kall- münz eG	Hemau	478.939	389.127	126.781	207.668
442	1	Volksbank Nordschwarz- wald eG	Pfalzgraf- enweiler	474.650	343.883	102.845	280.941
443	3	Raiffeisenbank Oberpfalz NordWest eG, Kemnath	Kemnath	473.628	392.467	152.273	215.725
444	3	Raiffeisenbank Neustadt- Vohenstrauß eG	Neustadt a.d.Waldnaab	470.503	357.878	165.623	249.938
445	9	Raiffeisenbank Erkelenz eG	Erkelenz	467.613	353.600	171.840	246.089
446	1	Volksbank Beilstein-Ilfeld- Abstatt eG	Beilstein	465.263	354.008	100.828	279.805
447	3	Volksbank-Raiffeisenbank Dingolfing eG	Dingolfing	462.812	355.156	83.712	255.336
448	13	Volksbank Wildeshauser Geest eG	Wildeshausen	462.623	307.044	108.979	320.727
449	1	Volksbank Sulmtal eG	Obersulm	460.421	325.475	136.142	284.533
450	3	Raiffeisenbank Pfeffen- hausen-Rottenburg-Wilden- berg eG	Rottenburg	456.522	332.447	53.208	350.287
451	9	Volksbank im Harz eG	Osterode am Harz	452.296	330.290	129.733	263.501
452	9	Raiffeisenbank Westeifel eG	Schönecken	450.340	320.787	143.223	278.896
453	3	Raiffeisenbank Am Gold- enen Steig eG, Röhrnbach	Röhrnbach	449.295	349.096	85.951	230.605
454	13	Raiffeisenbank eG, Moormerland	Moormerland	448.538	300.871	64.025	273.520
455	9	Raiffeisenbank Mecklen- burger Seenplatte eG	Waren	447.493	359.106	113.647	120.470
456	13	Volksbank Niedergrafschaft eG	Uelsen	445.080	248.391	60.741	386.197
457	3	Raiffeisenbank Ortenburg - Kirchberg v.W. eG	Ortenburg	443.586	295.629	52.338	353.562
458	9	Volks- und Raiffeisenbank Saale-Unstrut eG	Merseburg	443.580	374.968	113.564	110.976
459	13	Raiffeisenbank Garrel eG	Garrel	443.148	188.550	32.822	402.878
460	9	VR Bank Weimar eG	Weimar	441.720	378.039	131.429	138.328
461	9	Volksbank Weschnitztal eG	Rimbach	441.013	369.485	147.655	297.689
462	9	Spreewaldbank eG	Lübben (Spreewald)	440.758	357.680	160.866	239.082
463	9	Volksbank Bremen-Nord eG	Bremen	437.555	325.230	157.627	257.734
464	3	Raiffeisenbank Bad Wind- sheim eG	Bad Wind- sheim	434.746	330.708	120.857	227.497
465	3	Raiffeisenbank Bütthard- Gaukönigshofen eG	Bütthard	434.688	328.836	116.524	191.334
466	9	Sylter Bank eG	Sylt/Keitum	433.364	332.421	99.751	328.860
467	9	Volksbank Solling eG	Hardeggen	433.160	340.498	102.751	192.142

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468	3	Raiffeisenbank Burgebrach - Stegaarach eG	Burgebrach	432.951	348.676	103.368	262.397
469	13	VR Bank Oldenburg Land West eG	Hatten	431.414	265.640	81.896	304.428
470	1	Bernhauser Bank eG	Filderstadt	426.531	335.299	42.489	344.958
471	9	DZB BANK GmbH	Mainhausen	426.302	264.169	0	336.710
472	9	Volksbank Raiffeisenbank Niederschlesien eG	Görlitz	425.227	361.077	129.255	182.773
473	3	Raiffeisenbank i. Lkrs. Passau-Nord eG	Tiefenbach	424.201	327.655	137.823	190.201
474	3	VR-Bank eG, Alzenau	Alzenau	423.513	353.542	53.789	207.287
475	3	Raiffeisenbank Bobingen eG	Bobingen	423.008	349.161	111.658	167.278
476	9	Volksbank Butzbach eG	Butzbach	422.570	310.359	104.943	230.073
477	3	Raiffeisenbank Heilsbronn-Windsbach eG	Windsbach	420.449	303.648	115.960	224.324
478	3	Raiffeisenbank Haag-Gars-Maitenbeth eG	Haag i. OB.	417.617	333.870	125.239	264.723
479	13	Raiffeisenbank Flachsmeer eG	Wes-toverledingen	416.633	257.388	92.257	339.234
480	3	Raiffeisenbank Sulzbach-Rosenberg eG	Sulzbach-Rosenberg	415.896	327.763	108.547	199.288
481	9	Raiffeisenbank eG, Simmerath	Simmerath	414.831	232.664	67.444	335.409
482	9	Volksbank Wilhelmshaven eG	Wilhelmshaven	414.686	244.874	62.228	273.881
483	1	Volksbank Münsingen eG	Münsingen	414.235	335.696	136.574	211.714
484	9	VR-Bank Eisenach-Ronshausen eG	Eisenach	413.766	354.238	144.952	167.207
485	3	Raiffeisenbank Donaumooser Land eG, Karlshuld	Karlshuld	413.445	328.414	112.455	242.428
486	3	Raiffeisenbank Hallertau eG, Rudelzhausen	Rudelzhausen	412.695	334.144	126.688	272.369
487	3	Raiffeisenbank RSA eG, Rechtmehring	Rechtmehring	411.123	277.984	50.255	367.642
488	9	Volksbank Kempen-Grefrath eG	Kempen	409.246	296.533	97.437	188.418
489	9	Volksbank Börde-Bernburg eG	Wanzleben	407.893	296.610	96.880	224.633
490	9	Eckernförder Bank eG Volksbank-Raiffeisenbank	Eckernförde	405.048	311.910	101.316	285.285
491	9	Volksbank Riesa eG	Riesa	404.557	313.566	117.960	183.551
492	3	Raiffeisenbank Parsberg-Velburg eG	Parsberg	400.640	303.980	67.639	229.323
493	9	Raiffeisenbank Neustadt eG	Neustadt	400.474	323.454	81.980	256.842
494	3	Raiffeisenbank Rupertiwinkel eG, Teisendorf	Teisendorf	400.394	305.714	138.979	244.620
495	9	Raiffeisenbank Ried eG	Bürstadt	400.365	322.710	123.712	227.029
496	1	Raiffeisenbank Kraichgau eG	Kirchardt	399.619	287.622	103.033	324.583
497	3	Schrobenhausener Bank eG	Schrobenhausen	399.472	307.611	101.753	277.145

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
498	13	Volksbank eG Delmenhorst Schierbrok	Delmenhorst	399.251	278.319	122.715	311.669
499	3	Raiffeisenbank Höchberg eG	Höchberg	399.086	293.377	80.941	255.768
500	9	Volksbank Eisenberg eG	Eisenberg	396.190	346.447	29.953	123.484
501	9	Frankenberger Bank, Raiffeisenbank eG	Frankenberg (Eder)	395.428	299.330	121.088	280.167
502	1	Volksbank Welzheim eG	Welzheim	391.751	332.649	180.710	269.869
503	9	Raiffeisenbank eG, Lauenburg	Lauenburg	391.247	320.048	77.605	264.333
504	9	Raiffeisenbank eG, Großenlütder	Großenlütder	390.642	282.966	93.830	181.727
505	9	VR-Bank Hunsrück-Mosel eG	Morbach	390.198	311.375	78.004	186.408
506	3	VR-Bank Gerolzhofen eG	Gerolzhofen	388.285	260.406	53.679	297.495
507	3	Volksbank-Raiffeisenbank Glauchau eG	Glauchau	386.869	315.781	112.948	179.570
508	1	Volksbank Meßkirch eG Raiffeisenbank	Meßkirch	386.864	260.401	115.683	246.802
509	9	Volksbank Dessau-Anhalt eG	Dessau	386.586	340.928	125.912	160.657
510	9	Volksbank Pirna eG	Pirna	386.280	327.304	46.470	203.057
511	3	Raiffeisenbank Kirchweithal eG, Pforzen	Pforzen	385.093	291.525	53.974	203.019
512	9	Volksbank Kamen-Werne eG	Werne	382.745	294.630	156.674	212.757
513	13	Volksbank eG Westrhauderfehn	Rhauderfehn	381.806	261.035	74.434	299.919
514	1	Raiffeisenbank Mutlangen eG	Mutlangen	379.239	311.927	49.540	243.289
515	1	Raiffeisenbank Südhardt eG	Durmursheim	378.521	305.886	120.326	279.996
516	3	Raiffeisenbank Holzkirchen-Otterfing eG	Holzkirchen	368.118	300.873	104.812	255.636
517	3	Bayerische BodenseeBank - Raiffeisen- eG, Lindau	Lindau (B)	367.161	249.132	39.085	238.223
518	13	Spar- und Darlehnskasse eG, Friesoythe	Friesoythe	365.563	266.814	82.649	272.593
519	1	Volksbank Vorbach-Tauber eG	Weikersheim	365.536	260.687	84.887	211.581
520	9	Volksbank Anröchte eG	Anröchte	364.082	254.667	85.659	221.810
521	13	Volksbank Essen-Cappeln eG	Cappeln	362.989	222.360	51.893	279.078
522	9	Volksbank Nordharz eG	Goslar	362.095	285.360	107.286	158.623
523	9	Volksbank Gescher eG	Gescher	359.914	158.957	38.787	227.807
524	3	Raiffeisenbank Estenfeld-Bergtheim eG	Estenfeld	359.758	271.437	49.669	198.188
525	9	Volksbank Delitzsch eG	Delitzsch	357.400	318.494	117.026	74.548
526	3	Raiffeisenbank Hengersberg-Schöllnach eG	Hengersberg	357.105	260.713	111.268	272.664
527	3	Raiffeisenbank Westallgäu eG, Gestratz	Gestratz	354.619	300.720	80.113	217.114
528	1	Raiffeisenbank Bretzfeld-Neuenstein eG	Bretzfeld	354.267	279.633	83.389	214.038

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
529	1	Spar- und Kreditbank Hardt eG	Eggenstein-Leopoldshafen	351.014	249.882	89.373	285.504
530	13	Volksbank Westerstede eG	Westerstede	350.125	192.785	75.678	268.401
531	9	Volksbank Selm-Bork eG	Selm	348.940	244.003	92.286	187.275
532	9	Volksbank Elsen-Wewer-Borchen eG	Paderborn	348.691	245.650	75.306	251.566
533	3	Volksbank Lindenberg eG	Lindenberg i.Allgäu	347.933	270.618	73.680	237.892
534	3	Raiffeisenbank Schwabmünchen eG	Schwabmünchen	347.381	275.838	89.749	221.326
535	9	Mendener Bank eG	Menden	343.911	264.636	92.347	232.684
536	3	Raiffeisenbank Bibertgrund eG, Zirndorf	Zirndorf	343.608	277.088	92.216	185.786
537	3	Raiffeisenbank Südliches Ostallgäu eG, Seeg	Seeg	343.401	279.918	64.460	157.383
538	3	Raiffeisenbank Westkreis Fürstenfeldbruck eG	Moorenweis	342.646	247.094	111.519	244.166
539	9	Raiffeisen-Volksbank Saale-Orla eG	Pößneck	342.073	281.684	95.448	94.547
540	9	Raiffeisen-Bank Eschweiler eG	Eschweiler	341.849	207.787	70.796	289.770
541	9	Volks- und Raiffeisenbank Fürstenwalde Seelow Wriezen eG	Fürstenwalde	339.865	292.759	75.557	129.939
542	3	Raiffeisenbank Aschberg eG	Holzheim	332.354	253.694	98.116	168.446
543	1	Raiffeisenbank Schrozberg-Rot am See eG	Schrozberg	328.561	240.859	60.822	135.931
544	13	Volksbank Bösel eG	Bösel	328.252	176.854	58.707	253.257
545	3	Raiffeisenbank Pfaffenhausen eG	Pfaffenhausen	327.099	262.748	83.437	184.274
546	9	Raiffeisenbank Ostprignitz-Ruppin eG	Neuruppin	325.792	267.664	104.154	94.175
547	9	Volksbank Jerichower Land eG	Burg	324.804	263.473	77.894	129.426
548	3	Raiffeisenbank Aresing-Gerolsbach eG	Gerolsbach	324.702	246.535	88.985	222.245
549	9	Volksbank Rathenow eG	Rathenow	324.598	242.801	52.726	157.345
550	3	Raiffeisenbank Falkenstein-Wörth eG	Falkenstein	320.348	264.291	104.882	107.022
551	3	Raiffeisenbank Aindling eG	Aindling	319.545	228.668	58.520	238.905
552	3	Raiffeisenbank Buch-Eching eG	Eching bei Landshut	315.479	243.589	94.018	224.772
553	3	Raiffeisenbank Ichenhausen eG	Ichenhausen	312.522	262.466	125.704	85.590
554	13	Volksbank Haselünne eG	Haselünne	310.751	198.716	61.148	215.511
555	9	Volksbank Mittleres Erzgebirge eG	Olbernhau	310.423	264.220	114.265	119.112
556	3	VR Bank Burglengenfeld eG	Burglengenfeld	307.601	231.598	67.795	164.345
557	9	Volksbank eG, Fredenbeck	Fredenbeck	306.674	195.492	68.522	217.498
558	13	Volksbank eG, Lönningen	Lönningen	305.639	197.721	63.854	255.306

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
559	13	Hümmlinger Volksbank eG	Werlte	303.513	201.565	52.312	232.904
560	3	Raiffeisenbank Arnstorf eG	Arnstorf	302.844	219.155	50.109	214.911
561	1	Raiffeisenbank Rosenstein eG	Heubach	302.428	223.763	63.720	194.861
562	9	Raiffeisenbank Biebergrund-Petersberg eG	Petersberg	302.400	241.766	67.610	191.532
563	3	Raiffeisen-Volksbank Wemding eG	Wemding	302.004	213.327	100.353	149.472
564	1	Raiffeisenbank Oberteuringen-Meckenbeuren eG	Oberteuringen	297.968	226.644	92.512	187.171
565	3	Raiffeisenbank Seebachgrund eG, Heßdorf	Heßdorf	297.375	226.580	107.639	231.322
566	3	Raiffeisenbank Thannhausen eG	Thannhausen	296.883	211.705	37.853	147.711
567	9	Volksbank Meerbusch eG	Meerbusch	296.469	245.597	52.203	132.578
568	9	Volksbank Heiden eG	Heiden	295.350	138.754	62.151	183.410
569	9	Raiffeisenbank eG, Rodenbach	Rodenbach	293.698	234.819	101.800	198.274
570	9	Volksbank Düren eG	Düren	292.428	253.325	87.660	126.882
571	9	Volksbank Schnathorst eG	Hüllhorst	292.338	218.956	88.469	209.193
572	1	Raiffeisenbank eG, Gundelfingen	Gundelfingen	291.779	228.024	57.744	213.801
573	9	Raiffeisenbank eG, Handewitt	Handewitt	291.471	154.478	71.037	254.986
574	3	Raiffeisenbank Steingaden eG	Steingaden	290.455	234.447	87.778	175.690
575	1	Volksbank Deisslingen eG	Deißlingen	286.700	164.057	37.000	200.182
576	3	Raiffeisenbank Pfaffenhofen a.d. Glonn eG	Odelzhausen	284.962	221.487	84.822	241.572
577	3	Raiffeisenbank Regenstauf eG	Regenstauf	283.730	213.468	81.896	164.816
578	3	Raiffeisenbank Auerbach-Freihung eG	Auerbach i.d.OPf	283.641	207.054	60.786	185.346
579	3	Raiffeisenbank Hochfranken West eG, Stammbach	Stammbach	283.232	207.518	85.332	139.643
580	9	Volksbank im Wesertal eG	Coppenbrügge	283.042	235.338	92.682	153.570
581	3	Raiffeisenbank Greding-Thalmässing eG	Greding	282.497	229.739	72.997	137.375
582	3	Raiffeisenbank Gilching eG	Gilching	281.640	237.208	59.594	160.908
583	3	Raiffeisenbank Rehling eG	Rehling	281.000	162.188	37.437	220.428
584	9	Spar- und Darlehnskasse Bockum-Hövel eG	Hamm	279.381	211.087	83.465	171.028
585	3	Raiffeisenbank Chiemgau-Nord - Obing eG	Seebruck	277.155	208.986	56.110	148.808
586	3	Raiffeisenbank Ehekirchen-Oberhausen eG	Ehekirchen	276.532	192.921	84.599	194.866
587	9	Raiffeisenbank eG, Teterow	Teterow	276.524	223.658	72.717	151.064
588	13	Raiffeisenbank eG Scharrel	Saterland	275.816	153.393	58.378	233.864
589	13	Raiffeisenbank Rastede eG	Rastede	275.187	193.713	98.368	198.100
590	9	Volksbank Reiste-Eslohe eG	Eslohe	274.395	186.646	61.706	159.366

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
591	3	Raiffeisenbank Wal-daschaff-Heigenbrücken eG	Waldaschaff	272.822	196.231	90.054	158.667
592	9	Raiffeisenbank eG, Weimar	Weimar	272.257	204.721	59.190	196.961
593	9	Volksbank Demmin eG	Demmin	271.008	221.336	82.327	113.450
594	9	Raiffeisen-Volksbank Oder-Spree eG	Beeskow	269.513	226.649	61.486	118.929
595	9	Raiffeisenbank Eifeltor eG	Kaisersesch	268.723	219.541	94.197	149.812
596	9	Raiffeisenbank eG, Barg-teheide	Bargteheide	267.858	180.176	33.480	214.501
597	3	Raiffeisen-Volksbank Bad Staffelstein eG	Bad Staffelstein	267.553	220.676	76.216	116.950
598	1	Volksbank Remseck eG	Remseck	267.310	219.712	70.650	167.249
599	1	Raiffeisenbank Frankenhardt-Stimpfach eG	Stimpfach	266.943	217.245	64.996	129.626
600	1	Bopfinger Bank Sechta-Ries eG	Bopfingen	265.856	222.405	86.400	123.685
601	1	Volksbank Ammerbuch eG	Ammerbuch	262.661	196.637	53.652	183.211
602	3	EVENORD-BANK eG-KG, Nürnberg	Nürnberg	262.558	187.563	66.568	166.224
603	3	Raiffeisenbank Rattiszell-Konzell eG	Rattiszell	261.954	216.284	61.826	136.646
604	9	Volksbank Esens eG	Esens	261.662	198.723	79.832	142.714
605	1	Spar- und Kreditbank, Rheinstetten	Rheinstetten	259.298	212.766	52.565	125.280
606	9	Raiffeisenbank Zeller Land eG	Briedel	258.665	212.416	68.992	138.704
607	1	Volksbank Baiersbronn Murgtal eG	Baiersbronn	257.861	193.477	66.749	141.630
608	13	Raiffeisenbank Wesermarsch-Süd eG	Brake	257.625	189.426	70.042	159.391
609	9	Raiffeisenbank eG, Leezen	Leezen	257.024	192.964	46.707	133.707
610	3	Raiffeisenbank Unteres Vilstal eG, Schmidmühlen	Schmidmühlen	254.566	176.577	65.861	187.046
611	3	Raiffeisenbank Beuerberg-Eurasburg eG	Eurasburg	253.920	168.496	31.189	234.661
612	1	Volksbank Flein-Talheim eG	Flein	253.200	186.660	53.865	154.457
613	9	Genobank Mainz eG	Mainz	251.425	186.496	45.014	198.132
614	9	Volksbank Spree-Neiße eG	Forst (Lausitz)	247.898	208.876	76.117	155.159
615	3	Raiffeisenbank Stauden eG	Fischach	247.600	205.905	75.336	110.314
616	1	VR-Bank eG Magstadt-Weissach	Magstadt	246.978	201.745	46.693	136.149
617	9	Volksbank Daaden eG	Daaden	245.210	185.862	59.039	152.264
618	13	Volksbank Emstek eG	Emstek	241.872	139.289	41.513	205.444
619	9	Volksbank Überwald-Gorxheimertal eG	Abtsteinach	241.598	201.757	89.741	117.720
620	1	Volksbank Sandhofen eG	Mannheim	240.993	198.735	77.904	168.026
621	3	Raiffeisenbank Griesstädt-Halbing eG	Halbing	239.437	151.417	36.445	186.172
622	3	Raiffeisenbank Geiselhöring-Pfaffenberg eG	Geiselhöring	236.812	185.999	68.070	124.724
623	9	Volksbank Lauterecken eG	Lauterecken	235.141	190.429	113.373	129.888

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
624	1	Volksbank Trossingen eG	Trossingen	235.044	174.710	73.567	119.396
625	13	Brühler Bank eG	Brühl	233.122	69.385	25.191	150.765
626	9	Volksbank Marsberg eG	Marsberg	232.805	182.370	84.699	115.038
627	3	Raiffeisenbank St. Wolfgang-Schwindkirchen eG	St. Wolfgang	231.757	172.476	72.733	158.191
628	3	Raiffeisenbank Aschau-Samerberg eG	Aschau	231.636	148.984	55.749	141.974
629	13	Kaltenkirchener Bank eG	Kaltenkirchen	230.165	176.020	63.926	172.981
630	3	Raiffeisenbank Taufkirchen-Oberneukirchen eG	Oberneukirchen	227.971	174.643	66.027	168.795
631	9	Raiffeisenbank Grimma eG	Grimma	225.529	171.273	36.795	125.847
632	3	Raiffeisenbank Eschlkam-Lam-Lohberg-Neukirchen b. Hl. Blut eG	Eschlkam	225.265	162.932	72.835	70.039
633	9	Raiffeisenbank Gotha eG	Gotha	223.887	182.982	48.256	111.552
634	9	Raiffeisenbank Werratal-Landeck eG	Heringen (Werra)	222.706	182.251	44.408	88.958
635	9	Volksbank Ascheberg-Herbern eG	Ascheberg	222.277	180.342	65.482	158.296
636	9	Raiffeisenbank Borken Nordhessen eG	Borken/Hess.	222.191	167.040	70.830	130.458
637	3	Raiffeisenbank Nordkreis Landsberg eG	Egling	221.464	174.497	64.508	146.262
638	9	Volksbank Stendal eG	Stendal	216.747	161.868	47.872	146.766
639	9	Volksbank Schlangen eG	Schlangen	216.024	158.991	49.071	128.422
640	1	Raiffeisenbank Westhausen eG	Westhausen	214.900	168.890	43.617	92.399
641	1	Raiffeisenbank Bühlertal eG	Vellberg	214.309	163.988	42.854	130.688
642	9	Volksbank Elsterland eG	Jessen (Elster)	213.946	181.754	68.378	66.401
643	1	Raiffeisenbank Kaiserstuhl eG	Vogtsburg	212.300	136.279	25.667	166.772
644	3	Raiffeisenbank Beilngries eG	Beilngries	212.272	134.762	31.128	119.656
645	1	Volksbank Pfullendorf eG	Pfullendorf	211.122	153.694	56.832	135.903
646	3	Raiffeisenbank Küps-Mitwitz-Stockheim eG	Küps	210.568	157.563	73.629	99.620
647	3	Raiffeisenbank Mittelschwaben eG, Roggenburg	Roggenburg	209.616	156.416	59.375	137.655
648	9	Spar- und Kreditbank Evangelisch-Freikirchlicher Gemeinden eG	Bad Homburg	209.501	189.596	134.150	81.274
649	1	Raiffeisenbank Aidlingen eG	Aidlingen	209.363	179.617	23.543	104.262
650	1	Volksbank Blaubeuren eG	Blaubeuren	208.293	153.954	89.613	117.885
651	1	Genossenschaftsbank, Weil im Schönbuch	Weil im Schönbuch	208.068	159.213	22.979	122.856
652	3	Raiffeisenbank Schrobenshausen Land eG	Langenmosen	206.766	161.148	52.748	95.020
653	1	VR-Bank Ehningen-Nürtingen eG	Ehningen	206.623	160.907	59.760	150.280
654	9	Volksbank Bönen eG	Bönen	205.222	149.069	79.501	142.321

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
655	3	Volksbank Aschaffenburg eG	Aschaffenburg	203.506	156.519	30.884	92.164
656	1	Raiffeisenbank Aichhalden-Hardt-Sulgen eG	Hardt	201.576	145.684	49.617	138.674
657	9	VR-Bank Freudenberg-Niederfischbach eG	Freudenberg	201.331	152.546	37.173	123.947
658	1	Raiffeisenbank Wangen eG	Wangen	201.217	153.631	61.368	122.672
659	9	Volksbank Wittgenstein eG	Bad Berleburg	200.498	168.182	81.244	98.582
660	9	Raiffeisenbank Kastellaun eG	Kastellaun	199.536	158.912	76.879	122.125
661	13	Volksbank Nordhümmeling eG	Börger	199.517	150.423	47.850	120.882
662	1	Volksbank Heuberg eG	Meßstetten	199.467	162.367	59.096	77.384
663	13	Volksbank Visbek eG	Visbek	198.545	129.181	22.521	162.613
664	9	Volksbank Ostlippe eG	Blomberg	198.266	151.191	78.608	57.319
665	9	Volksbank Versmold eG	Versmold	197.711	144.994	54.749	103.471
666	1	Volksbank Kirnau eG	Rosenberg	196.745	139.469	59.414	114.803
667	3	Raiffeisenbank Bad Kötzing eG	Bad Kötzing	196.444	158.062	75.247	82.514
668	1	Winterlinger Bank eG	Winterlingen	195.992	153.888	49.471	109.722
669	9	Raiffeisenbank Nördliche Bergstraße eG	Alsbach-Hähnlein	195.644	170.499	71.490	91.007
670	1	Raiffeisenbank Bad Schussenried eG	Bad Schussenried	195.141	147.629	86.199	128.676
671	9	Raiffeisenbank Elbmarsch eG	Heist	192.284	142.808	50.550	124.780
672	9	Volksbank Wolgast eG	Wolgast	191.801	164.207	64.970	82.768
673	9	Volksbank Dünwald - Holweide eG	Köln	191.003	160.126	52.188	100.813
674	13	Raiffeisenbank Butjadingen-Abbehausen eG	Butjadingen	189.695	145.529	54.927	94.398
675	1	Raiffeisenbank Bad Saulgau eG	Bad Saulgau	189.534	153.033	67.197	120.717
676	3	Raiffeisenbank Türkheim eG	Türkheim	189.180	157.070	56.634	109.872
677	3	Raiffeisenbank Knoblauchsland eG, Nürnberg-Buch	Nürnberg-Buch	189.174	139.298	36.199	137.951
678	1	Raiffeisenbank Oberes Gäu eG	Rottenburg am Neckar	188.598	149.679	31.988	136.255
679	9	Volksbank Rheinböllen eG	Rheinböllen	188.318	141.064	51.649	86.955
680	9	Volksbank Börßum-Hornburg eG	Börßum	187.879	138.611	24.458	111.357
681	9	VOLKSBANK SELIGENSTADT EG	Seligenstadt	187.027	91.588	38.945	175.324
682	3	Volksbank Zwickau eG	Zwickau	186.779	161.793	49.715	80.141
683	9	Volksbank Wittenberg eG	Lutherstadt Wittenberg	186.357	142.698	35.918	94.887
684	9	Budenheimer Volksbank eG	Budenheim	185.649	146.801	66.874	108.368
685	1	Winterbacher Bank eG	Winterbach	184.261	147.285	32.848	96.386
686	3	Raiffeisenbank Elsavatal eG	Eschau	184.107	123.042	30.076	120.824

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
687	1	Raiffeisenbank Geislingen-Rosenfeld eG	Geislingen	183.619	150.808	45.650	72.814
688	13	Volksbank Oyten eG	Oyten	182.386	108.655	33.006	138.745
689	9	Volksbank Störmede-Hörste eG	Geseke	181.641	137.681	60.045	103.752
690	13	Volksbank Geeste-Nord eG	Schiffdorf-Spaden	179.748	95.836	36.891	122.930
691	3	Raiffeisen-Volksbank Tüßling-Unterneukirchen eG	Tüßling	179.491	146.823	64.331	123.634
692	9	Volksbank Winsener Marsch eG	Marschacht	178.811	126.254	7.746	137.265
693	1	Raiffeisenbank Denzlingen-Sexau eG	Denzlingen	178.278	125.847	49.687	140.505
694	1	Raiffeisen Privatbank eG, Wiesloch	Wiesloch	175.398	114.419	18.368	147.446
695	13	Föhr-Amrumer Bank eG	Wyk auf Föhr	175.360	114.556	28.855	118.585
696	1	Raiffeisenbank Donau-Heuberg eG	Mühlheim	174.654	119.408	51.653	121.902
697	9	Volksbank Braunlage eG	Braunlage	172.947	131.390	45.481	108.815
698	1	Raiffeisenbank Niedere Alb eG	Langenau	171.503	129.347	42.028	135.517
699	3	Raiffeisenbank Unteres Inntal eG, Pocking-Hartkirchen	Hartkirchen, Stadtgemeinde Pocking	171.447	128.196	57.342	96.423
700	1	Abtsgmünder Bank -Raiffeisen- eG	Abtsgmünd	171.120	130.924	30.427	82.965
701	3	Raiffeisenbank Hirschau eG	Hirschau	170.554	128.136	35.909	82.594
702	3	Raiffeisenbank Hollfeld-Waischenfeld-Aufseß eG	Hollfeld	170.245	136.117	64.874	65.899
703	9	Raiffeisenbank Kaarst eG	Kaarst	169.960	125.135	54.288	96.371
704	3	Raiffeisenbank Parkstetten eG	Parkstetten	169.620	134.384	58.219	108.003
705	13	Volksbank Neuenkirchen-Vörden eG	Neuenkirchen-Vörden	168.933	104.657	33.224	129.512
706	3	Raiffeisenbank Ebrachgrund eG, Mühlhausen	Mühlhausen	167.895	135.924	54.547	93.318
707	1	Raiffeisenbank Hardt-Bruhain eG	Dettenheim	166.299	148.148	78.135	99.484
708	3	Raiffeisenbank Oberferien-Burghann eG	Burghann	165.914	129.005	33.131	100.995
709	9	Volksbank Gemen eG	Borken	164.557	97.030	41.060	104.883
710	9	MKB Mittelstandskreditbank Aktiengesellschaft	Hamburg	163.911	122.443	21.553	145.090
711	9	Volksbank Senden eG	Senden	163.128	140.440	80.476	72.907
712	3	Raiffeisenbank Singoldtal eG, Hurlach	Hurlach	162.978	131.817	43.199	106.735
713	3	Raiffeisenbank Maßbach eG	Rannungen	162.255	133.053	31.946	48.400
714	9	Volks- und Raiffeisenbank Eisleben eG	Lutherstadt Eisleben	161.393	140.116	35.559	41.739
715	9	Volksbank Westerkappeln-Wersen eG	Westerkappeln	161.156	124.370	47.971	118.198

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
716	9	Volksbank Südkirchen-Capelle-Nordkirchen eG	Nordkirchen	160.490	121.517	46.047	100.486
717	9	Raiffeisenbank Schaafheim eG	Schaafheim	160.233	129.874	39.097	122.059
718	9	Spar- und Darlehnskasse Börde Lamstedt-Hechthausen eG	Lamstedt	159.787	119.988	53.815	79.719
719	9	Volksbank eG, Sangerhausen	Sangerhausen	158.404	135.731	38.621	39.848
720	9	Raiffeisenbank Mehring-Leiwen eG	Leiwen	158.184	108.787	52.457	97.002
721	9	Raiffeisenbank "Nahe" eG	Fischbach	157.663	125.848	72.993	85.580
722	3	Raiffeisenbank Fuchstal-Denklingen e.G.	Fuchstal	155.978	120.001	51.871	72.644
723	13	Raiffeisenbank Strüclingen-Idafehn eG	Ostrhauderfehn	155.160	128.145	49.188	90.053
724	3	Raiffeisenbank Kitzinger Land eG	Obernbreit	155.002	118.869	37.739	87.730
725	3	Raiffeisenbank Adelzhausen-Sielenbach eG	Adelzhausen	154.537	121.491	42.697	93.157
726	1	Volksbank-Raiffeisenbank Deggingen eG	Deggingen	152.406	124.546	58.531	88.800
727	13	Spar- und Kreditbank eG, Hammah	Hammah	150.316	91.469	25.811	106.397
728	13	Volksbank Lastrup eG	Lastrup	149.855	83.385	25.683	127.297
729	3	Raiffeisenbank am Dreisessel eG, Neureichenau	Neureichenau	149.529	114.341	31.509	78.663
730	1	Echterdinger Bank eG	Leinfeld-Echterdingen	149.279	117.905	51.260	79.944
731	9	Volksbank Kierspe eG	Kierspe	147.949	102.813	32.203	89.607
732	13	Raiffeisenbank Lorup eG	Lorup	147.925	80.930	22.794	117.913
733	1	Raiffeisenbank Kieselbronn eG	Kieselbronn	147.785	119.513	22.674	96.032
734	9	Volksbank eG, Köthen (Anhalt)	Köthen (Anhalt)	147.263	129.439	33.733	60.998
735	9	Raiffeisenbank eG, Ratzeburg	Ratzeburg	146.860	97.600	29.493	114.028
736	1	Volksbank Krauthem eG	Krauthem	146.763	116.877	54.489	74.858
737	1	Onstmettinger Bank eG	Albstadt	146.752	115.247	36.689	69.242
738	9	Volksbank Gebhardshain eG	Gebhardshain	146.339	125.384	57.101	106.684
739	3	Raiffeisenbank Uehlfeld-Dachsbach eG	Dachsbach	145.414	111.921	37.761	89.410
740	1	Raiffeisenbank Steinheim eG	Steinheim	144.278	116.403	54.808	82.485
741	3	Raiffeisenbank Oberaudorf eG	Oberaudorf	142.911	97.004	31.844	89.130
742	9	Spar- und Kreditbank des Bundes Freier evangelischer Gemeinden eG	Witten	141.910	112.138	44.075	66.169
743	1	Raiffeisenbank Reute-Gaisbeuren eG	Bad Waldsee	141.298	90.630	27.653	116.939

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
744	9	VR-Bank Spangenberg-Morschen eG	Spangenberg	140.485	119.594	63.586	60.855
745	9	Volksbank Wickede (Ruhr) eG	Wickede	140.369	90.364	23.105	93.220
746	9	Volksbank Raesfeld eG	Raesfeld	139.207	95.891	31.502	91.454
747	9	Vereinigte Raiffeisenbank Burgstädt eG	Burgstädt	138.806	123.743	46.733	30.665
748	3	Raiffeisenbank Unteres Zusamtal eG, Buttenwiesen	Buttenwiesen	138.287	95.508	49.553	89.280
749	1	Raiffeisenbank eG, Elztal	Elztal	138.104	103.199	28.132	96.223
750	3	Raiffeisenbank Gmund am Tegerensee eG	Gmund	138.048	107.090	30.164	89.740
751	9	Volksbank Ober-Mörlen eG	Ober-Mörlen	134.857	107.149	53.213	44.504
752	9	Raiffeisenbank eG Offenbach/M.- Bieber	Offenbach a.M.	134.497	117.326	22.383	65.455
753	9	Raiffeisenbank eG, Flieden	Flieden	133.840	104.678	59.707	68.542
754	9	Raiffeisenbank Freinsheim eG	Freinsheim	133.811	112.332	15.812	79.028
755	3	Raiffeisenbank Gefrees e.G.	Gefrees	133.658	99.821	47.225	63.086
756	1	Raiffeisenbank Wyhl eG	Wyhl	133.303	89.240	31.256	114.667
757	9	Landbank Horlofftal eG	Reichelsheim/Wett.	133.017	111.816	59.783	91.157
758	9	Raiffeisenbank Irrel eG	Irrel	132.845	89.565	41.148	104.189
759	3	Raiffeisenbank Oberland eG, Marktleugast	Marktleugast	130.946	101.829	47.688	48.145
760	1	Scharnhäuser Bank eG	Ostfildern	129.108	99.978	43.427	100.364
761	9	Spar-u.Kredit-Bank eG, Gemünden	Gemünden	127.802	92.642	31.795	80.415
762	9	Raiffeisenbank Volkmarsen eG	Volkmarsen	126.786	102.581	56.521	66.344
763	3	Raiffeisenbank Grainet eG	Grainet	126.223	66.568	26.682	64.917
764	9	Volksbank Enniger-Ostfeld-Westkirchen eG	Ennigerloh	125.825	101.533	44.782	65.206
765	1	Volksbank Rot eG	St. Leon-Rot	125.043	105.696	20.797	76.920
766	3	Raiffeisen - Volksbank Hermsdorfer Kreuz eG	Hermsdorf	124.567	101.431	30.071	48.297
767	3	Raiffeisenbank im Grabfeld eG, Römhild	Sulzdorf a.d.Lederhecke	123.509	85.220	38.236	68.690
768	1	Dettinger Bank eG	Dettingen	122.886	99.051	30.577	84.211
769	3	Raiffeisenbank Bissingen eG	Bissingen	122.615	83.258	30.446	93.821
770	9	Volksbank Hamm/Sieg eG	Hamm	122.344	91.496	28.128	86.211
771	9	Volksbank eG, Gardelegen	Gardelegen	121.852	99.406	42.091	64.194
772	1	Hagnauer Volksbank eG	Hagnau	119.988	93.294	14.486	81.179
773	9	Raiffeisen-Volksbank Neustadt eG	Neustadt am Rübenberge	119.295	89.121	20.394	71.231
774	3	Raiffeisenbank Baisweil-Eggenenthal-Friesenried eG	Baisweil	117.330	86.651	26.537	69.114
775	9	Raiffeisenbank Moselkrampen eG	Ernst	117.304	87.985	18.788	57.508

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
776	3	TEBA Kreditbank GmbH & Co. KG, Landau/Isar	Landau a.d. Isar	116.700	13.947	0	90.183
777	1	Federseebank eG	Bad Buchau	116.207	93.569	60.207	53.220
778	9	VR Bank eG, Alsheim	Alsheim	115.842	88.416	17.623	74.178
779	9	Volksbank Erle eG	Raesfeld	115.480	72.777	27.776	88.184
780	3	Raiffeisenbank Thurnauer Land eG	Thurnau	114.198	98.940	36.096	47.124
781	1	Raiffeisenbank Aulendorf eG	Aulendorf	112.667	67.413	27.519	80.548
782	3	Raiffeisenbank Tattenhausen-Großkarolinenfeld eG	Großkarolinenfeld	110.764	66.287	11.841	79.722
783	9	Raiffeisenbank Kalbe-Bismark eG	Kalbe (Milde)	109.632	94.483	29.621	22.382
784	1	Raiffeisenbank Böllingertal eG	Heilbronn-Biberach	109.613	94.714	30.909	46.514
785	3	Raiffeisenbank Mittenwald eG	Mittenwald	108.252	84.851	12.738	73.210
786	3	Raiffeisenbank Floß eG	Floß	107.984	75.742	28.114	52.298
787	9	Raiffeisenbank Gymnich eG	Erfstadt	107.822	55.842	9.726	85.815
788	3	Alxing-Brucker Genossenschaftsbank eG	Alxing	105.355	61.917	12.860	90.789
789	9	Volksbank Schupbach eG	Beselich	105.218	73.017	39.236	76.347
790	3	Raiffeisenbank Heiligenstadt i. OFr. eG	Heiligenstadt	105.140	89.002	38.927	31.254
791	3	Raiffeisenbank Jettingen-Scheppach eG	Jettingen	105.128	88.951	28.664	47.102
792	3	Raiffeisenbank Wegscheid eG	Wegscheid	104.912	82.537	16.513	53.335
793	9	Volksbank Langendernbach eG	Dornburg	103.846	77.111	51.944	83.565
794	3	Raiffeisenbank Anger eG	Anger	102.895	78.743	22.629	71.306
795	1	Spar- und Kreditbank Bühlertal eG	Bühlertal	102.010	73.856	31.693	77.904
796	9	Volksbank eG, Grebenhain	Grebenhain	101.654	82.535	29.224	57.065
797	9	VR Bank Alzey-Land-Schwabenheim eG	Schwabenheim	100.529	79.826	36.421	71.606
798	9	Volksbank Amelsbüren eG	Münster	100.397	72.530	20.713	74.486
799	3	Raiffeisenbank am Kulm eG, Speichersdorf	Speichersdorf	99.551	77.835	24.749	67.266
800	3	Raiffeisenbank Nüdlingen eG	Nüdlingen	98.150	79.328	32.853	51.423
801	3	Raiffeisenbank Alteglofsheim-Hagelstadt eG	Hagelstadt	98.027	80.195	30.041	56.273
802	1	Raiffeisenbank Wimsheim-Mönsheim eG	Wimsheim	96.568	73.371	26.657	38.069
803	9	Volksbank eG, Adelebsen	Adelebsen	96.459	75.622	32.792	56.391
804	3	Raiffeisenbank Sinzing eG	Viehhausen	95.246	76.562	23.195	63.006
805	9	Volksbank Haaren eG	Waldfeucht	94.254	72.997	30.267	55.313
806	9	Raiffeisenbank eG, Todenbüttel	Todenbüttel	93.762	62.821	18.700	75.844
807	9	Volksbank Worpswede eG	Worpswede	93.700	75.311	25.943	57.746

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
808	1	Volksbank Dettenhausen eG	Dettenhausen	91.528	76.458	29.051	66.619
809	9	Volksbank Überherrn eG	Überherrn	91.374	70.544	28.618	65.586
810	9	Raiffeisenbank Welling eG	Welling	88.120	71.680	26.466	70.015
811	9	Raiffeisenbank Grävenwiesbach eG	Grävenwiesbach	87.178	69.208	22.474	60.651
812	3	CB Bank GmbH, Straubing	Straubing	86.653	2.831	0	76.232
813	3	Raiffeisenbank Wittislingen eG	Wittislingen	86.435	70.348	18.580	31.476
814	1	Raiffeisenbank Erlenbach eG	Erlenbach	85.668	65.966	14.968	59.768
815	3	Raiffeisenbank Eichenbühl und Umgebung eG	Eichenbühl	85.303	69.485	26.112	57.865
816	13	Volksbank Bakum eG	Bakum	84.810	56.654	25.245	64.392
817	3	VOLKSBANK IMMENSTADT eG	Immenstadt	84.542	62.940	14.077	71.613
818	9	Spar- u. Darlehnskasse Oeventrop eG	Arnsberg	83.773	66.313	38.167	29.377
819	3	Raiffeisenbank Bechhofen eG	Bechhofen	83.479	63.700	35.606	47.423
820	9	Kurhessische Landbank eG	Kassel	80.696	39.926	7.138	62.438
821	9	Raiffeisenbank Kehrig eG	Kehrig	80.617	44.505	18.036	60.022
822	9	Volksbank Schwanewede eG	Schwanewede	79.845	61.645	25.705	54.430
823	13	Volksbank Saerbeck eG	Saerbeck	79.838	54.771	23.299	59.985
824	1	Volksbank Limbach eG	Limbach	79.227	61.814	15.523	50.951
825	3	Raiffeisenbank Dietersheim und Umgebung eG	Dietersheim	78.318	58.474	21.553	41.911
826	1	Raiffeisenbank Ersingen eG	Kämpfelbach	76.601	58.424	26.348	61.315
827	9	Raiffeisenbank Burghaun eG	Burghaun	75.621	42.809	18.790	36.121
828	9	Volksbank Wißmar eG	Wettenberg	75.181	57.216	20.072	49.606
829	3	Raiffeisenbank Aiglsbach eG	Aiglsbach	74.236	57.782	7.350	38.408
830	9	Raiffeisenbank eG Asbach-Sorga	Bad Hersfeld	71.960	55.143	9.430	56.224
831	1	Raiffeisenbank Sondelfingen eG	Reutlingen	71.749	51.873	15.120	43.787
832	1	Raiffeisenbank Mötzingen eG	Mötzingen	69.583	55.523	11.698	37.163
833	9	Raiffeisenbank Fischenich-Kendenich eG	Hürth	69.268	49.756	15.137	8.816
834	9	Volksbank Westenholz eG	Delbrück	68.850	45.523	19.665	47.474
835	9	Raiffeisenkasse Erbes-Büdesheim und Umgebung eG	Erbes-Büdesheim	68.286	54.006	14.971	42.410
836	1	Raiffeisenbank Mehrstetten eG	Mehrstetten	68.124	51.867	13.924	42.286
837	3	Raiffeisenbank Hiltenfingen eG	Hiltenfingen	67.384	54.607	30.327	53.071

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Re- ceivables
838	3	Raiffeisenbank Emtmanns- berg eG	Emtmanns- berg Ortsteil Troschenreuth	66.775	42.210	10.754	38.359
839	9	Raiffeisenbank Kirtorf eG	Kirtorf	66.691	55.345	23.181	36.730
840	3	Raiffeisenbank Frankenwin- heim und Umgebung eG	Frankenwin- heim	66.065	52.236	9.286	22.991
841	1	Raiffeisenbank Berghülen eG	Berghülen	64.354	50.990	24.411	31.293
842	3	Raiffeisenbank Aitrang-Ru- deratshofen eG	Aitrang	63.674	50.050	11.884	43.336
843	3	Raiffeisenbank Hofkirchen- Bayerbach eG	Hofkirchen	63.421	52.898	19.233	34.863
844	13	Raiffeisenbank eG, Seestermühle	Seestermühle	62.658	46.022	19.977	54.066
845	9	Volksbank Ulrichstein eG	Ulrichstein	61.621	50.953	20.522	42.379
846	9	Volksbank Heimbach eG	Heimbach	61.331	51.394	18.576	28.884
847	1	Raiffeisenbank Altschweier eG	Bühl	60.329	42.808	10.786	41.330
848	1	Raiffeisenbank Ottenbach eG	Ottenbach	60.084	47.763	24.374	35.665
849	3	Raiffeisenbank Bidingen eG	Bidingen	58.348	43.548	19.413	43.848
850	3	Raiffeisenbank Wald-Gö- risried eG	Wald	57.838	47.280	15.564	33.019
851	1	Berkheimer Bank eG	Esslingen	57.631	47.263	23.969	23.057
852	3	Raiffeisenbank Heroldsbach eG	Heroldsbach	57.044	45.461	14.689	42.700
853	9	Volksbank Feldatal eG	Feldatal	52.824	28.320	10.558	20.572
854	1	Raiffeisenbank Erlenmoos eG	Erlenmoos	52.482	44.873	26.003	19.238
855	13	Raiffeisenbank Wieseder- meer-Wiesede-Mar- cardsmoor eG	Wiesedermeer	51.200	35.788	14.528	31.419
856	9	Raiffeisenbank eG Unter- westerwald	Arzbach	51.107	42.453	17.190	32.642
857	9	Volksbank Brandoberndorf eG	Waldsolms	49.324	39.064	17.537	24.431
858	9	Volksbank Wulfsen eG	Wulfsen	48.175	37.272	15.466	26.100
859	9	Raiffeisenbank eG, Ows- schlag	Owschlag	48.167	37.489	17.695	28.244
860	3	Raiffeisenbank Wallgau- Krün e.G.	Wallgau	47.435	42.151	22.677	31.928
861	9	Volksbank Wewelsburg- Ahden eG	Büren	47.369	36.903	13.960	32.927
862	9	Rosbacher Raiffeisenbank eG	Windeck	47.240	38.933	15.937	22.861
863	1	Raiffeisenbank Gruibingen eG	Gruibingen	46.696	33.420	19.841	25.943
864	3	Raiffeisenbank Wüstenselbitz eG	Helmbrechts OT Wüstenselbitz	45.452	38.485	24.069	26.515
865	3	Raiffeisenbank Raisting eG	Raisting	44.275	34.625	14.374	21.380
866	1	Raiffeisenbank Tüngental eG	Schwäbisch Hall	40.317	35.472	8.843	28.748

Rank	Association	Name	Place	Balance Sheet Total	Deposits	Savings Deposits	Customer Receivables
867	1	Raiffeisenbank Vordersteinenberg eG	Alfdorf	39.306	33.163	9.075	24.474
868	9	Raiffeisenbank eG, Niederwallmenach	Niederwallmenach	38.982	33.136	18.178	19.617
869	1	Raiffeisenbank Gammesfeld eG	Blaufelden	33.850	31.892	26.075	11.116
870	9	Hüttenberger Bank eG	Hüttenberg	33.648	26.497	6.672	21.375
871	3	Raiffeisenbank Bruck eG	Bruck i.d.OPf	32.706	26.194	5.739	15.051
872	1	Raiffeisenbank Maitis eG	Göppingen	27.287	23.754	14.293	16.093
873	9	Raiffeisenbank eG, Struvenhütten	Struvenhütten	19.839	18.085	3.118	8.917
Schlüssel der Verbandskennziffern:							
01	Baden-Württembergischer Genossenschaftsverband						
03	Genossenschaftsverband Bayern						
09	Genossenschaftsverband – Verband der Regionen						
13	Genossenschaftsverband Weser-Ems						
16	Verband der Sparda-Banken						
17	Verband der PSD Banken						

Table 24: List of all cooperative banks in Germany as of the end of 2018

Source: BVR, 2021

Note: The table presented in Appendix 3 contains information that is available to everyone on the website of the umbrella organisation of the German Volks- und Raiffeisenbanken (BVR) at www.bvr.de. In this respect, the table does not contain any data relevant to data protection. Reporting in Turnitin as a “match” is logical, but not correct.

Appendix 4: Cooperative banks within Europe – Size, structure and importance

In the table below (Part 1), European and non-European cooperative banks are listed in alphabetical order by country, with information on the number of employees, number of clients, number of independent banks and number of branches.

Number and Shares of Cooperative Banks in European and Non-European Countries – Part 1

European Union country and data-providing institution	No. of employees (Full-time equivalent)	No. of clients	No. of legally independent local or regional cooperative banks	No. of branches in home country
Austria				
Österreichische Raiffeisenbanken	29,000	3,600,000	406	1,448
Österreichische Volksbanken	4,121	1,134,339	10	343
Bulgaria				
Central Co-operative Bank	1,958	1,732,916	n.a.	310
Denmark				
Nykredit	3,505	1,101,000	56	42
Finland				
OP Financial Group	12,212	4,400,000	167	407
France				
Credit Agricole	139,000	52,000,000	39	8,700
Credit Mutuel	82,000	31,600,000	18	5,160
BPCE	106,500	31,200,000	30	7,800
Germany				
Cooperative Financial Network	177,248	>30,000,000	915	11,108
Greece				
Association of Cooperative Banks of Greece	907	385,261	9	110
Hungary				
SZHISZ	6,701	1,506,733	19	1,144
Italy				
Federkasse (BCC)	30,103	6,000,000	289	4,255
Lithuania				
LCCU Group	407	112,945	50	64
Luxembourg				
Banque Raiffeisen	626	118,801	13	38
Netherlands				
Rabobank	37,170	8,500,000	102	444
Poland				
National Union of Co-operative Banks (KZBS)	31,125	n.a.	553	4,505
Portugal				
Credito Agricola	4,068	1,500,000	81	669
Romania				
Creditcoop	1,948	609,540	41	744
Slovenia				

European Union country and data-providing institution	No. of employees (Full-time equivalent)	No. of clients	No. of legally independent local or regional cooperative banks	No. of branches in home country
Dezelna Banka Slovenije d.d.	348	88,926	1	82
Spain				
Union Nacional de Cooperativas de Credito	12,230	7,193,796	43	3,244
Banco de Credito Cooperativo (BCC)	5,682	3,537,963	19	1135
United Kingdom				
Building Societies Association	32,440	23,000,000	44	1,510
Total	719,299	209,322,220	2,914	53,262
Non-European Union Countries				
Canada				
Desjardins Group	45,547	n.a.	281	739
Japan				
The Norinchukin Bank / JA Bank Group	3,608	n.a.	681	7,679
Switzerland				
Raiffeisen Schweiz	9,411	3,700,000	255	912
Total (Non-EU)	58,566		1,217	9,330

Table 25: Number and Shares of Cooperative Banks in European and Non-European Countries on 30.12.2018 Part 1

Source: European Association of Co-operative Banks A.I.S.B.L., 2018, pp. 24–27

It is notable that Germany has the largest number of independent cooperative banks (915) and also (apart from the United Kingdom) the most members (18,514 854).

France is a special case, because the number of members is counted separately for each institution. The same applies to the number of branch offices. Here, too, next to France, German cooperative banks lead the way with 11,108 branches.

The following table (Part 2) lists European and non-European cooperative banks by number of members, total balance sheet total (total bank size), market share deposits and market share loans. Again, the banks are listed by country in alphabetical order.

Number and Shares of Cooperative Banks in European and Non-European Countries – Part 2

European Union country and data-providing institution	No. of members	Total assets	Domestic market share: deposits (%)	Domestic market share: loans (%)
Austria				
Österreichische Raiffeisenbanken	1,700,000	286,063	30.6	28.9
Österreichische Volksbanken	660,807	25,323	5.3	4.5
Bulgaria				
Central Co-operative Bank	6,394	2,767	5.8	4.2
Denmark				
Nykredit	468,445	191,510	5.1	31.0
Finland				
OP Financial Group	1,833,000	137,242	37.0	35.5
France				
Credit Agricole	9,700,000	1,763,169	24.4	21.7
Credit Mutuel	7,800,000	813,198	15.5	17.0
BPCE	9,000,000	1,259,850	22.7	21.1
Germany				
Cooperative Financial Network	18,514,854	1,243,316	21.5	21.7
Greece				
Association of Cooperative Banks of Greece	172,393	2,629	1.0	0.8
Hungary				
SZHSZ	32,938	7,421	10.7	8.7
Italy				
Federkasse (BCC)	1,275,000	212,000	7.8	7.2
Lithuania				
LCCU Group	105,074	369	1.6	1.2
Luxembourg				
Banque Raiffeisen	31,073	7,905	19.0	14.0
Netherlands				
Rabobank	1,916,000	602,991	34.0	n.a.
Poland				
National Union of Co-operative Banks (KZBS)	969,171	41,585	10.2	73
Portugal				
Credito Agricola	400,000	17,988	7.1	5.0
Romania				
Creditcoop	654,538	261	n.a.	n.a.
Slovenia				
Dezeln Banka Slovenije d.d.	304	931	3.0	2.2
Spain				
Union Nacional de Cooperativas de Credito	1,508,536	98,397	6.4	4.7
Banco de Credito Cooperativo (BCC)	1,433,980	40,507	2.3	2.7
United Kingdom				
Building Societies Association	23,000,000	440,328	18.3	n.a.
Total	81,182,507	7,195,749		

European Union country and data-providing institution	No. of members	Total assets	Domestic market share: deposits (%)	Domestic market share: loans (%)
Non-European Union Countries				
Canada				
Desjardins Group	n.a.	182,110	42.1	22.5
Japan				
The Norinchukin Bank / JA Bank Group	3,585	791,078	10.3	n.a.
Switzerland				
Raiffeisen Schweiz	1,890,128	194,812	13.1	n.a.
Total (Non-EU)	1,893,713	1,168,000		

Table 26: Number and Shares of Cooperative Banks in European and Non-European Countries on 30.12.2018 Part 2

Source: European Association of Co-operative Banks A.I.S.B.L., 2018

In terms of total assets, German cooperative banks are at the top of the league alongside France, with a share of 1,243,316 EUROMio. However, with a 21.5% share of customer deposits and a 21.7% share of customer loans, German cooperative banks only have about one-fifth of the total German banking market.

The special features of the German cooperative banks in comparison with other European and non-European cooperative banks are presented in the following paragraphs. The focus is on cooperative banks in the following countries: Austria, France, Germany, Italy, Spain and the United Kingdom. This is because together, the cooperative banks in these countries account for a share of more than 85% of the total assets and thus represent the majority.

France:

Unlike Germany, which has a single group of cooperative banks, France has five banking groups with cooperative status. There are three larger ones (Credit Agricole, Banques Populaires (Volksbanken) and Credit Mutuel) and two smaller ones (Credit Cooperatif and Credit Mutuel Agricole et Rural). The strongest group is Credit Agricole with the central body Caisse Nationale de Credit Agricole. In the past, Credit Agricole was a specialist bank for the agricultural sector; today, it conducts almost all types of banking business. Another important cooperative banking group is the Banques Populaires (Volksbanken). Originally banks for craftsmen and small and

medium-sized enterprises, they have now extended their activities to other target groups. The third cooperative banking group is Credits Mutuels, which focuses primarily on the private customer market. There are also other cooperative banks, but these are of secondary importance (Disch, 1995; Stein, 1995).

Ory *et al.* (2006) state that due to restructuring in 2005, different structures have emerged within the individual cooperative association system. The organisational structure of Credit Mutuel is relatively diffuse, and cooperation within the group seems to take place to a limited extent only. The organisational structure of Credit Agricole represents a cooperative group that has isolated itself from the rest of the group, which also seems to be the case for Banque Populaire.

In summary, the French cooperative banking system appears to be structured differently and less homogeneous than the German one. The only common denominator is the use of the cooperative principle as a basis.

Italy:

Compared with other European countries, in macro-economic terms the banking sector in Italy is of below-average importance. The balance sheet total of all Italy's banks in 2018 was approximately 2.1 times the country's overall economic output. By comparison, the European average was 2.8 times the GDP. By contrast, the bank branch network in Italy, with 2,212 inhabitants per branch, is well above average. By comparison, the European average is 4,396 inhabitants per branch office (Deutscher Sparkassen- und Giroverband Abteilung Volkswirtschaft, Finanzmärkte und Wirtschaftspolitik, 2019).

The total of 289 cooperative banks (as of 30 December 2018) represents a relatively small share of the Italian banking market as a whole, with a 7.8% share of deposits and a 7.2% share of loans. Similarly, with 6 million customers and 1.275 million members (European Association of Co-operative Banks A.I.S.B.L., 2018), it is difficult to compare them with German cooperative banks.

Austria:

Austria has a dense banking network. Raiffeisen banks form the largest banking group, with a total of approximately 1,800 head offices and branches. Of these, about

900 are maintained by joint-stock banks and bankers and the savings banks. Together, the other banking groups maintain 650 head offices and branches.

The Raiffeisen banks are divided into eight provincial central offices and 431 independent banks. There are more than 1,500 branch offices, so there is a high penetration rate. The Volksbanks are organised in the Volksbank Group; they operate similarly to the Raiffeisen banks but with a smaller branch network. Volksbank Wien AG functions as the central institution.

An essential distinguishing feature in Austria is the differentiation between single-tier and multi-tier sector banks according to their legal form and membership in the relevant professional banking association. Single-tier sector banks include joint-stock banks, regional mortgage banks, building societies and specialised banks. Two-tier sector banks include savings banks and Volksbanks, and three-tier sector banks include Raiffeisen banks. One central institution of each of the banking groups coordinates within these multi-tier sectors and, among other things, performs money settlement functions.

The three-tier concept of Raiffeisen banks is structured as follows. The independent local Raiffeisen banks are on the first level. On the second level, the regional Raiffeisen banks are superordinate. The main owners of these regional banks are the Raiffeisen banks of the respective federal province. On the third level, Raiffeisen Bank International is the central institution of the banking group; it is the second largest bank in Austria after the Erste Group. UniCredit Bank Austria ranks third (Statista, 2020).

Based on the total balance sheet total (EUR 826.9 billion), the Raiffeisen banks were most prominent in mid-2016 with a market share of 31.2%, ahead of the equity banks and bankers with a market share of 28.9%. The savings banks followed with a share of 17.9%. Special purpose banks achieved a market share of 8.3%, Landes-Hypothekenbanken 6.9%, Volksbanken 3.9% and building societies 2.9% (Statista, 2020).

Blisse (2017) points out that although Austrian Raiffeisen banks have a high share of own reserves, they did not pay dividends to their members during restructuring periods. On the other hand, local cooperative banks base their equity capital more firmly on the share capital of their members and frequently pay a capital participation dividend, even during restructuring phases.

United Kingdom:

The United Kingdom is more centralised in terms of the distribution of bank headquarters; there are hardly any decentralised banks. The Scottish Airdrie Savings Bank, which closed in 2017, was the last existing regional trustee savings bank. A high degree of centralisation of the banking sector in the United Kingdom is also evident from the fact that almost 75% of the British banks have their headquarters in London.

A large proportion of loans is granted by the five major (international) commercial banks (the Big Four, plus the Santander Group), which also operate the most branches (Flögel and Gärtner, 2018). So-called challenger banks, which are managed as private commercial banks, usually operate at a shorter operational and functional distance than the four big banks.

In Great Britain, most banks are represented by the British Bankers' Association. Other banking associations, such as the Asset Based Finance Association, are predominantly issue-specific. British banks are usually members of several associations.

Germany's associations of savings and cooperative banks are very influential. Small and regional banks are supported to realise economies of scale and solutions for coping with new banking regulations. In addition, services and tools, such as IT and rating systems, are offered.

The United Kingdom does not have a suitable association for decentralised banks. The British Bankers' Association offers more general support in terms of lobbying for its member banks and organises meetings and seminars (Flögel and Gärtner, 2018).

There are still some 40 independent cooperative banks in England (European Association of Co-operative Banks A.I.S.B.L., 2018).

Spain:

Flögel and Gärtner (2018) explain that there are four types of banks in Spain. One of these four groups includes local and regional banks. These include the two remaining savings banks and some cooperative banks. Cooperative banks in Spain differ from those in Germany. While some cooperative banks operate on a national level, others specialise in the agricultural sector or resemble the typical German cooperative banks as local universal banks. The Spanish cooperative banks have similarities with

the regional banks in Germany, but in absolute terms they grant significantly fewer loans to enterprises.

The relevance of decentralised banks in Spain is low. Only a few regional banks (two savings banks and some cooperative banks) have survived the liberalisation. However, there are still about 60 independent cooperative banks in Spain (European Association of Co-operative Banks A.I.S.B.L., 2018).

A. Analysis type

In the current work, a quantitative analysis of data from balance sheets and other directories was performed. The years 2009 to 2018¹¹⁵ (i.e. a period of 10 years) were selected and calculated for the analysis and comparison of management qualities and performance in German cooperative banks. Existing secondary sources were used for this purpose.

To achieve this aim, information from the BISNODE database was used in the first instance. BISNODE AG is a major European provider of digital business information, with its headquarters in Stockholm and branches in 19 European countries. For the purpose of the current work, the BISNODE branch in Germany, Darmstadt, kindly provided a database containing the balance sheet and profit and loss account data for all German cooperative banks. The original database (created by BISNODE in the form of an Excel spreadsheet) contained 17,646 data rows. Each row contained the balance sheet and profit and loss data for one German cooperative bank for one banking year.

The second data source was the Commercial Register,¹¹⁶ a database containing information about companies and the year of entry of the executive board members. The third data source was the Electronic Federal Gazette (www.bundesanzeiger.de), a database (consisting of links to PDF documents) containing the balance sheet positions and profit and loss accounts for all German cooperative banks for the last 10 years. The fourth data source was CompanyHouse, a commercial database containing information about companies, the year of entry of the executive board members and, in most cases, the executive board members' dates of birth. In order to use this database, a fee for 6 months' access was required.

¹¹⁵ Reasons for selecting 2009–2018 as the data collection period are explained in more detail in *Section 5.4.2* on page 126.

¹¹⁶ In German, Handelsregister.

Strategies regarding the scope of the quantitative data

The examination of the bank and executive board data was carried out on the basis of data that had been collected from several sources¹¹⁷. Therefore, the analysis is retrospective and includes information from previous years deposited in the data sources. Regarding the number of years to be considered, there are differing views in the literature.

Berger *et al.* (2012) examine the influence of the socio-economic composition of the board on the risk appetite of German banks over a period of 17 years. A long period (of 11 years) is also taken into account by Pentina *et al.* (2009) in their investigation of long-term performance of retailers following the introduction of online sales. Both research papers were conducted retrospectively. This contrasts with the research of Ton and Raman (2010), who cover a period of just 4 years when examining the effect of product variants in retail stores, expressed in gross margin (Ton and Raman, 2010, p. 546).

Kouser and Saba (2011) use several ratios¹¹⁸ to examine the impact of mergers on bank profitability. The period examined is 6 years: 3 years prior to the merger and 3 years following the merger. The authors also use the Gross Profit Margin as a measure. Using t-tests, the mean values of the ratios were compared in each case, before and after the merger. Khan (2011) also covers a period of 6 years in his research on Indian banks. Albertazzi and Gambacorta examine a significantly longer period, 23 years, in their evaluation of the impact of corporate income tax on bank profitability.

Banks, like any other company, are subject to certain changes; for example, due to business closures or mergers. Such changes are sometimes accompanied by a change in the composition of the executive board; furthermore, key figures may no

¹¹⁷ Existing data from the BISNODE database was used. Further relevant data was also retrieved from a variety of other sources, such as the Internet, bank websites and the electronic Federal Gazette. All data obtained was saved in a suitable format – for example, as a PDF file, an Excel file or a screenshot – for traceability or subsequent recording. If the data was not available in a suitable format, it was entered manually into an Excel spreadsheet or directly into IBM SPSS 25 software. The Gross Profit Margin was determined according to the data from the profit and loss account and was thus condensed into a key figure.

¹¹⁸ Ratios are intended to increase the information content of annual financial statements, to enhance thinking in terms of relationships, to serve as a tool for company analyses, and to enable comparisons. The special cognitive value of ratios lies not in their quality as absolute or relative numbers, but in the possibility of enabling comparisons with one or more other ratios (Bäsch (1992, pp. 137–139).

longer be comparable with previous results. Therefore, a longer period of investigation is sometimes problematic. Authors who study banks deal with this issue in different ways. Kouser and Saba (2011), for example, use two different bank comparison groups: one group existing 3 years before a merger, the other existing 3 years after a merger. Different banks are represented in each of the two comparison groups. That is, the different points in time are compared, rather than comparing the individual banks. In this way, it is possible to circumvent the fact that bank structures may change after a merger. A period of just 3 years is examined by Li *et al.* (2001) in their analysis of changes in quality management in Hong Kong banks, and only banks with complete data sets for all 3 years are included.

For the current work, a scope of 3 years is not considered comprehensive or, thus, meaningful enough. This is supported by the research of, for example, Berger *et al.* (2014) and Albertazzi and Gambacorta (2006). These studies cover longer periods because the authors consider the influence of board members on the bank's results for a time period of less than 3 years to be too small.

In the current work, the extensive database created from the BISNODE database, in addition to available and retrievable data from the electronic Federal Gazette, made it possible to collect data for a period of 10 years (retrospectively). The survey was conducted as of the reporting date at the end of 2018, which is the period for which the largest amount of data was available at the time of the data collection.

At the time of the data evaluation (autumn 2020), complete data was available for the annual financial statements of German cooperative banks up to 31 December 2018. In Germany, companies – including cooperative banks – are required by law to publish their annual financial statements in the electronic Federal Gazette (www.bundesanzeiger.de). Publication is possible only after the financial statements have been audited and certified by external auditing associations. In principle, the annual financial statements must be prepared by the end of March of the following year. After the subsequent audit, the annual financial statement is approved by the members (at the general or representative assembly). Only after this date is the data published in the electronic Federal Gazette. Due to SARS-Covid-19, most cooperative banks experienced a significant delay in having their annual financial statements for 2019 approved by the members. As a result, it was not possible to include data for 2019 in the evaluation.

There are indications that over a 10-year period, the influence of individual board members can affect the bank's results. Due to several mergers of German cooperative banks in the past, several changes were to be expected. In this respect, it did not seem reasonable to include only those banks for which complete data sets were available (see Li *et al.*, 2001). Therefore, the current work followed the approach of Kouser and Saba (2011), which was simply to split the sample: every bank for which data was available for at least 5 years was included in the evaluation.

In concrete terms, this means that two samples based on the time horizon are used in the current work. The first sample, which covers a period of 5 years, represents the entire sample (see Pentina *et al.*, 2009; Ton and Raman, 2010). In the second sample, those banks for which at least 10 years of data were available (i.e. the banks that had not experienced a merger in the last 10 years) were also included in the total sample. Thus, the data analysis was based on a total sample of 5 years and a sub-sample of 10 years.

Data gathering

The necessary economic performance indicators are taken from the BISNODE database and subsequently calculated. The BISNODE database already contains a comprehensive data basis. If economic data are missing, these data can be accessed online on the website of the electronic Federal Gazette (www.bundesanzeiger.de). Due to legal obligations, all corporations and thus also cooperative banks must publish data on the profit and loss account as well as the annual financial statements with notes and management report annually. Data covering a period of the last 10 years are available to everyone. Due to the upstream security query, a so-called captcha, automatic retrieval is not possible; rather, each individual year must be retrieved manually for each individual bank. The retrieved data is displayed and saved as a PDF file or in HTML format (see *Appendix 2: Profit and loss account – Example “Raiffeisenbank Bühlertal”* on page 224) to ensure traceability.

The information contained therein is extracted manually, and transferred directly into a suitable medium that can be processed further, such as IBM SPSS or Microsoft Excel.

Data sources for calculating the Gross Profit Margin

To calculate the Gross Profit Margin, it was necessary to obtain data from each bank's balance sheet and the profit and loss account. Information from the BISNODE database was used for this purpose.

Table 27 – Number of cooperative banks and number of available years shows the number of cooperative banks for which data was available for a specific number of years; in other words, which data the BISNODE database contained. Deutsche Bundesbank publications were used to assess whether the amount of data contained in the BISNODE database – or, rather, the number of banks listed – was actually correct. Every year, the Deutsche Bundesbank publishes a list of all existing (cooperative) banks in the previous year, as of 31 December. These statistics served as a reference for the data provided by BISNODE.

Number of cooperative banks	From	To	Number of years
209	1999	2018	20
7	2000	2018	19
27	2001	2018	18
46	2002	2018	17
102	2003	2018	16
155	2004	2018	15
17	2005	2018	14
136	2006	2018	13
106	2007	2018	12
24	2008	2018	11
7	2009	2018	10
11	2010	2018	9
1	2012	2018	7
7	1999	2017	19
1	2001	2017	17
5	2002	2017	16
5	2003	2017	15

Number of cooperative banks	From	To	Num- ber of years
10	2004	2017	14
1	2005	2017	13
7	2006	2017	12
11	2007	2017	11
2	2009	2017	9
9	1999	2016	18
2	2002	2016	15
13	2003	2016	14
13	2004	2016	13
1	2005	2016	12
6	2006	2016	11
7	2007	2016	10
2	2008	2016	9
3	2010	2016	7
5	1999	2015	17
3	2000	2015	16
7	2003	2015	13
9	2004	2015	12
7	2006	2015	10
8	2007	2015	9
5	2008	2015	8
2	2009	2015	7
1	2010	2015	6
1	2014	2015	2
2	1999	2014	16
1	2002	2014	13
3	2003	2014	12
6	2004	2014	11
4	2006	2014	9
6	2007	2014	8

Number of cooperative banks	From	To	Num- ber of years
2	2009	2014	6
2	2010	2014	5
5	1999	2013	15
3	2002	2013	12
4	2003	2013	11
5	2004	2013	10
1	2005	2013	9
4	2007	2013	7
1	2008	2013	6
1	2010	2013	4
3	1999	2012	14
1	2001	2012	12
1	2002	2012	11
2	2003	2012	10
5	2004	2012	9
1	2005	2012	8
4	2005	2012	8
5	2007	2012	6
1	2008	2012	5
4	1999	2011	13
3	2003	2011	9
2	2004	2011	8
1	2005	2011	7
6	2006	2011	6
3	2007	2011	5
1	2009	2011	3
2	1999	2010	12
2	2003	2010	8
2	2004	2010	7
3	2006	2010	5

Number of cooperative banks	From	To	Number of years
3	2007	2010	4
1	1999	2009	11
1	2002	2009	8
2	2003	2009	7
3	2004	2009	6
8	2006	2009	4
1	2008	2009	2
1	1999	2008	10
1	2003	2008	6
1	2007	2008	2
2	1999	2007	9
1	2002	2007	6
1	2004	2007	4
1	2005	2007	3
1	2006	2006	1
1	2003	2005	3
2	1999	2004	6
1	2002	2004	3
1	2003	2004	2
1	2004	2004	1
1	1999	2003	5
1	2003	2003	1
2	1999	2002	4
5	1999	2000	2
3	1999	1999	1

Table 27: Number of cooperative banks and number of available years

Source: BISNODE

Table 28 – Number of banks on the basis of the BISNODE database compared with Deutsche Bundesbank Statistics compares the number of cooperative banks according to the data contained in the BISNODE database with the number of banks according to the statistics from the Deutsche Bundesbank.

Year	Number of cooperative banks according to the BISNODE database	Number of cooperative banks according to Deutsche Bundesbank Statistics
2018	906	875
2017	961	915
2016	1013	972
2015	1057	1021
2014	1084	1047
2013	1124	1078
2012	1151	1101
2011	1171	1121
2010	1185	1138
2009	1180	1156
2008	1166	1197
2007	1136	1232
2006	980	1255
2005	784	1290
2004	776	1335
2003	561	1392
2002	413	1489
2001	351	1621
2000	328	1794
1999	319	2034

Table 28: Number of banks on the basis of the BISNODE database compared with Deutsche Bundesbank Statistics

Sources: BISNODE, Deutsche Bundesbank

Various influences can help to explain the differences between the individual sources.

The Deutsche Bundesbank sets 31 December of each year as the data cut-off date. All German banks must report their key bank figures (balance sheet, profit and loss account, notes and management report) from the previous year to the Bundesbank by 30 March of the following year. In practice, this means the banks must prepare their annual accounts by 30 March.

The data in the BISNODE database is based on data from the Federal Gazette. *After* their annual accounts have been audited and approved, all banks must report their key bank figures from the previous year to the Federal Gazette for publication. This may result in deviations based on the reported figures, as changes may be made during the period between the preparation and the approval of the annual financial statements.

In addition, banks that have merged are sometimes listed more than once in the BISNODE database: once under the bank's previous name and once under its new name. For example, in the BISNODE database, Raiffeisenbank Offingen eG and Raiffeisenbank Aschberg eG are listed simultaneously, even though following a merger Raiffeisenbank Offingen eG no longer legally exists.

The Deutsche Bundesbank, on the other hand, only considers the bank that exists after a merger.

Criteria based on the time period

In the case of a merger, there are always effects on the balance sheet total (the size of the bank) and the composition of the executive board.

In this respect, the only banks considered were those that had existed without interruption (without a merger) for at least 5 years (for Sample 1) or at least 10 years (for Sample 2). Although these exclusions will have led to distortions in the results, the approach was justified insofar as it made it possible to compare bank performance under the same conditions.

Criteria based on percentage changes

Another area that requires a more detailed examination is the change in the balance sheet total, which is the usual measure of a cooperative bank's size.

Percentage increases of less than 20% were interpreted as normal balance sheet growth. In the same way that any other company can grow due to higher turnover, business expansion or similar causes, this happens analogously in cooperative banks. The reasons for this are manifold, and include increased customer demand, expansion of certain businesses lines, increased demand for credit, among others. Usually, smaller growth rates (usually < 10%) are shown for information only on the basis of numerical values, whereas larger changes (> 10%) are also explained in the notes and management report as well, with the reasons behind the figures provided.

Percentage increases of less than 20% (normal balance sheet growth) were easily understood in the case of individual cooperative banks by reading the explanatory text in the notes and management reports; banks are legally obliged to publish the balance sheet, profit and loss account, notes and management report in the Federal Gazette. Percentage increases of more than 20% but less than 35% were checked (without exception) for each individual case in order to differentiate between normal balance sheet growth and growth that was due to a merger. The review was carried out by retrieving the notes and management report from the Federal Gazette for the relevant financial year of the respective bank. Then an explicit search was made for a passage in the text that explained the reasons for the growth.

Table 29 – Cooperative banks with percentage increases of the balance sheet > 20% and < 35% lists the banks reviewed (percentage increases > 20% and < 35%) with the corresponding results.

Cooperative bank	Year	Balance sheet growth	Cause
Alxing-Brucker Genossenschaftsbank eG	31.12.2018	25,65	Normal growth
Dortmunder Volksbank eingetragene Genossenschaft	31.12.2013	27,03	Merger
Erfurter Bank eG	31.12.2015	22,21	Normal growth

Cooperative bank	Year	Balance sheet growth	Cause
Frankfurter Volksbank eG	31.12.2018	30,52	Merger
GLS Gemeinschaftsbank e.G.	31.12.2013	20,78	Merger
Leipziger Volksbank eG	31.12.2017	29,97	Merger
IlevoBank eG	31.12.2009	31,88	Merger
Ostfriesische Volksbank eG	31.12.2014	22,14	Merger
Raiffeisenbank Aschberg eG	31.12.2016	32,22	Merger
Raiffeisenbank Bad Schussenried eG	31.12.2014	38,21	Merger
Raiffeisenbank eG Bargteheide	31.12.2009	21,05	Merger
Raiffeisenbank Ems-Vechte eG	31.12.2009	23,86	Merger
Raiffeisenbank Ems-Vechte eG	31.12.2011	21,81	Merger
Raiffeisenbank Freinsheim eG	31.12.2014	34,93	Merger
Raiffeisenbank Heilsbronn-Windsbach eG	31.12.2015	24,59	Merger
Raiffeisenbank im Hochtaunus eG	31.12.2018	22,06	Normal growth
Raiffeisenbank Kaiserstuhl eG	31.12.2009	20,07	Normal growth
Raiffeisenbank Kehrig eG	31.12.2016	25,81	Normal growth
Raiffeisenbank Lorup eG	31.12.2012	25,51	Merger
Raiffeisenbank Pfeffenhausen-Rottenburg-Wildenberg eG	31.12.2014	22,71	Merger
Raiffeisenbank Tüngental eG	31.12.2017	24,90	Normal growth
Raiffeisenbank Volkacher Main-schleife - Wiesentheid eG	31.12.2018	27,36	Merger
Raiffeisenbank Voreifel eG	31.12.2016	28,88	Merger
Raiffeisenbank Westhausen eG	31.12.2011	20,92	Normal growth
Raiffeisen-Volksbank Aschaffenburg eG	31.12.2013	23,05	Merger
Sparda-Bank Hamburg eG	31.12.2010	20,33	Normal growth
Sparda-Bank West eG	31.12.2018	31,55	Merger

Cooperative bank	Year	Balance sheet growth	Cause
Volks- und Raiffeisenbank eG	31.12.2013	26,62	Merger
Volksbank Bad Oeynhausen-Herford eG	31.12.2011	23,99	Merger
Volksbank Bigge-Lenne eG	31.12.2014	27,05	Merger
Volksbank Brenztal eG	31.12.2015	27,32	Merger
Volksbank Butzbach eG	31.12.2009	25,54	Merger
Volksbank Dammer Berge eG	31.12.2011	23,27	Normal growth
Volksbank Deisslingen eG	31.12.2009	22,50	Normal growth
Volksbank Delbrück-Hövelhof eG	31.12.2013	34,47	Merger
Volksbank Delbrück-Hövelhof eG	31.12.2015	22,01	Merger
Volksbank eG Grebenhain	31.12.2018	27,25	Merger
Volksbank eG Fredenbeck	31.12.2016	34,72	Merger
Volksbank eG Sangerhausen	31.12.2009	20,56	Normal growth
Volksbank eG Braunschweig Wolfsburg	31.12.2016	26,09	Merger
Volksbank Eisenberg eG	31.12.2009	32,13 !	Normal growth
Volksbank Emstal eG	31.12.2010	21,15	Normal growth
Volksbank Ermstal-Alb eG	31.12.2015	32,32	Merger
Volksbank GMHütte-Hagen-Bissendorf eG (GHB)	31.12.2011	20,51	Normal growth
Volksbank Gronau-Ahaus eG	31.12.2017	20,75	Normal growth
Volksbank Halle (Saale) eG	31.12.2016	25,15	Merger
Volksbank Kleverland eG	31.12.2009	23,86	Normal growth
Volksbank Kleverland eG	31.12.2010	20,99	Normal growth
Volksbank Main-Tauber eG	31.12.2009	29,72	Merger
Volksbank Mittelhessen eG	31.12.2009	26,45	Merger
Volksbank Mittweida eG	31.12.2012	21,54	Normal growth
Volksbank Mittweida eG	31.12.2015	25,19	Normal growth
Volksbank Pirna eG	31.12.2009	26,13	Merger

Cooperative bank	Year	Balance sheet growth	Cause
Volksbank Raiffeisenbank Bad Kissingen eG	31.12.2009	22,43	Merger
Volksbank Raiffeisenbank Meißen Großenhain eG	31.12.2012	20,43	Normal growth
Volksbank Raiffeisenbank Würzburg eG	31.12.2011	28,16	Merger
Volksbank Rhein-Lippe eG	31.12.2018	34,23	Merger
Volksbank Süd-Emsland eG	31.12.2010	24,05	Merger
VR Bank Augsburg-Ostallgäu eG	31.12.2013	29,54	Merger
VR meine Raiffeisenbank eG	31.12.2015	22,60	Merger
VR meine Raiffeisenbank eG	31.12.2017	29,44	Merger
VR PLUS Altmark-Wendland eG	31.12.2017	23,72	Merger
Westerwald Bank eG Volks- und Raiffeisenbank	31.12.2017	21,36	Merger

Table 29: Cooperative banks with percentage increases of the balance sheet > 20% and < 35%

Sources: BISNODE, Federal Gazette

The table shows that 63 banks were reviewed. In some cases, the 5-year sample could still be used for banks that had experienced growth as a result of mergers, provided that these were mergers *before* or *during* 2013; for example, Volksbank Butzbach eG and Volksbank Main-Tauber eG. For the rest of the banks, where their growth was normal this was due to bank-specific reasons, such as increased customer deposits or changes in bank strategies, and in each case the reasons were explained in the notes and management report of the bank concerned. Among the banks reviewed, there was only one with normal growth of more than 30% (Volksbank Eisenberg eG, 2009). This was verified by means of the notes and management report of the specific bank.

Criteria based on merger processes

In view of the circumstances described above, in the further course of this thesis it was shown that a percentage increase in the balance sheet total of more than 35% from the previous year to the next year indicated a merger. To check whether this was actually the case, random samples were taken at 14 banks with growth rates of more than 35%. In all the cases examined, the growth could be attributed to merger activities. Depending on the year in which the merger took place, the bank was removed from the analysis or, if possible, used for the 5-year sample. *Table 30 – Review of merger processes in cooperative banks with growth > 35%* lists the banks reviewed.

Cooperative bank	Year	Growth in %	Cause
Raiffeisenbank eG Deggendorf-Plattling-Sonnenwald	31.12.2017	37,73	Merger
Raiffeisenbank Eifeltor eG	31.12.2014	37,86	Merger
Vereinigte Volksbank eG Ganderkesee - Hude - Bookholzberg – Lemwerder	31.12.2016	39,67	Merger
Volksbank Albstadt eG	31.12.2014	37,60	Merger
Volksbank Erft eG	31.12.2017	39,91	Merger
Volksbank im Bergischen Land eG	31.12.2017	37,02	Merger
Volksbank Kassel Göttingen eG	31.12.2017	38,38	Merger
Volksbank Neckartal eG	31.12.2009	43,54	Merger
Volksbank Ochtrup-Laer eG	31.12.2017	46,74	Merger
Volksbank Raiffeisenbank Starnberg-Herrsching-Landsberg eG	31.12.2015	38,72	Merger
Volksbank Rietberg eG	31.12.2014	37,90	Merger
VR Bank Fulda eG	31.12.2018	44,86	Merger
VR-Bank Neckar-Enz eG	31.12.2016	37,11	Merger
VR-Bankverein Bad Hersfeld-Rotenburg eG	31.12.2016	36,09	Merger

Table 30: Review of merger processes in cooperative banks with growth > 35%

Sources: BISNODE, Federal Gazette

Cooperative banks that showed particularly large declines in their balance sheet totals in a given year were also reviewed. Given that cooperative banks only undertake mergers and not separations, balance sheet declines were usually due to normal events in a financial year; for example, changes in customer behaviour or business policy. The explanations and reasons for these changes were found in the notes and management reports of the respective banks. As an example, this was verified with four banks, as shown in *Table 31 – Cooperative banks with negative growth rates*.

Cooperative bank	Year	Growth in %	Cause
Bank 1 Saar eG	31.12.2014	-9,19	Normal
Bremische Volksbank eG	31.12.2009	-18,34	Normal
GENO BANK ESSEN eG	31.12.2015	-19,38	Normal
Raiffeisenbank eG Unterwesterwald	31.12.2016	-17,70	Normal

Table 31: Cooperative banks with negative growth rates

Sources: BISNODE, Federal Gazette

Final identification of the data required for the current work

Cooperative banks that ceased operations due to mergers in any year *before* 2018 were not included in the analysis.

For the purpose of the current work, the years 2018 and earlier are relevant and are divided into two categories: 5 years and 10 years. On this basis, the data presented in the table below was included in the evaluation:

Number of cooperative banks	From	To	Years
632	2008	2018	11
11	2009	2018	10
63	2013	2018	6
8	2014	2018	5

Table 32: Bank sample selection of 5 years and 10 years

Source: BISNODE

As shown in the table above, 714 banks were included for which balance sheet and profit and loss account data was available for at least 5 years, and 643 banks were included with data available for even 10 years; in each case, starting from 2018 and moving backwards.

Criteria within the profit and loss account for calculating the Gross Profit Margin

The data contained in the BISNODE database was re-sorted several times for the purposes of evaluation. For the final calculation of the Gross Profit Margin, the individual balance sheet and profit and loss account items were entered into the respective cells in an Excel spreadsheet, as can be seen in *Table 33*.

Position	Excel cell
Balance sheet total Assets	DH
Balance sheet total Equity and Liabilities	GN
1a) Interest Income from lending and money market transactions	GX
1b) Interest Income from fixed-interest securities and debenture book receivables	GZ
3a) Current income from shares	HA
3b) Current income from investments	HY
3c) Current income from units	IA
4) Income from profit pools and profit transfer agreements	HX
5) Commission Income	HC
7) Net income or net expense from the trading portfolio	IN
7a) Gross profit from trade in goods	IP
8) Other operating income	ID

Position	Excel cell
./.	
2) Interest Expenses	HG
6) Commission Expenses	HH
10a) Personnel Expenses	HN
10b) Other Administrative Expenses (material expenses)	HR
11) Depreciation and Value Adjustments on Intangible and Tangible Assets	HS
12) Other Operating Expenses	IE

Table 33: Excel cells used to calculate the Gross Profit Margin

Source: BISNODE

B. Collecting manager and executive board data

The relevant data for the individual managers was collected from the following sources: management reports, the BISNODE database, CompanyHouse, the Commercial Register, the home, privacy or contact pages of the respective bank's website, XING, LinkedIn, press reports, and other publications mentioning the respective bank. Furthermore, a questionnaire was distributed to all board members of German cooperative banks.

A brief description of each source that was used is provided below.

CompanyHouse: This is an Internet service provider specialising in collecting manager data from online sources, such as the Federal Gazette and the Commercial Register.

Management reports: These reports were used to source data that was not available in the BISNODE database. The management reports were retrieved from the electronic Federal Gazette (www.bundesanzeiger.de). All executive board members are listed by name in the management report. In the event of new members joining or leaving the executive board, this data is noted for the respective business year. In

general, the management report contains information on the number of board members (board composition), the gender of the board members (on the basis of first and last names listed) and, in the case of changes, the date a person joined or left the board. Furthermore, it details whether or not there is a chair of the board (CEO / non-CEO).

Commercial Register: All companies operating in Germany are listed in the commercial register. Certain data stored in the register is publicly available, including the date of registration for newly appointed board members, the names of the board members and their dates of birth.

Website (homepage or privacy and contact information¹¹⁹ pages) of the respective banks: All German cooperative banks are represented online by a website. The privacy and contact information page, which must contain certain information by law, was used to find the names of the board members, the gender of the board members (as first name and surname are mentioned), the composition of the board (CEO / non-CEO) and the number of board members (board size).

XING and LinkedIn: These are both career networking platforms. Similar to the information contained in a CV, information on a manager's education, academic study, employment relationships, professional experience and company affiliations can often be found on these platforms.

A discussion of the (un)reliability of the data sources mentioned above is provided in *Section 5.4.5* on page 136.

Sources of data on boards and board members

For the purpose of collecting data on the executive board (members), certain information in the BISNODE database was used.

In addition to the balance sheet and the profit and loss account data for a single banking year, the BISNODE database contains an Excel worksheet with (incomplete) information on: the name of the cooperative bank; the names of the members of the executive board; the names of the members of the supervisory board; the dates of

¹¹⁹ In German, *Impressum*.

birth of the members of the executive board; the dates of birth of the supervisory board members; a distinction between whether a board member is a CEO / non-CEO; a distinction of whether a person is a member of the supervisory board or chair of the supervisory board; the date on which a person started in their corresponding role (as an executive board member or a supervisory board member); and the date a person left their role as an executive board member (if this applies).

In total, the BISNODE database contains 10,015 records. *Table 34 – BISNODE database with distribution of positions (executive board members / supervisory board members)* provides a breakdown of members and chairs of the supervisory board, members of the executive board and CEOs.

Number	Position
6,426	Supervisory board members
1,079	Chairmen of the supervisory board
2,074	Member of the executive board (=non-CEO)
436	Member of the executive board (=CEO)

Table 34: BISNODE database with distribution of positions (executive board members / supervisory board members)

Source: BISNODE

Selection criteria: board membership

Given that the members and chairs of the supervisory board were not the focus of the current work, they were not included.

Table 35 – Number of executive board members including date of commencement of position and date of departure shows the distribution after the members and chairs of the supervisory board were excluded.

Number	Description
2,510	Total members of the executive board

Number	Description
955	Distributed among cooperative banks
436	CEO
2,074	Non-CEO
2,110	Date of birth available
289	Starting date '1900' means, that no date is available
745	Starting date between 2015 and 2020
535	Starting date 2010 – 2014 (≥ 5 years and < 10 years)
941	Starting date 2009 and earlier (≥ 10 years)
117	End date 2015-2017
274	End date 2018-2020
2,119	No end date available, i.e. they are still active

Table 35: Number of executive board members including date of commencement of position and date of departure

Source: BISNODE

Selection criteria: start and end dates of board membership

In the current work, only those executive board members who had been active in that role for at least 5 years were considered, counting backwards from 2018. Accordingly, 745 people who started their activities as executive board members in 2015 or afterwards were not considered in the evaluation. Similarly, 117 members of the executive board who left the board before 2018 were excluded from the evaluation.

Supplementing dates of birth and start dates

As no date of birth was available in BISNODE for 400 executive board members and no start date for board membership was available for 289 executive board members, the next step was to try to identify this data in other easily accessible sources, e.g.

CompanyHouse. After researching the information in CompanyHouse, it was possible to add 221 dates of birth and 172 employment commencement dates.

Identifying female board members by first name

On the basis of the surnames and first names of the executive board members, it was possible to confidently identify 59 members as female. For 46 other board members, a more detailed check was needed, as the author could not be clear whether the names (e.g. Uli) referred to female or male board members. Therefore, a purely visual check was carried out by comparing the published pictures of the board members of the respective bank with the first names¹²⁰. Thus, an assignment of gender was possible.

Excluding executive board members due to a merger

After excluding the executive board members of the cooperative banks that had already been excluded due to mergers etc., 1,221 executive board members remained. These were spread across 674 cooperative banks.

Collecting outstanding data by means of a questionnaire

Because some data was not available to the extent required, all members of the executive board in each bank were identified and contacted by e-mail. Initially, they were contacted regardless of their length of service (longer than 5 years or longer than 10 years).

To identify and survey all the executive board members of the individual banks, a list of all active cooperative banks in Germany as of the end of 2018 was used (BVR, 2019). For more details, see *Appendix 3: List of all cooperative banks in Germany as of the end of 2018* on page 250. Accordingly, a total of 873 cooperative banks had to be considered.

¹²⁰ Due to the German law on names (in contrast to other countries), a first name must be clearly identifiable as female or male.

From this list, the website of each bank was retrieved by using the bank name. The information listed in *Table 36 – Data, stemming from the privacy and contact information page* was retrieved from the privacy and contact information page which must contain certain information) and entered into an Excel table.

Data / Information	Collected Information
Number of executive board members	Numerical value, numeric
CEO (in German: Vorstandsvorsitzender / Vorstandssprecher)	Yes or No, y/n
Name and first name of the executive board member	Name, First name, alphabetical
Female executive board member	Yes or No, y/n
More than 1 CEO	Yes or No, y/n
Second part of the general info e-mail address + first name and name of the executive board member	e-mail address* firstname.name@bankname.de

Table 36: Data, stemming from the privacy and contact information page

Source: Privacy and contact information page of the respective banks' websites

** In most cases, it was possible to use the format of the general information e-mail address (which each bank must have) in order to derive the e-mail addresses of the individual members of the executive board. This usually consisted of: [First name.surname@] [back part of the e-mail address.de].*

In the mandatory information on a bank's website (the privacy and contact information page) it was not always immediately clear whether there was a CEO (also referred to as a chair or spokesperson of the executive board; for the purposes of the current work, chair and spokesperson of the executive board were regarded as equivalent). In such cases, the "About us – Organs & Committees" page of the website was checked to see if a CEO had been appointed. If both sources were missing, a dual-CEO (if there were at least two executive board members) or multiple-CEO (if there were more than two board members) was assumed.

The data collected in this way is shown in *Table 37 – Data collected in preparation for conducting a questionnaire*:

Number	Description
1,925	Executive board members
1,921	Available e-mail addresses (three addresses could not be determined, one e-mail address was not unique due to multiple names)
807	Cooperative banks (cut-off date May 2020, i.e. between 31.12.2018 and May 2020 there were 66 mergers)
89	Spokesmen (=CEO)
335	CEO
383	Cooperative banks with dual-CEO or multiple-CEO
1,495	Non-CEO
2	Executive board members, position could not be determined
1	Cooperative bank with only one executive board member
49	Executive board members with a doctoral degree

Number	Description
74	Female executive board members, thereof 13 CEO / 0 Spokeswomen
608	Cooperative banks with two executive board members
122	Cooperative banks with three executive board members
62	Cooperative banks with four executive board members
6	Cooperative banks with five executive board members
5	Cooperative banks with six executive board members
1	Cooperative banks with seven executive board members
2	Cooperative banks with eight executive board members

Table 37: Data collected in preparation for conducting a questionnaire

Source: Privacy and contact information pages of the respective banks' websites

In addition, this made it possible to compare the data gathered through this step with the data that had already been obtained from the BISNODE database. In this respect, it was possible to avoid inaccuracies caused by using only one data source.

Having collected the necessary information, 1,921 members of the executive board were contacted by e-mail and asked to answer nine questions (one of which was

open-ended). The content of the e-mail is presented below. The German version can be found in the next section.

E-mail and questionnaire

“Dear Mr xy,

PhD research on good practices that influence performance in cooperative banks

I am a PhD student at Middlesex University Business School where I am currently undertaking research into cooperative banks to try and determine which good practices impact on success and in particular the operating results.

I am currently collecting data from public available sources on bank characteristics including those data that relate to the characteristics of board members, such as age and education. To that end, I am hoping that you will be able to expedite this data collection process by completing the attached questionnaire and by returning it to me until July 10.

An outcome from this study is to better understand the relationship between age, education and experience, for example on the operating result before valuation.

To that end, I would be very grateful if you could take around 5 minutes of your time for answering 9 questions (test participants needed max. 5 minutes).

In return, you will receive an executive summary of the findings which will allow you to assess the impact of the above factors on your bank and to determine good practice in this respect. At the same time, the results can also be useful as a practical guide for the recruitment of new board members.

The data will be kept confidential and will be anonymised. Your participation is of course voluntary. For further questions on data protection, please refer to Art. 5 DSGVO (principles for the processing of personal data). The Middlesex University Business School ethics committee has approved the study. My PhD project is supervised by Dr Louise Boulter and Dr Andrea Werner. For further information on this study please see attached participant information sheet.

For your participation it is sufficient to reply to this e-mail and answer the following questions.

Many thanks in advance for your help with this.

I am () years old

() I have completed an apprenticeship/training in () Banking () in another profession, namely__

() I have a () university () college () professional academy degree
as a () magister () diploma () B.A./B.Sc. () M.A./M.Sc.
() others _____ in the field of _____

() I have a **second** () university () college () professional academy degree
as a () magister () diploma () B.A./B.Sc. () M.A./M.Sc.
() others _____ in the field of _____

() I have a **third** () university () college () professional academy degree
as a () magister () diploma () B.A./B.Sc. () M.A./M.Sc.
() others _____ in the field of _____

() I have a postgraduate degree () Dr. () PhD () DBA () others _____

() I have completed a training as a () certified bank manager () certified savings
bank manager

() Furthermore, I have the following (not yet mentioned) professional qualifica-
tion(s) _____

I have a total of () years of work experience, including () years in banking.

I have been a member of the executive board of a bank for () years

This is my () first () second () third () fourth () fifth () _____ position as a member of
the executive board within a bank

Is there anything else that you would like to add in terms of qualities and characteris-
tics that you think are likely to impact on the success of a cooperative bank?

_____”

Additional explanations of individual survey questions

Question

I have completed an apprenticeship/training in Banking

Explanation

After completing one's theoretical (school-based) training, it is standard practice in Germany to start an apprenticeship with a company. Within the apprenticeship, one learns about all areas of the profession from scratch, regardless of whether the profession is manual or office-based. An apprenticeship is usually concluded with a final

examination and certifies the trainee in the respective occupation. The training usually takes place within the company. An apprenticeship as a bank clerk lasts for three years (IHK München, 2020). Practical training at a bank is accompanied by regular study at a vocational college, where the trainee is taught the theoretical knowledge required for a job as a bank clerk.

Completing an apprenticeship as a bank clerk is not a mandatory requirement for working in a bank; a degree in business administration, banking and finance, or management can provide the necessary theoretical knowledge for the role. A degree programme is usually followed as an academic course and often makes it possible to work in a higher (more qualified) position.

Question

() I have completed training as a () certified bank manager () certified savings bank manager

Explanation

To be a board member of a German cooperative bank, a person must meet certain legal requirements. These requirements are considered to be fulfilled if the person has a licence according to § 25 c of the KWG. This licence can be acquired by either completing a degree in a bank-specific subject (finance and banking, bank management, etc.) or completing an apprenticeship as a bank clerk followed by a further qualification as a certified banking administrator (Akademie Deutscher Genossenschaften ADG, 2020). It should be noted that the title Certified Banking Administrator (in German: *diplomierter Bankbetriebswirt Management*) is awarded by the Academy of German Cooperatives and is *not* recognised by the German government (Sparkassenakademie, 2020). As an alternative, the title Certified Savings Banking Administrator (in German: *diplomierter Sparkassenbetriebswirt Management*) is awarded by the Academy of German Savings Banks. However, this title is not recognised by the German government either.

Members of the executive board often include the title Legally Certified Banking Administrator¹²¹ on their business cards, but this is not officially correct and implies that the title has more symbolic than practical value.

Question

I have a total of () years of work experience, including () years in banking.

Explanation

Work experience or professional experience in Germany expresses how many years someone has worked for one company or more. In Germany, only paid employment in a company is considered to be professional experience and can be referred to as such. The type of activity is irrelevant, and can include office work or a trade. In contrast, academic training (school or university) is not counted as work experience.

In response to the part of the question that reads "...including () years in banking", the intention was for the respondents to state the number of years they had worked in one bank or more. Therefore, if a respondent's overall professional experience did not match their professional experience within banks, this indicated that they had gained professional experience outside banks.

German version of the questionnaire

Forschungsprojekt: Einfluß von Ausbildung und Erfahrung auf Betriebsergebnis

Sehr geehrte Vorständin, sehr geehrter Vorstand,

ich bin Doktorand an der Middlesex University Business School in London, an der ich derzeit Forschungsarbeiten zu Genossenschaftsbanken durchführe, um herauszufinden, wie sich Good Practice Ansätze auf den Erfolg und insbesondere auf die Betriebsergebnisse auswirken.

Momentan sammle ich Daten aus öffentlich zugänglichen Quellen zu Bankmerkmalen, einschließlich solcher Daten, die sich auf die Merkmale von Vorstandsmitgliedern beziehen, wie Alter und Ausbildung. Zu diesem Zweck hoffe ich, dass es Ihnen möglich ist, diese Datenerhebung zu beschleunigen, indem Sie die beigefügten Fragen beantworten und bis zum 15. Juli an mich zurücksenden.

¹²¹ In German, *diplomierter Bankbetriebswirt Management*, abbreviated (erroneously) to *Dipl. Bankbetriebswirt*.

Ein Ergebnis dieser Studie ist ein besseres Verständnis des Zusammenhangs zwischen Alter, Ausbildung und Erfahrung auf beispielsweise das Betriebsergebnis vor Bewertung.

Daher wäre ich Ihnen sehr dankbar, wenn Sie für die Beantwortung von 9 Fragen 5 Minuten Ihrer Zeit erübrigen könnten (Test-Teilnehmer benötigten max. 5 Minuten Zeit). Im Gegenzug erhalten Sie eine Zusammenfassung der Ergebnisse, die Ihnen eine Einschätzung der Einflüsse der oben genannten Faktoren für Ihre Bank erlaubt. Gleichzeitig können die Ergebnisse auch als praktischer Leitfaden für die Neueinstellung von Vorständen nützlich sein.

Alle Daten werden anonym und vertraulich behandelt. Ihre Teilnahme ist selbstverständlich freiwillig. Für weitergehende Fragen zum Thema Datenschutz wird auf Art. 5 DSGVO (Grundsätze für die Verarbeitung personenbezogener Daten) verwiesen. Die Ethik-Kommission der Middlesex University Business School hat die Studie genehmigt. Meine Arbeit wird von Dr. Louise Boulter und Dr. Andrea Werner betreut. Weitere Informationen zu dieser Studie entnehmen Sie bitte dem beigegeführten Teilnehmer-Informationsblatt.

Für Ihre Teilnahme genügt es, auf diese E-Mail zu antworten und die nachfolgenden Fragen zu beantworten.

Vielen Dank im Voraus für Ihre Mithilfe

Ich bin () Jahre alt

() Ich habe eine Ausbildung/Lehre als () Bankkaufmann/frau () als _____ absolviert

() Ich habe ein Studium an der () Fachhochschule () Universität
() Berufsakademie mit einem () B.A./B.Sc. () M.A./M.Sc.
() Magister () Diplom () anderer Grad: _____
im Bereich/Studiengang _____ abgeschlossen

() Ich habe ein **zweites** Studium an der () Fachhochschule () Universität
() Berufsakademie mit einem () B.A./B.Sc. () M.A./M.Sc.
() Magister () Diplom () anderer Grad: _____
im Bereich/Studiengang _____ abgeschlossen

() Ich habe ein **drittes** Studium an der () Fachhochschule () Universität
() Berufsakademie mit einem () B.A./B.Sc. () M.A./M.Sc.
() Magister () Diplom () anderer Grad: _____
im Bereich/Studiengang _____ abgeschlossen

() Ich habe den Grad eines () Dr. () PhD () DBA () anderer Grad: _____

() Ich habe die Ausbildung zum () diplomierten Bankbetriebswirt /
() diplomierten Sparkassenbetriebswirt absolviert

() Darüberhinaus verfüge ich über folgende (noch nicht genannte) berufliche Qualifikation(en) _____

Ich habe insgesamt () Jahre Berufserfahrung, davon () Jahre in einer Bank oder Sparkasse

Ich bin seit () Jahren als Bank-Vorstand tätig

Dies ist meine () erste () zweite () dritte () vierte () fünfte () ____ Stelle als Bank-Vorstand

Gibt es noch etwas, das Sie in Bezug auf die Qualitäten und Eigenschaften von Bank-Vorständen hinzufügen möchten, das Ihrer Meinung nach den Erfolg einer Genossenschaftsbank beeinflussen könnte?

Collecting data on the insolvency rate, unemployment rate and gross value added

Further control variables – the unemployment rate, the insolvency rate and the gross value added – were investigated (for the current work) in relation to the past 10 years. The data needed to estimate these variables was retrieved by submitting online queries through the portal of the Federal Statistical Office (www.destatis.de). The data was available for the years 2009–2018 and was downloaded in the form of an Excel table. The individual data for each year was then aggregated to arrive at an average value for the last 10 years. For the unemployment rate and the insolvency rate, this average value was expressed in per cent per district. For the gross value added, the average value was expressed in euros per inhabitant per district.

It should be noted that not all the data for all years was available for all districts.

Consolidating and completing the collected data

The data was collected as described above and recorded in Excel tables. For ease of handling, the raw data was collected in separate Excel tables and re-sorted for further processing.

In preparation for testing the individual hypotheses (1-6), the raw data was combined and supplemented in the following stages of processing:

For the purpose of identifying all existing banks accurately and efficiently, bank codes were used. This is an index for all banks which matches the names of existing banks with a bank code file.

The unemployment rate, insolvency rate and gross value added were also added to the Excel tables.

In the next step, the average balance sheet total 5 years, average Gross Profit Margin 5 years, average balance sheet total 10 years and average Gross Profit Margin 10 years were added to the Excel table.

The following sources were used to supplement non-existent or only partially available data: CompanyHouse; GenoRiskSolutions; the internet; [bank websites](#);

BISNODE

The resulting version of the Excel file contained the following data, data fields and information:

Number	Name
807	Banks
72	Banks having a woman on the board
734	Banks having only male board members
1	Banks with 1 board member
606	Banks having 2 board members

Number	Name
123	Banks having 3 board members
62	Banks having 4 board members
6	Banks having 5 board members
5	Banks having 6 board members
1	Banks having 7 board members
2	Banks having 8 board members
416	Banks with a CEO
390	Banks with Dual/Multi-CEO
317	Districts
793	Unemployment rate last 10 years in %
782	Insolvency rate last 10 years in %
785	Gross value added last 10 years in Euro per person
675	Average balance sheet total last 5 years
675	Average Gross Profit Margin last 5 years
611	Average balance sheet total last 10 years
611	Average Gross Profit Margin last 10 years

Table 38: Completion of collected data for hypotheses 1–3

Source: Excel-Sheet “AL BWS Insolv Quote und GPM final 2020 07 12.xlsx”

The raw data described above was then transferred to IBM SPSS 25 for statistical analysis. The number of usable data sets is listed in the evaluations for each hypothesis.

After that, the existing data (from BISNODE) was supplemented by data from the following sources: CompanyHouse; GenoRiskSolutions; the internet; bank websites; Questionnaire

After this step, the version of the Excel file contained the following data, data fields and information:

Number	Name
1,169	Birth dates of members of the executive board
407	Distributed among 407 banks, i.e. there are 407 average ages available

Table 39: Completion of data for hypothesis 1

Source: Excel-Sheet “Alter 2020 07 14 Version 2.xlsx”

Within the final step, the existing data (from BISNODE; e.g. entry date) was supplemented where relevant by data from the following sources: CompanyHouse; GenoRiskSolutions; XING; LinkedIn; the internet; bank websites; Questionnaire

The final version of the Excel file contained 635 data records on individual executive board members (Source: Excel sheet “Data merger Version 1 2020 07 10.xlsx”). A “complete” bank data set was considered to exist if the data of at least two executive board members was available.

After comparing the banks with respect to the data on the Gross Profit Margin 5 years and the Gross Profit Margin 10 years, 65 complete data sets for testing hypotheses for the 5-year sample (sample 1) and 62 complete data sets for testing hypotheses for the 10-year sample (sample 2) were identified.

Self-reported data

When collecting data from certain sources, including social media platforms such as XING and LinkedIn, there is a risk that the data may deliberately or unknowingly be falsified or misrepresented because it is self-reported. Teye and Peaslee (2015) argue that this is often due to construct validity, or because information providers have varying degrees of reliability. Furthermore, all types of data are susceptible to measurement errors, but self-reporting is especially problematic in terms of validity and reliability. A distinction is made between random and systematic errors (Cole *et al.*, 2012). Random errors occur indiscriminately, which means that the same person could provide a different answer to the same question at different times. The causes are seen in unpredictable cognitive disorders and can be attributed to problems with information-processing or misinterpretation. Random errors affect reliability rather than validity. They are not a specific research problem, because random errors usually apply to the whole population of data to be collected. This means that for multiple measurements, the arithmetic mean error should be zero (Cole *et al.*, 2012).

Systematic errors are far more problematic because they are permanent errors or deviations from the truth (Teye and Peaslee, 2015); thus, they call into question the validity of the data source. Systematic errors can be caused by misinformation on the part of information providers, especially with regard to desirable social characteristics (Bowman and Hill, 2011). If systematic errors are consistently distributed across the sample, they are difficult to detect; but this is easier if the errors vary and can be attributed to specific causative factors. Research papers regarding error rates in self-reported data related to different genders do not provide clear results, but there is clear evidence that the accuracy of self-reported data increases with age (Teye and Peaslee, 2015).

In the current work, there are several sources of error. The data from the BISNODE database may contain transmission errors introduced by the individual reporting bank (random errors). Systematic errors should be minimised here, because the reported and published data is also reported not only to the Federal Gazette but also to the supervisory authority, the Deutsche Bundesbank. In the event of deviations, the Bundesbank urges the reporting bank to correct the data promptly.

The data published on the website of each individual bank is listed on the privacy and contact information page. The privacy and contact information page must contain certain mandatory information. Here, too, it is likely that no systematic errors occur, but the possibility of random errors does exist.

In the case of self-reported data from the social media platforms XING and LinkedIn, there is the possibility of random and systematic errors, as there are virtually no controlling authorities. A further source of error is the author of the current work: the data might have been recorded incorrectly (given that it was recorded manually).

To avoid random errors and systematic errors, the following measures were taken: first, the primary data sources BISNODE, the privacy and contact information page on the banks' websites and CompanyHouse were prioritised, as the data was readily available. In addition, existing data from one source (BISNODE) was combined with data from other sources (Federal Gazette, CompanyHouse, websites) and supplemented where required. Finally, manually collected data on the qualities of the executive board members was compared among various sources wherever possible. In addition, the data on the executive board members' qualities was not collected from social media alone, but also via an e-mail questionnaire containing nine questions (with reference to the manager qualities to be investigated).

This section explains how self-reported data was handled in the current work. One of the aims of the data collection was to gather self-reported information about the educational background of the individual board members. Therefore, it was necessary to consider how a meaningful classification of the respective educational qualifications could be achieved. This is discussed in the next section, starting with a statement about classifications of qualifications in an international context.

Classification of qualifications in an international context

Since qualification is a variable used in the current work, it is necessary to discuss an appropriate classification. In the 1970s, UNESCO developed a tool for comparing and classifying international qualifications: the International Standard Classification of Education (ISCED). The first classification was established in 1976; hence the name ISCED-76. Various amendments and additions were made in 1997 (ISCED-97), and

ISCED 2011 has been in place since 2012 (OECD, 2004; UNESCO Institute for Statistics, 2012).

The ISCED uses two variables – education sector and education level – to classify the content of education programmes. ISCED 2011 builds on the classification system, internationally established definitions and concepts, and ISCED maps of education programmes and qualifications worldwide. This allows for statistical analysis and comparison of educational programmes and qualifications around the world (UNESCO Institute for Statistics, 2012, p. 6).

The ISCED provides a comprehensive definition of an education programme and its purpose: "In ISCED, an education programme is defined as a coherent set or sequence of educational activities or communication designed and organized to achieve pre-determined learning objectives or accomplish a specific set of educational tasks over a sustained period. Objectives encompass improving knowledge, skills and competencies within any personal, civic, social and/or employment-related context. Learning objectives are typically linked to the purpose of preparing for more advanced studies and/or for an occupation, trade, or class of occupations or trades but may be related to personal development or leisure. A common characteristic of an education programme is that, upon fulfilment of learning objectives or educational tasks, successful completion is certified" (UNESCO Institute for Statistics, 2012, p. 7).

The core statements in this definition refer to educational activities, communication, and organised and sustained learning.

ISCED 2011 can be used to map education programmes, both formal and non-formal, to different stages of a person's life. The term *formal education* refers to education that is organised and institutionalised by public or private organisations. At the same time, it contributes to the education of the respective country. *Non-formal education*, on the other hand, is alternative or supplementary education that complements formal education (UNESCO Institute for Statistics, 2012, p. 11).

The ISCED uses parallel codification schemes to assign levels to education pathways (ISCED-P) and educational attainment (ISCED-A). Parallel codification schemes consisting of educational pathways (ISCED-P) and levels of attainment (ISCED-A) form the ISCED classifications. Each codification scheme is divided into

nine levels (UNESCO Institute for Statistics, 2012, p. 21). Each level is subdivided into further dimensions where necessary. The scheme is embedded in a coding system of three “digits”, as shown in the following tables.

ISCED-Programmes (ISCED-P)		ISCED-Attainment (ISCED-A)	
0	Early childhood education	0	Less than primary education
1	Primary education	1	Primary education
2	Lower secondary education	2	Lower secondary education
3	Upper secondary education	3	Upper secondary education
4	Post-secondary non-tertiary education	4	Post-secondary non-tertiary education
5	Short-cycle tertiary education	5	Short-cycle tertiary education
6	Bachelor’s or equivalent level	6	Bachelor’s or equivalent level
7	Master’s or equivalent level	7	Master’s or equivalent level
8	Doctoral or equivalent level	8	Doctoral or equivalent level
9	Not elsewhere classified	9	Not elsewhere classified

Table 40: ISCED coding of levels (first digit)

Source: (UNESCO Institute for Statistics, 2012), p. 21

ISCED-Programmes (ISCED-P)		ISCED-Attainment (ISCED-A)	
0	Not further defined	0	Not further defined
1	Early childhood educational development	1	Never attended an education programme
2	Pre-primary education	2	Some early childhood education
3	Not used	3	Some primary education (without completion of ISCED level 1)
4	General / academic	4	General / academic
5	Vocational / professional	5	Vocational / professional
6	Orientation unspecified	6	Orientation unspecified
7	Not used	7	Not used

ISCED-Programmes (ISCED-P)		ISCED-Attainment (ISCED-A)	
8	Not used	8	Not used
9	Not elsewhere classified	9	Not elsewhere classified

Table 41: ISCED coding of categories (second digit)

Source: (UNESCO Institute for Statistics, 2012), p. 21

ISCED-Programmes (ISCED-P)		ISCED-Attainment (ISCED-A)	
0	Not further defined	0	Not further defined
1	Recognised successful completion of programme is insufficient for completion or partial completion of ISCED level (and thus without direct access to programmes at higher ISCED levels)	1	Not used
2	Recognised successful completion of programme is sufficient for partial completion of ISCED level but without direct access to programmes at higher ISCED levels	2	Partial level completion without direct access to programmes at higher ISCED levels
3	Recognised successful completion of programme is sufficient for completion of ISCED level but without direct access to programmes at higher ISCED levels	3	Level completion without direct access to programmes at higher ISCED levels

ISCED-Programmes (ISCED-P)		ISCED-Attainment (ISCED-A)	
4	Recognised successful completion of programme is sufficient for completion of ISCED level and with direct access to programmes at higher ISCED levels	4	Level completion with direct access to programmes at higher ISCED levels
5	First degree programme – Bachelor's or equivalent level (3 to 4 years)	5	Not used
6	Long first degree programme – Bachelor's or Master's, or equivalent level	6	Not used
7	Second or further degree programme, following a Bachelor's or equivalent programme	7	Not used
8	Second or further degree programme, following a Master's or equivalent programme	8	Not used
9	Not elsewhere classified	9	Not elsewhere classified

Table 42: ISCED coding of subcategories (third digit)

Source: (UNESCO Institute for Statistics, 2012), p. 22

The 25 individually classified fields of education (unchanged from ISCED-97) are organised in nine broad groups. Inter- or multi-disciplinary programmes are classified according to the majority proportion: the field in which the student spends most of his or her time (UNESCO Institute for Statistics, 2012).

The following breakdown of the ISCED fields of education provides a more detailed description of the programmes included (UNESCO Institute for Statistics, 2012, pp. 73–75):

“0 General programmes

01 Basic programmes

Basic general programmes: pre-primary, elementary, primary, secondary, etc.

08 Literacy and numeracy

Simple and functional literacy, numeracy.

09 Personal development

Enhancing personal skills; for example, behavioural capacities, mental skills, personal organisational capacities, life-orientation programmes.

1 Education

14 Teacher training and education science

Teacher training for pre-school, kindergarten, elementary school, vocational, practical, non-vocational subject, adult education, teacher trainers and for handicapped children. General and specialised teacher-training programmes.

Education science: curriculum development in non-vocational and vocational subjects. Educational assessment, testing and measurement, educational research, other education science.

2 Humanities and arts

21 Arts

Fine arts: drawing, painting, sculpture;

Performing arts: music, drama, dance, circus;

Graphic and audio-visual arts: photography, cinematography, music production, radio and television production, printing and publishing;

Design; craft skills.

22 Humanities

Religion and theology;

Foreign languages and cultures: living or ‘dead’ languages and their literature, area studies;

Native languages: current or vernacular language and its literature;

Other humanities: interpretation and translation, linguistics, comparative literature, history, archaeology, philosophy, ethics.

3 Social sciences, business and law

31 Social and behavioural science

Economics, economic history, political science, sociology, demography, anthropology (except physical anthropology), ethnology, futurology, psychology, geography (except physical geography), peace and conflict studies, human rights.

32 Journalism and information

Journalism; library technician and science; technicians in museums and similar repositories;
Documentation techniques;
Archival sciences.

34 Business and administration

Retailing, marketing, sales, public relations, real estate;
Finance, banking, insurance, investment analysis;
Accounting, auditing, bookkeeping;
Management, public administration, institutional administration, personnel administration;
Secretarial and office work

38 Law

Local magistrates, "*notaires*", law (general, international, labour, maritime, etc.), jurisprudence, history of law.

4 Science

42 Life sciences

Biology, botany, bacteriology, toxicology, microbiology, zoology, entomology, ornithology, genetics, biochemistry, biophysics, other allied sciences, excluding clinical and veterinary sciences.

44 Physical sciences

Astronomy and space sciences, physics, other allied subjects, chemistry, other allied subjects, geology, geophysics, mineralogy,

physical anthropology, physical geography and other geosciences, meteorology and other atmospheric sciences including climatic research, marine science, vulcanology, palaeoecology.

46 Mathematics and statistics

Mathematics, operations research, numerical analysis, actuarial science, statistics and other allied fields.

48 Computing

Computer sciences: system design, computer programming, data processing, networks, operating systems – software development only (hardware development should be classified with the engineering fields).

5 Engineering, manufacturing and construction

52 Engineering and engineering trades

Engineering drawing, mechanics, metal work, electricity, electronics, telecommunications, energy and chemical engineering, vehicle maintenance, surveying.

54 Manufacturing and processing

Food and drink processing, textiles, clothes, footwear, leather, materials (wood, paper, plastic, glass, etc.), mining and extraction.

58 Architecture and building

Architecture and town planning: structural architecture, landscape architecture, community planning, cartography;
Building, construction;
Civil engineering.

6 Agriculture

62 Agriculture, forestry and fishery

Agriculture, crop and livestock production, agronomy, animal husbandry, horticulture and gardening, forestry and forest product techniques, natural parks, wildlife, fisheries, fishery science and technology.

64 Veterinary

Veterinary medicine, veterinary assisting.

7 Health and welfare

72 Health

Medicine: anatomy, epidemiology, cytology, physiology, immunology and immunohaematology, pathology, anaesthesiology, paediatrics, obstetrics and gynaecology, internal medicine, surgery, neurology, psychiatry, radiology, ophthalmology;

Medical services: public health services, hygiene, pharmacy, pharmacology, therapeutics, rehabilitation, prosthetics, optometry, nutrition;

Nursing: basic nursing, midwifery;

Dental services: dental assisting, dental hygienist, dental laboratory technician, odontology.

76 Social services

Social care: care of the disabled, childcare, youth services, gerontological services;

Social work: counselling, welfare not elsewhere classified (n.e.c.)

8 Services

81 Personal services

Hotel and catering, travel and tourism, sports and leisure, hairdressing, beauty treatment, and other personal services: cleaning, laundry, dry-cleaning, cosmetic services, domestic science.

84 Transport services

Seamanship, ship's officer, nautical science, air crew, air traffic control, railway operations, road motor vehicle operations, postal service.

85 Environmental protection

Environmental conservation, control and protection, air and water pollution control, labour protection and security.

86 Security services

Protection of property and persons: police work and related law enforcement, criminology, fire-protection and fire-fighting, civil security; Military" (UNESCO Institute for Statistics, 2012, pp. 73–75)".

Classification of qualifications in Germany

After classifications of qualifications have first been discussed in an international context, the next section deals with the German education system, as the focus of this thesis is Germany.

In Germany, the Federal Ministry of Education and Research,¹²² in cooperation with the Standing Conference of the Ministers of Education and Cultural Affairs¹²³ of the Federal Republic of Germany, has formulated a German Qualifications Framework for Lifelong Learning (GQF).¹²⁴ This qualifications framework is based on the ISCED-2011 classifications and is regarded as a translation of the European Qualifications Framework (EQF). The GQF aims to make the German education system more transparent and enable the comparison of qualifications in Germany with those of other countries. The qualifications within the various education sectors are divided into eight levels (Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017).

The EQF acts as a translation tool that makes it possible to compare national qualifications across Europe. Eight reference levels form the core of the EQF. They describe learning outcomes; that is, what learners know, what they understand and what they are able to do. Accordingly, the learning outcomes at each level are described under three pillars: *knowledge*, *skills* and *responsibility and autonomy*. The EQF, which was adopted by the European institutions in 2008 and revised in 2017, is already being implemented throughout Europe. To this end, the Member States are in the process of developing their own national qualifications frameworks. Their levels are assigned to the levels of the EQF. The EQF thus serves as a European meta-framework that facilitates the comparison of the different national education systems in Europe (Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017).

Like the EQF, the GQF is composed of eight levels. However, these are structured differently from those of the EQF: a larger number of categories is used to extend and concretise the EQF. For example, to adequately represent the learning outcomes aimed for in the German education system, the GQF identifies four pillars –

¹²² In German, Bundesministerium für Bildung und Forschung.

¹²³ In German, Kultusministerium.

¹²⁴ In the original German text: “Der Deutsche Qualifikationsrahmen für lebenslanges Lernen”.

knowledge, skills, social competence and independence – instead of the three pillars in the EGF. The levels of the GQF are matched with the levels of the EQF within the framework of *1:1 referencing*. Thus, the German qualifications assigned to the GQF are simultaneously assigned to the corresponding EQF level (Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017, pp. 3–4).¹²⁵

Level	Qualifications	Qualifikationen
1	Preparation for vocational training Pre-vocational training measures Vocational preparation year	Berufsausbildungsvorbereitung Berufsvorbereitende Bildungsmaßnahmen Berufsvorbereitungsjahr
2	Secondary School Certificate Vocational college (basic vocational training) Preparation for vocational training Pre-vocational training measures Vocational preparation year Entry qualification	Hauptschulabschluss (HSA) Berufsfachschule (Berufliche Grundbildung) Berufsausbildungsvorbereitung Berufsvorbereitende Bildungsmaßnahmen (BvB, BvB-Reha) Berufsvorbereitungsjahr (BVJ) Einstiegsqualifizierung (EQ)
3	Secondary school-leaving certificate Vocational college (intermediate school-leaving certificate) Dual vocational training (2-year training courses)	Mittlerer Schulabschluss (MSA) Berufsfachschule (Mittlerer Schulabschluss) Duale Berufsausbildung (2-jährige Ausbildungen)

¹²⁵ Table 43 – Overview of assigned qualifications/qualification types in English and German provides an overview of the individual levels and the qualifications assigned to them. The author's translation into English appears alongside the German original text.

Level	Qualifications	Qualifikationen
4	General qualification for university entrance Subject-related higher education entrance qualification Advanced technical college entrance qualification Dual vocational training (3 and 3 ½ year training courses) Vocational college (vocational training regulated by state law) Vocational college (fully qualifying vocational training) Vocational retraining (level 4) Specialist in ground handling services in air traffic (certified)	Allgemeine Hochschulreife (AHR) Fachgebundene Hochschulreife (FgbHR) Fachhochschulreife (FHR) Duale Berufsausbildung (3- und 3 ½-jährige Ausbildungen) Berufsfachschule (Landesrechtlich geregelte Berufsausbildungen) Berufsfachschule (vollqualifizierende Berufsausbildung nach BBiG/HwO) Berufliche Umschulung nach BBiG (Niveau 4) Fachkraft Bodenverkehrsdienst im Luftverkehr (Geprüfte)
5	IT Specialist (Certified) Service technician (certified) Other continuing vocational training qualifications (level 5)	IT-Spezialist (Zertifizierter) Servicetechniker (Geprüfter) Sonstige berufliche Fortbildaungsqualifikationen nach BBiG/HwO (Niveau 5)
6	Bachelor and equivalent degrees Technical school (further education courses regulated by state law) Master craftsman Qualified merchant (certified)	Bachelor und gleichgestellte Abschlüsse Fachschule (Landesrechtlich geregelte Weiterbildungen) Meister Fachkaufmann (Geprüfter) Fachwirt (Geprüfter)

Level	Qualifications	Qualifikationen
	Business administrator (certified) Training and further education pedagogue (certified) Operational Professional (IT) (Auditor) Other vocational further training qualifications (level 6) Vocational further training qualifications (level 6)	Aus- und Weiterbildungspädagoge (Geprüfter) Operativer Professional (IT) (Geprüfter) Sonstige berufliche Fortbildungsqualifikationen nach BBIG/HwO (Niveau 6) Berufliche Fortbildungsqualifikationen nach § 54 BBIG (Niveau 6)
7	Master's and equivalent degrees Business economist according to the Vocational Training Act (certified) Business economist according to the crafts code (certified) Technical business economist (certified) Strategic Professional (IT) (Auditor) Professional pedagogue (certified)	Master und gleichgestellte Abschlüsse Betriebswirt nach dem Berufsbildungsgesetz (Geprüfter) Betriebswirt nach der Handwerksordnung (Geprüfter) Technischer Betriebswirt (Geprüfter) Strategischer Professional (IT) (Geprüfter) Berufspädagoge (Geprüfter)
8	Doctorate and equivalent artistic degrees	Doktorat und äquivalente künstlerische Abschlüsse

Table 43: Overview of assigned qualifications/qualification types in English and German

Source: Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017, pp. 3–4

Using the classifications and levels for the purposes of this research

To test Hypothesis 5 (level of education), data on the education and (if available) university degrees of the respective board members was collected manually from social media platforms, press reports, websites and the research questionnaire.

Analogous to the ISCED-2011 and GQF classifications, dual vocational training (where one part of the training is spent in a company and the other is spent at vocational college) is classed as level 4¹²⁶ (Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017, pp. 12–33), degrees (bachelor's and master's degrees) are classed at levels 6 and 7, and postgraduate degrees are classed at level 8.

Within level 4 (post-secondary non-tertiary education) there is a list of all nationally recognised apprenticeships (as of 1 August 2017) based on the GQF. Thus, it was possible to use this list to assign all training completed by board members to a certain level. For example, apprenticeship as a bank clerk (the most common training for board members participating in the current work) was assigned to level 4 (Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen, 2017; *BIBB / Berufesuche - Informationen zu Aus- und Fortbildungsberufen*, 2020). Level 5 (short-cycle tertiary education)¹²⁷ mainly includes technical qualifications (for technicians) and was anticipated to be less relevant for the purposes of the current work. Level 6 (bachelor's degree or equivalent)¹²⁸ includes the following qualifications: Bachelor of Arts (BA), Bachelor of Science (BSc), Bachelor of Engineering (BEng), Bachelor of Law (LLB), Bachelor of Fine Arts (BFA), Bachelor of Music (BMus), Bachelor of Education (BEd), Diploma (from a University of Applied Sciences), State Examination.

Level 7 (Master's degree or equivalent)¹²⁹ includes the following qualifications: Master of Arts (MA), Master of Science (MSc), Master of Engineering (MEng), Master of Law (LLM), Master of Fine Arts (MFA), Master of Music (MMus), Master of Education

¹²⁶ Source: Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen (2017, pp. 12–33).

¹²⁷ Source: Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen (2017, pp. 34–36).

¹²⁸ Source: Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen (2017, pp. 37–66).

¹²⁹ Source: Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen (2017, pp. 67–69).

(MEd), Diploma (University), Magister, State Examination, Postgraduate master's (e.g. MBA).

Level 8 (doctoral degree or equivalent)¹³⁰ includes the following qualifications: Academic doctorate (Dr), Doctor of Philosophy (PhD).

Calculating the Gross Profit Margin and specifying the data-selection criteria

The future earnings potential of a credit institution, also referred to as its *future viability*, can be expressed on the basis of its earnings situation. The profit and loss account in the annual financial statements provided the necessary data for this purpose. Using the average balance sheet total, the following relative ratios are calculated to assess the earnings situation.

The earnings power, which summarises all income, is compared with the operating costs, which in the case of (cooperative) banks mainly consist of personnel and administrative costs. Administrative or operating costs are represented by the gross margin. The gross margin and gross requirement margin are combined to produce the condensed ratio Gross Profit Margin. The difference between the gross earning margin and the gross requirement margin is expressed in the Gross Profit Margin (Hölscher *et al.*, 2016, p. 186).

The Gross Profit Margin is similar to the operating result before valuation from the internal accounting of the credit institutions. The operating result before valuation provides information for the company's executives and employees (Götze, 2010; Maurer, 2016). The operating result before valuation is a key indicator of an institution's long-term earning power (Bremke *et al.*, 2004; Maurer, 2016). The use of the operating result before valuation as an indicator of a bank's performance is common in practice and in the literature.

Apart from the fact that the operating result before valuation can only be determined by the bank's internal information (costs and revenues), it differs in some other respects from the Gross Profit Margin, which is based on expenses and income (Götze,

¹³⁰ Source: Bund-Länder-Koordinierungsstelle für den Deutschen Qualifikationsrahmen für lebenslanges Lernen (2017, pp. 70–75).

2010). Essentially, the difference is that when calculating the operating result before valuation, non-operating expenses and income are not considered as sales and costs. In principle, therefore, the operating result before valuation and the Gross Profit Margin can be considered synonymous. However, in the current work the Gross Profit Margin was used, because only external accounting data was available.

The Gross Profit Margin compares income and costs. Income includes the following: interest income from lending and money market transactions in the profit and loss account; interest income from fixed-income securities and debt register claims; and current income from shares and other variable-yield securities, including participating interests and business balances with cooperatives, shares in affiliated enterprises, income from profit pools, profit transfer or partial profit transfer agreements, commission income, net income/expense from trading portfolios and other operating income. Costs, on the other hand, include profit and loss account items comprised of interest expenses; commission expenses; personnel expenses; other administrative expenses; depreciation and value adjustments on intangible assets and property, plant and equipment; and other operating expenses (Maurer, 2016, p. 72).

After calculating the difference between costs and income, the gross profit is set in relation to the average balance sheet total of the cooperative bank. The result is expressed as a percentage value (Maurer, 2016, p. 73).

Table 44, Table 45 and Table 46 show a balance sheet and profit and loss account providing basic financial information.

Pos.	Positionen Bilanz (HGB)	Positions Balance Sheet *2	Value in T€
1.	Barreserve a) Kassenbestand b) Guthaben bei Zentralnotenbanken c) Guthaben bei Postgiroämtern	Cash & balances with central banks	1,126
2.	Schuldtitel öffentlicher Stellen und Wechsel, die zur Refinanzierung bei Zentralnotenbanken zugelassen sind a) Schatzwechsel und unverzinsliche Schatzanweisungen	Debt instruments of public authorities and bills which are eligible for refinancing at central banks	

Pos.	Positionen Bilanz (HGB)	Positions Balance Sheet *2	Value in T€
	sowie ähnliche Schuldtitel öffentlicher Stellen b) Wechsel		
3.	Forderungen an Kreditinstitute a) täglich fällig b) andere Forderungen	Net loans and advances to banks	7,763
4.	Forderungen an Kunden darunter: Durch Grundpfandrechte gesichert Kommunalkredite Alle übrigen Forderungen an Kunden	Net loans and advances to customers Mortgage loans Corporate and commercial loans Other loans	45,587
5.	Schuldverschreibungen und andere festverzinsliche Wertpapiere a) Geldmarktpapiere b) Anleihen und Schuldverschreibungen ba) von öffentlichen Emittenten bb) von anderen Emittenten c) eigene Schuldverschreibungen	Other securities	38,471
6.	Aktien und andere nicht festverzinsliche Wertpapiere	Shares and other non-fixed income securities	312
6a.	Handelsbestand	Trading portfolio	
7.	Beteiligungen und Geschäftsguthaben bei Genossenschaften	Investments in associated companies	1,573
8.	Anteile an verbundenen Unternehmen	Shares in affiliated companies	
9.	Treuhandvermögen	Assets held in trust	9
10.	Ausgleichsforderungen gegen die öffentliche Hand einschließlich Schuldverschreibungen aus deren Umtausch	Equalisation claims against public authorities including bonds and notes issued in substitution thereof	
11.	Immaterielle Anlagewerte	Other intangible assets	
12.	Sachanlagen	Fixed assets (property, plant and equipment)	914
13.	Sonstige Vermögensgegenstände	Other assets	1,841
14.	Rechnungsabgrenzungsposten	Deferred items	
16.	Aktiver Unterschiedsbetrag aus der Vermögensverrechnung	Assets arising from the overfunding of pension obligations	
	Summe der Aktiva	Total Assets	97,594

Table 44: Balance sheet and profit and loss account, providing basic financial information (part 1)

Pos.	Positionen Bilanz (HGB)	Positions Balance Sheet *2	Value in T€

Pos.	Positionen Bilanz (HGB)	Positions Balance Sheet *2	Value in T€
1.	Verbindlichkeiten gegenüber Kreditinstituten	Bank deposits	5,495
2.	Verbindlichkeiten gegenüber Kunden a) Spareinlagen b) andere Verbindlichkeiten ba) täglich fällig bb) mit vereinbarter Laufzeit oder Kündigungsfrist	Customer deposits Savings deposits Other customer deposits Demand deposits Time deposits	82,287
3.	Verbriefte Verbindlichkeiten	Securitised liabilities	
4.	Treuhandverbindlichkeiten	Trust liabilities	9
5.	Sonstige Verbindlichkeiten	Other liabilities	156
6.	Rechnungsabgrenzungsposten	Other deferred liabilities	2
6a.	Passive latente Steuern	Deferred tax liabilities	
7.	Rückstellungen a) Rückstellungen für Pensionen u. ähnliche Verpflichtungen c) Steuerrückstellungen d) andere Rückstellungen	Provisions	727
8.	[gestrichen]	-	
9.	Nachrangige Verbindlichkeiten	Subordinated liabilities	
10.	Genussrechtskapital	Participation rights capital	
11.	Fonds für allgemeine Bankrisiken	Fund for general banking risks	1,700
12.	Eigenkapital	Common equity	7,219
	Summe der Passiva	Total Liabilities and Equity	97,594

Table 45: Balance sheet and profit and loss account, providing basic financial information (part 2)

Pos.	Positionen Gewinn- und Verlustrechnung (HGB)	Positions profit and loss account *3	Value in T€
1.a)	Zinserträge aus Kredit- und Geldmarktgeschäften	Interest on loans	1,924
1.b)	Zinserträge aus festverzinslichen Wertpapieren und Schuldbuchforderungen	Interest and preferred stock dividends on securities	713
2.	Zinsaufwendungen	Total interest paid	-388
	Zinsüberschuss	Net interest income	2,250
3.	Laufende Erträge aus a) Aktien und anderen nicht festverzinslichen Wertpapieren b) Beteiligungen und Geschäftsguthaben bei Genossenschaften c) Anteilen an verbundenen Unternehmen	Dividend income: common stock	42
4.	Erträge aus Gewinngemeinschaften, Gewinnabführungs-	Income from profit pools and agreements	

Pos.	Positionen Gewinn- und Verlustrechnung (HGB)	Positions profit and loss account *3	Value in T€
	oder Teilgewinnabführungsverträgen		
5., 6.	Provisionserträge abzgl. Provisionsaufwendungen	Net fee and commission income	613
7.	Nettoertrag/-aufwand des Handelsbestands	Net trading income	
8.	Sonstige betriebliche Erträge	Other operating income	92
9.	[gestrichen]	-	
10.a)	aa) Löhne und Gehälter +ab) Soziale Abgaben und Aufwendungen für Altersversorgung und für Unterstützung =Personalaufwand	Staff expenses	-1,359
10.b) +11. +12.	andere Verwaltungsaufwendungen +Abschreibungen und Wertberichtigungen auf immaterielle Anlagewerte und Sachanlagen +Sonstige betriebliche Aufwendungen	Other administrative expenses	-746
	=Bruttogewinn aus normaler Geschäftstätigkeit	= Pre-Impairment Operating Result (Profit or loss)	892
13. -14.	Abschreibungen und Wertberichtigungen auf Forderungen und bestimmte Wertpapiere sowie Zuführungen zu Rückstellungen im Kreditgeschäft abzüglich Erträge aus Zuschreibungen zu Forderungen und bestimmten Wertpapieren sowie aus der Auflösung von Rückstellungen im Kreditgeschäft	Loan impairment charges	-136
15. -16. +17.	Abschreibungen und Wertberichtigungen auf Beteiligungen, Anteile an verbundenen Unternehmen und wie Anlagevermögen behandelte Wertpapiere abzüglich Erträge aus Zuschreibungen zu Beteiligungen, Anteilen an verbundenen Unternehmen und wie Anlagevermögen behandelten Wertpapieren zuzüglich Aufwendungen aus Verlustübernahme	Securities and other credit impairment charges	-2
19.	=Ergebnis der normalen Geschäftstätigkeit	Operating Result (Earnings Before Interest and Taxes - EBIT)	752
20.	Außerordentliche Erträge	Non-recurring income	

Pos.	Positionen Gewinn- und Verlustrechnung (HGB)	Positions profit and loss account *3	Value in T€
21.	Außerordentliche Aufwendungen	Non-recurring expense	
22. =20. – 21.	Außerordentliches Ergebnis	Extraordinary income/loss	
23. +24.	Steuern von Einkommen und vom Ertrag zuzüglich Sonstige Steuern, soweit nicht unter Posten 12 Ausgewiesen	Tax expense	-186
24a.	Einstellung in Fonds für allgemeine Bankrisiken	Allocation to fund for general banking risks	-400
25.	=Jahresüberschuss	Net income	166

Table 46: Balance sheet and profit and loss account, providing basic financial information (part 3)

Notes: Translations for Balance sheet and profit and loss account – with real values from an example*1 cooperative bank, *1) Source: <https://www.bundesanzeiger.de/ebanzwww/wexsservlet>, search term = “Raiffeisenbank Bibertal-Koetz 2015”, Please note: all values are in Teuro (T€), *2) Source: https://www.bundesbank.de/Redaktion/DE/Downloads/Service/Meldewesen/Bankenaufsicht/PDF/rkv_f1.pdf?__blob=publicationFile, *3) Source: https://www.bundesbank.de/Redaktion/DE/Downloads/Service/Meldewesen/Bankenaufsicht/PDF/rkv_f3.pdf?__blob=publicationFile, also see Appendix 1.

For better understanding and traceability, the function of the profit and loss account is explained in general terms below. This is followed by a detailed discussion of the individual profit and loss items required to calculate the Gross Profit Margin.

The function of the profit and loss account

The profit and loss account includes expenses and income for the current financial year (Becker and Peppmeier, 2011). It marks a set period in which the commercial profit or loss of a bank is determined. The annual financial statements have an information function, within which the prohibition on netting according to article 2 § 246 paragraph 1 of the Commercial Code is applied. If the different positions are netted, the financial statements cannot provide information on the individual sources of income and expenditure. By revealing the income sources, the positions can explain the origin of the result (Becker and Peppmeier, 2011).

Interest income (items 1a and 1b)

Interest income is the first item reported in the profit and loss account, as shown in Form 3 issued by the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin). Interest is defined as the consideration or price for the provision of capital over time. Commission, on the other hand, is the consideration or the price for the provision of services (Bieg, 2010).

The interest income is divided into two sub-items, (a) and (b):

1. Interest income

a) Credit and money market transactions

b) Fixed-income securities and debenture loans

Interest expenses (item 2)

The second item on Form 3 of the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin) is interest expenses. Interest expenses and similar expenses from banking business are listed here.

Current income (item 3)

Current income, the third item on the profit and loss account, includes income from equities, other non-fixed income securities, investments and shares in affiliated companies (Schierenbeck, 2003).

Commission income (item 5)

Commission income is also reported in the profit and loss account. In accordance with the Invoice Credit Regulation (RechKredV), this item includes commissions and similar income from service transactions. However, only income derived from services related to banking or, more broadly, banking business must be reported. Any income from services not related to the banking business is reported in item 8 as other operating income (Scharpf and Schaber, 2018).

Service transactions include the following: first, payments and account management: provision of coins; deposits from non-banks in favour of third parties; fees in cash (night safe deposits, money transfers, withdrawals from ATMs by customers of other

credit institutions); sales commissions; account maintenance fees; etc. (Bieg, 2010); second, fees from foreign payment transactions; third, provisions in the securities issue business; buying and selling commissions in the securities business; fourth, deposit business; fifth, buying and selling commissions from foreign exchange, variety metals business; sixth, assigning home savings and insurance contracts; credit brokerage; seventh, guarantee business

Commission expenses (item 6)

In the profit and loss account, the commission expenses are covered in item 6. According to the Invoice Credit Regulation (RechKredV), commissions and similar expenses for service transactions must be listed in this section (paragraph 30 RechKredV).

Net income from / expenses of the trading portfolio (item 7)

In item 7 of the profit and loss account, the expenses and income from transactions in securities of the trading portfolio, foreign exchange and precious metals, in addition to financial instruments, are recorded in a balanced form (Schierenbeck, 2003). According to the law (§ 340 paragraph 1 sentence 1 Commercial Code), this position must be netted, which is in contrast to the interest and commission business. Here, expenses and income must be reported separately. This approach is also referred to as a breakthrough of the general netting ban according to the Commercial Code (Botsis *et al.*, 2012).

Personnel expenses (item 10a)

Personnel expenses are reported under item 10a of the profit and loss account. These expenses include all cash and in-kind benefits for employees, commercial employees and members of the executive board (Bieg, 2010).

Administrative expenses (item 10b)

Administrative expenses are shown in item 10b of the profit and loss account. This item covers all of the material expenses of the bank. Aside from other office operating expenses, administrative expenses include the following: communication expenses; space expenses; operating expenses for motor vehicles; expenses for advertising and representation; expenses for association fees; deposit insurance and investor

compensation expenses; expenses for legal advice, other consultancy and auditing services; and compensation for members of the supervisory board (Bieg, 2010).

Depreciation and value adjustments on intangible and tangible assets (item 11)

Item 11 of the profit and loss account includes all depreciations of assets shown on the balance sheet. These include self-created or purchased industrial property rights and licences (intangible assets); for example, computer software developed in-house (Bieg, 2010).

Other operating expenses (item 12)

Item 12 of the profit and loss account includes all expenses from ordinary business activities that are not allocated to other items in the profit and loss account or that cannot be offset against income (Bieg, 2010).

Process for calculating the Gross Profit Margin

In summary, and on the basis of the individual items of the profit and loss account described above, the following process can be used to calculate the Gross Profit Margin:

Income

1a) Interest income from lending and money market transactions

1b) Interest income from fixed-interest securities and debenture book receivables

3) Current income

4) Income from profit pools and profit transfer agreements

5) Commission income

7) Net income from / expenses of the trading portfolio

8) Other operating income

—

Expenses

2) Interest expenses

6) Commission expenses

10a) Personnel expenses

10b) Other administrative expenses (material expenses)

11) Depreciation and value adjustments on intangible and tangible assets

12) Other operating expenses

= *Gross Profit*

By offsetting the total income against the operating expenses, one obtains the Gross Profit, which is used as a measure of performance in the current work. The Gross Profit Margin is obtained by placing it in relation to the average balance sheet total.

Gross Profit Margin

$$= \frac{\text{(Gross profit from ordinary business activity)}}{\text{(Average balance sheet total)}}$$

The Gross Profit Margin is also referred to as the Partial Operating Profit or the Profit Margin (Botsis et al., 2012).

Average balance sheet total

The Deutsche Bundesbank recommends using the average balance sheet total when determining certain key figures from the profit and loss account. This is to ensure that comparisons made between the banks are more accurate (Richter, 2014; Christians, 2010; Riekeberg, 2003b). The reason given for using the average balance sheet total is that the balance sheet total of a bank usually increases slightly from the balance sheet date of the previous year to the balance sheet date of the reporting year. However, given that expenses and income are incurred throughout the year, it would not be appropriate to use the balance sheet total of the year under review as a benchmark. Here, the actual average balance sheet total of the period would be considered too high. If the balance sheet total as of the reference date for the previous year was

used, the balance sheet total would systematically be set too low. Therefore, the average balance sheet total is used. This is calculated from the arithmetic mean of all the working-day values of the balance sheet total for a single year.

The average balance sheet total described above is not usually published, so a sustainable value for the average balance sheet total must still be determined. To do so, the following calculation is applied:

$$\text{Average Balance Sheet Total } i = \text{Balance Sheet } i - 1 + \text{Balance Sheet } i / 2$$

Accordingly, the average balance sheet total is calculated as the arithmetic mean of the balance sheet total of the reporting year $i - 1$ and the balance sheet total of the reporting year $i / 2$ (Riekeberg, 2003a). The calculation from the average of two balance sheet dates is also recommended by Schierenbeck (2003).

Excel formulas for calculating the gross profit and average balance sheet total

Calculating the gross profit

The gross profit was calculated by using the following formula in the Excel spreadsheet:

$$\text{Gross profit} = (\text{GX} + \text{GZ} + \text{HA} + \text{HY} + \text{IA} + \text{HX} + \text{HC} + \text{IN} + \text{IP} + \text{ID}) - (\text{HG} + \text{HH} + \text{HN} + \text{HR} + \text{HS} + \text{IE})$$

Calculating the average balance sheet total

The Gross Profit Margin represents a percentage value. In order for this value to be calculated correctly, the average balance sheet total must first be determined.

For the actual sample selection, the years 2009–2018 (10 years) and 2014–2018 (5 years) were generally sufficient. However, the 5-year and 10-year sample selections were added along with the balance sheet total for the previous year (if available) for the calculation of the balance sheet total. These additional years (2009 and 2013) serve only to determine the average balance sheet total more precisely. When data for exactly 5 years or exactly 10 years was available, the balance sheet total of the first available year was used twice.

Therefore, the average balance sheet totals were calculated by using the following Excel formulas.

Average balance sheet total for the 10-year sample:

Year 2009 = (Balance sheet total 2008 + Balance sheet total 2009) / 2 >> if 2008 is available*

Year 2010 = (Balance sheet total 2009 + Balance sheet total 2010) / 2

Year 2011 = (Balance sheet total 2010 + Balance sheet total 2011) / 2

Year 2012 = (Balance sheet total 2011 + Balance sheet total 2012) / 2

Year 2013 = (Balance sheet total 2012 + Balance sheet total 2013) / 2

Year 2014 = (Balance sheet total 2013 + Balance sheet total 2014) / 2

Year 2015 = (Balance sheet total 2014 + Balance sheet total 2015) / 2

Year 2016 = (Balance sheet total 2015 + Balance sheet total 2016) / 2

Year 2017 = (Balance sheet total 2016 + Balance sheet total 2017) / 2

Year 2018 = (Balance sheet total 2017 + Balance sheet total 2018) / 2

*if 2008 is not available:

Year 2009 = (Balance sheet total 2009 + Balance sheet total 2009) / 2

...

Year 2018 = (Balance sheet total 2017 + Balance sheet total 2018) / 2

The average balance sheet total (5-year sample) was calculated using the following Excel formula.

Average balance sheet total for the 5-year sample:

Year 2014 = (Balance sheet total 2013 + Balance sheet total 2014) / 2 >> if 2013 is available*

Year 2015 = (Balance sheet total 2014 + Balance sheet total 2015) / 2

Year 2016 = (Balance sheet total 2015 + Balance sheet total 2016) / 2

Year 2017 = (Balance sheet total 2016 + Balance sheet total 2017) / 2

Year 2018 = (Balance sheet total 2017 + Balance sheet total 2018) / 2

*if 2013 is not available:

Year 2014 = (Balance sheet total 2014 + Balance sheet total 2014) / 2

...

Year 2018 = (Balance sheet total 2017 + Balance sheet total 2018) / 2

Checking data consistency

In order to check the consistency of the data (the conformity of the BISNODE data with the Federal Gazette data), samples from the BISNODE database were compared with data from the Federal Gazette. Two methods of comparison were used: (1) a complete evaluation over 10 balance sheet years for 5 randomly selected banks (Raiffeisenbank Mutlangen, Raiffeisenbank Pfaffenwinkel, Raiffeisenbank Sinzing, Sparda-Bank Nürnberg, Vereinigte Raiffeisenbank Burgstädt); (2) 10 randomly selected individual balance sheet years¹³¹ (Raiffeisenbank Hofkirchen-Bayerbach 2013, Volksbank im Ostmünsterland 2018, Raiffeisenbank Ried 2008, Raiffeisenbank Vordersteinenberg 2014, Volksbank Feldatal 2008, Volksbank Haltern 2011, Volksbank Hameln-Stadthagen 2010, Volksbank Immenstadt 2017, Volksbank Lastrup 2009, Volksbank Remseck 2012). *Table 47 – Selected samples for checking the consistency of data between the BISNODE database and the Federal Gazette* shows the evaluation of the samples.

Cooperative bank	Year	GPM BISNODE in %	GPM Federal Gazette in %	Deviation in Euro	Cause
Raiffeisenbank Mutlangen	2008	0.64	0.64	0	
Raiffeisenbank Mutlangen	2009	0.64	0.64	0	
Raiffeisenbank Mutlangen	2010	1.24	1.24	0	
Raiffeisenbank Mutlangen	2011	0.96	0.96	0	

¹³¹ The consistency of the data was compared for individual items in the balance sheet and profit and loss account taken from the BISNODE data source and the Federal Gazette data source.

Cooperative bank	Year	GPM BISNODE in %	GPM Federal Gazette in %	Deviation in Euro	Cause
Raiffeisenbank Mutlangen	2012	0.93	0.93	0	
Raiffeisenbank Mutlangen	2013	0.91	0.92	59,225	
Raiffeisenbank Mutlangen	2014	0.73	0.73	0	
Raiffeisenbank Mutlangen	2015	1.00	1.00	0	
Raiffeisenbank Mutlangen*	2016	0.73	0.80	224,510	Item 'Income from the release of provisions' is missing (Excel sheet column 'IB')
Raiffeisenbank Mutlangen*	2017	1.05	1.07	80,595	Item 'Income from the release of provisions' is missing (Excel sheet column 'IB')
Raiffeisenbank Mutlangen	2018	1.13	1.13	0	
Raiffeisenbank Pfaffenwinkel	2008	0.94	0.94	0	
Raiffeisenbank Pfaffenwinkel	2009	1.32	1.32	0	
Raiffeisenbank Pfaffenwinkel	2010	1.70	1.70	0	

Cooperative bank	Year	GPM BISNODE in %	GPM Federal Gazette in %	Deviation in Euro	Cause
Raiffeisenbank Pfaffenwinkel	2011	1.60	1.60	0	
Raiffeisenbank Pfaffenwinkel	2012	1.55	1.55	0	
Raiffeisenbank Pfaffenwinkel	2013	1.51	1.51	0	
Raiffeisenbank Pfaffenwinkel	2014	1.05	1.05	0	
Raiffeisenbank Pfaffenwinkel*	2015	1.45	1.42	163,791	Item 'Income from the release of provisions' is missing (Excel sheet column 'IB')
Raiffeisenbank Pfaffenwinkel	2016	1.27	1.27	0	
Raiffeisenbank Pfaffenwinkel	2017	1.33	1.33	0	
Raiffeisenbank Pfaffenwinkel	2018	1.21	1.21	0	
Raiffeisenbank Sinzing	2008	0.72	0.72	0	
Raiffeisenbank Sinzing	2009	0.69	0.69	0	
Raiffeisenbank Sinzing	2010	0.70	0.70	0	
Raiffeisenbank Sinzing	2011	0.74	0.74	0	

Cooperative bank	Year	GPM BISNODE in %	GPM Federal Gazette in %	Deviation in Euro	Cause
Raiffeisenbank Sinzing	2012	0.54	0.54	0	
Raiffeisenbank Sinzing*	2013	0.89	0.71	131,621	Item 'Income from the release of provisions' is missing (Excel sheet column 'IB')
Raiffeisenbank Sinzing	2014	0.70	0.70	0	
Raiffeisenbank Sinzing	2015	0.71	0.71	0	
Raiffeisenbank Sinzing	2016	0.88	0.88	0	
Raiffeisenbank Sinzing	2017	0.95	0.95	0	
Raiffeisenbank Sinzing	2018	0.76	0.76	0	
Sparda-Bank Nürnberg	2008	0.45	0.45	0	
Sparda-Bank Nürnberg	2009	0.47	0.47	0	
Sparda-Bank Nürnberg	2010	0.60	0.60	0	
Sparda-Bank Nürnberg	2011	0.86	0.86	0	
Sparda-Bank Nürnberg	2012	0.80	0.80	0	

Cooperative bank	Year	GPM BISNODE in %	GPM Federal Gazette in %	Deviation in Euro	Cause
Sparda-Bank Nürnberg	2013	1.23	1.23	0	
Sparda-Bank Nürnberg	2014	1.08	1.08	0	
Sparda-Bank Nürnberg	2015	0.88	0.88	0	
Sparda-Bank Nürnberg	2016	0.81	0.81	0	
Sparda-Bank Nürnberg	2017	0.67	0.67	0	
Sparda-Bank Nürnberg	2018	0.33	0.33	0	
Vereinigte Raiffeisenbank Burgstädt	2008	0.74	0.74	0	
Vereinigte Raiffeisenbank Burgstädt	2009	0.61	0.61	0	
Vereinigte Raiffeisenbank Burgstädt	2010	0.67	0.67	0	
Vereinigte Raiffeisenbank Burgstädt	2011	0.55	0.55	0	
Vereinigte Raiffeisenbank Burgstädt	2012	0.72	0.72	0	

Cooperative bank	Year	GPM BISNODE in %	GPM Federal Gazette in %	Deviation in Euro	Cause
Vereinigte Raiffeisenbank Burgstädt	2013	0.78	0.78	0	
Vereinigte Raiffeisenbank Burgstädt	2014	0.63	0.63	0	
Vereinigte Raiffeisenbank Burgstädt	2015	0.61	0.61	0	
Vereinigte Raiffeisenbank Burgstädt	2016	0.69	0.69	0	
Vereinigte Raiffeisenbank Burgstädt	2017	0.64	0.64	0	
Vereinigte Raiffeisenbank Burgstädt	2018	0.54	0.54	0	
Raiffeisenbank Hofkirchen-Bayerbach	2013	0.93	0.93	0	
Volksbank im Ostmünsterland	2018	0.77	0.77	0	
Raiffeisenbank Ried	2008	1.09	1.09	0	
Raiffeisenbank Vordersteinenberg	2014	0.64	0.64	0	

Cooperative bank	Year	GPM BISNODE in %	GPM Federal Gazette in %	Deviation in Euro	Cause
Volksbank Feldatal*	2008	-1.13	-1.20	22,862	Item 'Income from the release of provisions' is missing (Excel sheet column 'IB') In addition, a net loss was actually recorded
Vollksbank Haltern	2011	1.40	1.40	0	
Volksbank Hammeln-Stadt-hagen	2010	1.31	1.31	0	
Volksbank Immenstadt*	2017	1.03	1.23	150,498	Item 'Income from the release of provisions' is missing (Excel sheet column 'IB')
Volksbank Lastrup	2009	1.39	1.39	0	
Volksbank Remseck	2012	0.61	0.61	0	

Table 47: Selected samples for checking the consistency of data between the BISNODE database and the Federal Gazette

Sources: BISNODE, Federal Gazette

On the basis of the banks marked with an asterisk (*), it can be seen that under item 8, “Other operating income” (positioned in the ID column of the Excel worksheet), individual banks *additionally* include the item “Income from the reversal of provisions”. There is no corresponding item for this in the profit and loss account published in the Federal Gazette; rather, it is an *internal* accounting item. The Federal Gazette includes the amount in item 8, “Other operating income”; in the BISNODE database, however, it is presented in column IB as “Income from the reversal of provisions”.

Necessary corrections and amendments due to the consistency check

To ensure that the Federal Gazette data is synchronised with the BISNODE data, column IB must be included in the formula for calculating Gross Profit. It has no effect on banks that do not use this position, as the position is usually shown as “0”.

The adjusted Excel formula for calculating the Gross Profit is therefore:

$$\text{Gross Profit} = (\text{GX} + \text{GZ} + \text{HA} + \text{HY} + \text{IA} + \text{HX} + \text{HC} + \text{IN} + \text{IP} + \text{ID} + \text{IB}) - (\text{HG} + \text{HH} + \text{HN} + \text{HR} + \text{HS} + \text{IE})$$

Accuracy of the results

To increase accuracy, the Gross Profit Margin was calculated and displayed to eight digits following the decimal point.

Calculating the Gross Profit Margin for each individual bank year

The next step was to calculate the Gross Profit Margin for each bank for each individual year, using the following Excel formula:

$$\begin{aligned} \text{Gross Profit Margin} \\ &= (\text{Gross profit from ordinary business activity}) \\ &\quad / (\text{Average balance sheet total}) \end{aligned}$$

In the final analysis, an average value was calculated for each bank over either 10 years or 5 years. The average values were then incorporated into the evaluation.

The next section considers the additional insights that could be gained from the open-ended question in the survey. The survey contained closed questions to gather information about particular manager qualities, as discussed in previous sections of this chapter. It also contained an open question, and the following section explains how the answers to this question were processed.

Qualitative content analysis

Since quantitative data alone is not sufficient for the purposes of this thesis, qualitative data was also collected. Qualitative content analysis was used to evaluate the feedback in the final question in the survey, which was an open question: “Is there anything else that you would like to add in terms of qualities and characteristics that you think are likely to impact the success of a cooperative bank?”. According to (Mayring and Brunner, 2009), qualitative content analysis can be used to establish a link to quantitative analysis, which is the main instrument used in the current work. The development and application of categories is often qualitatively oriented, but a further analysis regarding frequency, differences and correlations is carried out quantitatively.

Mayring and Brunner (2009, p. 673) define qualitative content analysis as follows: “It represents a method of evaluating fixed communication (e.g. texts), proceeds systematically, is rule- and theory-based by means of a set of categories, and measures itself against quality criteria. The qualitative element consists in the development of categories and the content-analytical systematisation of assigning categories to text components – steps that are usually ignored in quantitative content analysis”.

A distinction is usually made between material found in the literature and material produced by the current work. The answer to the open question in the survey is classed as material produced by the current work. According to Hüttner and Schwarting (1999) and Harwood and Garry (2003), qualitative content analysis is the appropriate means of evaluating open answers in questionnaires. The techniques of qualitative text content analysis are summarising (reducing), explaining (explicating) and structuring.

According to Mayring and Brunner (2009), quality criteria are essential in qualitative content analysis. These include objectivity, reliability and validity. For objectivity, it is

necessary that at least two evaluators check their codes for conformity. For the sake of reliability, texts should be examined several times and the results should be compared. For validity, it is necessary to develop a theory-based category system.

Doppler and Steffen (2019) suggest that data quality should first be improved by processing the data to make the information more usable. In concrete terms, the following approach, which could easily be transferred to the current work, is recommended: copy the raw data, sort the data (e.g. by survey date), summarise all the data in a table, assign the data to the respective bank, and conduct qualitative content analysis according to Mayring (2010). The first step here is creating paraphrases from the data. This starts by identifying passages of text which contain useful information and deleting those which do not. The individual paraphrases are transformed into terms that generalise the content; this is called coding. To create codes, questions should be asked of the text; for example, “What is addressed here?”, “What is relevant to the research question?”, etc. (Strübing *et al.*, 2018). After this, paraphrases that duplicate others or that are not relevant are identified and deleted. The remaining paraphrases and associated codes are bundled together in a tabular evaluation and summarised into new, higher-level paraphrases that reflect the main content of all responses. This records the central statements. The last step is to indicate the absolute and relative frequency of entries (Doppler and Steffen, 2019).

On the basis of the explanations set out above, the qualitative evaluation of the answers from the open question was conducted as follows.

Table 48 – Original replies from the questionnaire below shows the original responses to the survey question. Most of the answers contain only keywords, not full sentences or explanations. The statements were initially numbered and assigned to the respective banks. Furthermore, the original answers were retained in German before further processing.

No.	Replies
1	Ergänzend das GBF in Montabaur absolviert
2	Persönliche Eigenschaften, wie z.B. charakterfestigkeit, Ausdauer, Konfliktfähigkeit, Überzeugungsstärke, Bodenständigkeit
3	- unternehmerisches Denken - gelerntes anwenden können - flexibel, auf sich ändernde Märkte einstellen (auch bevor es dazu Lehrbücher gibt) - die Mitarbeiter in eine dauerhafte Veränderung mitnehmen
4	Führung mit Herz und Verstand. Vorbildfunktion.

No.	Replies
5	Bodenständig und zielstrebig sollte die Person sein.
6	Leidenschaft und unbedingt im Team arbeiten
7	* privater regionaler Bezug zum Geschäftsgebiet * ein sich daraus ergebendes Netzwerk in alle Richtungen * Identifikation mit dem eigenen Hause/ dem Geschäftsgebiet * Kontakte zu möglichen Neukunden und entsprechende Akquise
8	hohe Sozialkompetenz, Empathie und Veränderungsbereitschaft
9	Unternehmerisches Denken visioär und strategisch offen für Neues hohe Werteorientierung Förderung der Gesellschaft
10	Führungs- und Krediterfahrung, Umfangreiche Kenntnisse über die grundsätzliche Organisation einer Genossenschaftsbank.
11	- Erfahrung in der Sanierung von Banken - Offenheit für neue Wege und Bereitschaft, diese in der Bank auch ggfs. umzusetzen
12	Mitgliedschaft als Alleinstellungsmerkmal treiben
13	Soziale Balance Begeisterung
14	Bodenständigkeit !
15	Abschluss des Top Managementseminars bei der ADG Wechsel in Ressortverantwortungen Mitwirkung in bestimmten Gremien, bspw. Aufsichtsräten der FinanzGruppe Aktualität der Weiterbildung persönliche Fortentwicklung, bspw. in der Größe der Banken
16	Das Thema Digitalisierung im Allgemeinen und die Themen rund um smart data fehlt teilweise in der Ausbildung der Vorstände. Insbesondere bei den langjährigen Kollegen.
17	Harmonie im Vorstandsteam
18	Interdisziplinäre Kenntnisse und Branchenfremdes Wissen Kenntnisse Psychologie oder Didaktik
19	Ich habe zusätzl. Qualifikationen im Prüfungs- und Beratungswesen erlangt und danach wieder in das Bank und Warengeschäft zurückgekehrt (Steuerberater und Wirtschaftsprüfer)
20	Ein guter Umgang mit Menschen und eine sehr hohe Veränderungsbereitschaft sind wichtige Faktoren.
21	Zukunftsorientiert Zielstrebig Emphatisch Authentisch
22	Regionale Bodenständigkeit und Verwurzelung in der Region. Ein Zugehörigkeitsgefühl zur allgemeinen Bevölkerung wird ein Eckpfeiler des Erfolges des Gesamtinstitutes sein.
23	Ein ausgewogener Mix aus Theorie und Praxis ist sicherlich für eine Vorstandstätigkeit wichtig!
24	Erfahrung im Prüfungswesen von Finanzdienstleistern
25	Glaubwürdigkeit Entscheidungsfreude Blick in die Zukunft mit Sicht für Chancen/Risiken und Augenmaß zur möglichen auch negativen Wirkung bei wegweisenden Veränderungen
26	Wirtschaftliche Umfeld der Region
27	Neben der fachlichen Qualifikation ist es meiner Meinung nach nach erforderlich, authentisch und „gerade“ zu sein. Man steht im Fokus der Mitarbeiter und der Kunden und das eigene Verhalten ist relativ transparent, im Betrieb und auch sonst.
28	Grundsätzlich sehe ich ein berufsbegleitendes Studium für sehr vorteilhaft!! Praxiserfahrung!!!!
29	Der Wirkungsbereich von Bankvorständen in Genossenschaftsbanken ist maßgeblich von der Größe der Häuser abhängig. Insbesondere in den kleine-

No.	Replies
	ren Häusern sind Vorstände in der Regel noch regelmäßig im Kundengeschäft tätig. Dies ist insbesondere aufgrund der vielfältigen betrieblichen Aufgaben eine zusätzliche nicht zuletzt zeitliche Belastung.
30	Anmerkung: In unserem Haus gibt es keinen Vorstandsvorsitzenden bzw. Vorstandssprecher.
31	Man muss krisenfest sein!
32	Empathie
33	Regionale Markt- und Kundenkenntnis, neben der erforderlichen fachlichen Qualifikation eine hohe Sozialkompetenz als tragende Säule der Führungskompetenz.
34	Nur Geschäfte tätigen dessen Risiko sie abschätzen können. Kritisch gegenüber DZ-Bank und ihre Empfehlungen.
35	Strategisches und unternehmerisches Denken sollte vor regulatorischem und Fachwissen kommen!
36	Genossenschaftliches Selbstverständnis strategisches Denken Hohe Sozialkompetenz
37	Kontinuierliche operative Erfahrung, Mitmachen im täglichen Geschäft, eigene Kundenbetreuung und ständiges Lernen sind Erfolgsfaktoren auch in größeren Banken.
38	Strukturiertes und vernetztes Denken
39	Kundennähe
40	Werte
41	Die Berufserfahrung außerhalb der Bank besteht ausschließlich in der Tätigkeit beim genossenschaftlichen Prüfungsverband als Prüfer/WP.
42	Die Führung und Motivation von Mitarbeitern ist bedeutend für den Erfolg.
43	Bodenständigkeit, Identität mit der Region, christliche Werte im Umgang mit Mitarbeitern und Kunden (Verlässlichkeit, Ehrlichkeit, Offenheit)
44	Wichtig ist eine grosse Offenheit für Themen abseits des originären Bankgeschäftes sowie der Blick über den Tellerrand hinaus. Ohne Empathie hilft Fachwissen nichts.
45	Der Vorstandsweg ist oft der Weg des Fachvorgesetzten. Für die Zukunft halte ich (auch aufgrund der immer größeren Einheiten) die Führungs- und Managementkompetenz für entscheidender.
46	Es gibt neben der fachlichen Eignung und Ausbildung m.E. viele weitere Eigenschaften/Qualitäten die es Bedarf. Aufgrund der genossenschaftlichen Vielfältigkeit sind diese recht unterschiedlich gelagert Hinweis Neben dem dipl. Bankbetriebswirt ADG haben viele Kollegen die Bankleiterqualifikation auch bereits im Selbststudium bspw. bei der Frankfurt School, BankColleg etc. erworben. Ich persönlich bin hier über die entweder oder Auswahl gestolpert.
47	Ein gute Vernetzung in der Region
48	Die notwendigen Skills haben sich sehr verändert. Es geht nicht mehr allein um Wissen und Können sondern um transformationale Sinnvermittlung, kulturelles Verstehen von Kunden und Mitarbeiter/innen im 21. Jahrh., aktive unternehmerische Zukunftsgestaltung, die eigene Entwicklungs- und Veränderungsbereitschaft und die Schaffung eines Umfeldes (auch bei den Gremien), damit die Bank auch disruptive Veränderungen eingehen kann.
49	knapp 18-jährige Erfahrung in der externen Revision von Kreditgenossenschaften (Ablegung des Verbandsprüferexamens sowie der Berufsexamina zum Steuerberater und Wirtschaftsprüfer mit anschließender leitender Funktion beim Genossenschaftsverband)
50	Bodenhaftung behalten

No.	Replies
51	Ehrlichkeit, Transparenz und Verlässlichkeit ggü. Mitarbeitern und Kunden
52	Eine Hospitation in einem großen Institut wäre zur Vorbereitung einer Vorstandstätigkeit sehr sinnvoll. Ich persönlich hätte so eine Möglichkeit gern wahrgenommen!
53	Ich vermisste die Frage, ob der Vorstand vor seiner Berufung in den Vorstand bereits in der betreffenden Bank tätig war und wenn ja, wie lange. Der Austausch von Erfahrungen aus der Tätigkeit in anderen Banken könnte ebenfalls Einfluss auf den Erfolg einer Genobank haben.
54	Genossenschaftliche Identität Know How aus überregionalen Netzwerken und regionalen Netzwerken
55	Regionalität, Netzwerk, Umsetzbarkeit von Beschlüssen, Verandelung mit der Region, Verwuzelung
56	Regelmäßige Fortbildungen und Austausch mit Berufskollegen.
57	Praxistauglichkeit Teamfähigkeit, d.h. Führen nach und mit Argumenten
58	Bitte beachten Sie, dass sich durch Erfahrung angestoßene Maßnahmen häufig erst in 3-5 Jahren im Erfolg der Bank widerspiegelt. Und der Erfolg bemisst sich - gerade bei Genobanken - nicht nur nach dem Betriebsergebnis, sondern nach den Marktanteilen und Zufriedenheit der Mitglieder und Kunden. Daher bin ich bzgl. der Ergebnisse etwas skeptisch. Ich wünsche Ihnen dennoch viel Erfolg bei der Auswertung! :-)
59	In meinem Fall liegen 20 Berufsjahre als Verbandsprüfer, 13 Jahre als Wirtschaftsprüfer vor. Die Verbandsprüferausbildung hat auch den Grundstein zur Vorstandszulassung gelegt und fand an der ADG statt.
60	permanenter konsequenter Wille zum Erfolg
61	Im 21. Jahrhundert bedarf es nicht mehr den Allrounder-Vorstand der sich in allen Bereichen fachlich genau so auskennt, wie der Abteilungsleiter. Es bedarf eines Vorstands der klare Richtung vorgibt und hierfür die Mitarbeiter transparent mitnimmt (hohe Kommunikationsgüte). Außerdem hat er in der zweiten Führungsebene ebenfalls die passenden MA zu finden und diese voll mit Entscheidungsprozessen einzubinden.
62	Nach meiner Ausbildung zum Bankkaufmann und einigen Jahren Berufserfahrung war ich über 10 Jahre beim Genossenschaftsverband Frankfurt als Prüfer tätig. Die Erfahrungen aus dieser Tätigkeit haben mich als Bankvorstand immer positiv begleitet.
63	Bodenständigkeit und eine enge Verbindung zum Geschäftsgebiet.
64	Die Erlangung der Vorstandsqualifikation nach §44 KWG erfolgte bei mir über die ADG in Montabaur, Abschluss: diplomierter Bankbetriebswirt, Zulassungsvoraussetzung zum GBF: Ausbildung zum Bankbetriebswirt (auf regionaler Ebene), Aussage: Die Qualifikation nach §44 KWG setzt über die ADG kein Abitur oder Studium voraus. Das habe ich nicht und ich finde, dass dies so bleiben sollte. Vorstände - gerade von Genossenschaftsbanken sollten ein Bezug zur Basis haben. Sie sollten wissen, wo wir als Genossenschaften her kommen. Da ist dannein Abitur oder/und ein Hochschulstudium nicht zwingen erforderlich, mitunter auch hinderlich. Fachkenntnisse kann man auch über die Schiene Ausbildung-Fachwirt(IHK)-Betriebswirt(IHK)-genossenschaftlicher Betriebswirt- und dann diplomierter Bankbetriebswirt erlangen.
65	Ausbildung über den Tellerrand hinaus, würde sehr vielen Kollegen gut tun. Andere Branchenpraktika wären empfehlenswert um das Verständnis für die Kunden zu entwickeln.
66	Einblick in viele anderen Banken um über den Tellerrand zu schauen, da helfen 15 Jahre Tätigkeit als Prüferin in einem Prüfungsverband!
67	Veränderungsbereitschaft Strategisches Denken
68	change-Manager

No.	Replies
69	Konsequente vertriebliche Ausrichtung, Mut zur Kompetenzübertragung und Bodenhaftung!
70	grundsätzlich folgt beruflicher Erfolg aus der kindlichen Sozialisierung. Mit anderen Worten, ein bodenständiges und mit Werten geprägtes Elternhaus, eine Portion Durchsetzungsvermögen und Ehrgeiz sind die Grundvoraussetzungen für eine erfolgreiche berufliche Laufbahn. Der Erfolg von Genossenschaftsbank ist stark geprägt durch lokales Engagement und Loyalität zur Region.
71	Ich war über 17 Jahre Mitarbeiter des Genossenschaftsverbandes Frankfurt. Zuletzt als WP StB in der Funktion eines Abteilungsleiters.
72	Neben der fachlichen Qualifikation spielt auch die Soziale Kompetenz eine große Rolle.
73	Unterschiedliche Schwerpunktkenntnisse der einzelnen Vorstandskollegen ist förderlich.
74	Bankvorstände sollten Erfahrung mit dem Umgang mit Menschen haben. Die Aussage Man muß Menschen mögen spielt auch hier eine große Rolle. Wie sollen Menschen einem Vorstand folgen, wenn sie diesem keine Empathie entgegen bringen.
75	Auch für Vorstände gilt der Satz Man muß Menschen mögen. Nur dann kann man Vorbild sein und Mitarbeiter begeistern
76	Kenntnisse und Akzeptanz der genossenschaftlichen Grundwerte
77	Strategisches Denken und konsequentes Handeln Empathie, die Menschen zu verstehen und insbesondere Mitarbeiter zu Mitunternehmern zu entwickeln
78	IT-Kompetenz, Führung und Umgang mit MitarbeiterInnen
79	Sehr wichtig ist der Umgang mit den Mitarbeitern und die Fähigkeit diese zu motivieren, da die Leistung der Mitarbeiter für den Geschäftserfolg sehr entscheidend ist.
80	Identifikation mit der Bank. Stetige Weiterentwicklung. Einsatz & Engagement.
81	Kundenorientierung, Verständnis für die Region!
82	Die strategische Ausrichtung des Hauses und die persönliche Einstellung dazu ist wichtig. Wachstum ist nicht alles - die Risikoeinschätzung ist sehr wichtig - langfristige Trends muss man selbst erkennen und einschätzen.
83	Praktische Berufserfahrung in allen Bankbereichen / Regionaler Bezug zur Bank / Familiäre Situation und privates Umfeld / Lebenserfahrung
84	Regionalität, Bodenhaftung,
85	Der Sinn dieser Umfrage erschließt sich für mich nicht. Aus diesen 'statischen' persönlichen Daten kann man m.E. nach in keiner Weise ableiten, ob ich als Vorstand mit anderem Alter, Geschlecht, Ausbildung etc. diese Aufgabe in Bezug auf das Betriebsergebnis vor Risiko besser oder schlechter lösen würde/könnte und inwiefern dies überhaupt von persönlichen Eigenschaften und nicht vielmehr von externen Faktoren (Krisen, Niedrigzinsen, etc) abhängt.....
86	Kreativität, Offenheit für Neues, Mut neue Wege zu gehen
87	Erfolg hängt neben der Praxiserfahrung von einem gut funktionierendem Vorstandsteam ab.
88	Ein neutraler Fragebogen wäre nicht schlecht. Gute Personalführung, Bank muss immer auf dem aktuellen Stand sein (Weiterbildung/Digitalisierung), gutes Netzwerk, Ziel und Ergebnisorientiert, Durchsetzungsvermögen persönlich zuverlässiger Verhandlungspartner. Derzeit werden unkonventionelle Lösungen zur Vereinbarung von Familie und Beruf erwartet insbesondere in Zeiten von Corona
89	Nicht nur als Banker denken, sondern als Kaufmann

No.	Replies
90	Unternehmerische Denken und Handeln scheint mir mindestens genauso wichtig die die fachliche Qualifikation bzw. Ein Studienabschluss. Genauso wichtig sind konsequentes Handeln sowie eine hohe Einbindung von Mitarbeitern und Führungskräften in die Weiterentwicklung der Bank
91	Die Mischung einer klassischen Bankausbildung und in der Fortfolge die Aufstiegsfortbildung verbindet die Sichtweisen von Praktikern und Führungskräften sinnvoll. Darüber hinaus können in der genossenschaftlichen Aufstiegsfortbildung die für unsere Organisation wesentlichen genossenschaftlichen Werte vermittelt werden. Zukünftig werden verschmelzungsbedingt größere Häuser die geforderten Skills von Vorständen auf die 2. Ebene verlagert werden müssen. Gleichzeitig ist der zukünftige Auf- und Ausbau von strategischen Skills bei Vorständen wesentlich für den Erfolg und die Zukunftsfähigkeit der einzelnen GENO-Banken.
92	Um als Vorstand einer eG erfolgreich zu sein muss man von ganzem Herzen an die Ziele und die genossenschaftlichen Werte glauben und sie intern und extern kreativ umsetzen und in der täglichen Arbeit mit Überzeugung leben. Eine ordentliche Portion Humor dazu und die Fähigkeit, andere für die Ziele der Bank zu begeistern. Mehr braucht es nicht :-).
93	Viel Praktikererfahrung im Kundengeschäft.
94	Ich denke, es wird Zeit die historischen Lebensläufe bei Vorständen zu ändern (einmal Vertrieb - immer Vertrieb). Vielmehr sollten wichtige andere Qualifikationen (IT-Konwhow und Risikomanagement) mehr Berücksichtigung finden. Im Gegenzug sollten reine Steuerungsbank-Vorstände auch lernen Verantwortung für den Vertrieb zu übernehmen. Ich glaube, dass erfolgreiche Vorstände lernen müssen Teamplayer zu sein und nicht wie in der Vergangenheit reine Alpha-Tiere. Sind Banken, mit geringen Fluktuationsquoten im Vorstand besser oder schlechter? und welche Rolle spielt dabei der Aufsichtsrat? Ist es gut, wenn die Bank einen Vorstandsvorsitzenden hat oder wie in unseren Fall zwei gleichberechtigte Vorstände? Viel Erfolg bei ihrer Studie!
95	Fähigkeit zum vernetzten Denken Networking-Fähigkeiten
96	Der entscheidungsrelevante Erfahrungsschatz steigt aus meiner Sicht, wenn vor der Vorstandsfunktion in verschiedenen Häusern in (umsetzungs-)verantwortlicher Führungsposition gearbeitet wurde (z. BL)
97	Leitende Erfahrungen in einer Großbank
98	Vom Kunden und Mitarbeiter aus denken und zukunftsgerichtete Entscheidungen treffen
99	Erfahrung kombiniert mit einer Veränderungsbereitschaft und guter Mitarbeiterführung sind für mich das wesentliche - ganz unabhängig von der eigenen Ausbildung.
100	Kombination aus gesundem Menschenverstand & einer wissenschaftlichen Ausbildung. Fähigkeit Chancen und Risiken fundiert einschätzen zu können. Zudem Entscheidungsfähigkeit und -schnelligkeit.
101	Strategisches Denkvermögen/Kompetenz Erfahrung Empathie für Mitarbeiter und Kunden Identifikation mit unserer genossenschaftlichen Rechtsform
102	Verwurzelung in der Region und Kenntnis der Sorgen und Nöte der Menschen die darin leben. Soziales und politisches Engagement erweitert den Horizont
103	Ein Bankvorstand sollte zum Beispiel neben den grundsätzlichen Eigenschaften und Qualitäten auch folgende Eigenschaften haben: Innovativ sein und offen und wertschätzend um über neue/andere „Ideen“ nachzudenken, grundsätzliche Teamfähigkeit für die Arbeit in einem im Vorstandsteam.

No.	Replies
104	Breites Spektrum aneignen Entscheidungsfähigkeit Quer denken Dickes Fell Offenheit
105	Innovationsfreude, Kommunikationsfähigkeit, Flexibilität
106	Neugierig sein
107	Nicht sep. gefragt: Die Weiterbildung über das TOP an der ADG zum Certified Manager of Banking (ADG/SHB) mit der Blickrichtung an der Bank arbeiten hat mir wesentliche Erkenntnisse für die Bankleitertätigkeit gegeben.
108	Laufende Weiterbildung z.B. TOP - Programm der ADG aber auch im Bereich Führung.
109	Es sollte bei einer Vorstandstätigkeit (und der entsprechenden Ausbildung) ein größerer Fokus auf Führungs- und Managementqualitäten gelegt werden.
110	Während meiner langen beruflichen Tätigkeit haben sich die Werte in Bezug auf Führung gewandelt - sicherlich wichtig und sinnvoll. Einer der Werte - Vorbildfunktion bzw. als Vorstand Vorbild sowohl für Mitarbeiter aber auch die Öffentlichkeit zu sein - gehört leider auch dazu, was ich bedauere.
111	Führungsqualitäten und persönliches Auftreten. Einbindung der Mitarbeiter und Förderung der Führungs- und Mitarbeiterkultur. Offenes Auftreten sowohl zu den Mitarbeitern, wie auch zur Öffentlichkeit. Konsequentes Entscheiden und verbindliches Auftreten.
112	Mindestens genauso wichtig wie die Bildung ist die Persönlichkeit des Vorstandes einzustufen. Teamfähigkeit und Empathie sind in der heutigen Zeit von enormer Wichtigkeit. Auch das Benehmen zu Mitarbeitern, Kollegen und Kunden ist ausschlaggebend, wird aber selten bei der Einstellung / Bestzung von Führungspositionen angemessen berücksichtigt. Zu oft bekommen langgediente den Job, nur weil sie schon lange da sind.
113	entfällt
114	Die positive Einstellung. Offenheit für Veränderungen. Konsequenz in der Umsetzung. Fähigkeit Mitarbeiter mitzunehmen und Lust auf den Erfolg zeigen.
115	Ich war 10 Jahre Mitarbeiter beim BWGV (Prüfer), wie viele meiner Vorstandskollegen. Hierzu gab es allerdings keinerlei Bezug im Fragebogen.
116	gesunder Menschenverstand
117	Neuem aufgeschlossen sein, aber die Wurzeln nicht vergessen
118	Teamfähigkeit Führungsstärke, d.h. auch wirklich mit Menschen umgehen zu können, (es gibt zu viele Autokraten)
119	Langjährige Betriebszugehörigkeit. Kein ständiger Wechsel, besonders im Vorstand
120	Man sollte die Arbeitsweise verschiedener Kreditinstitute kennen - das erweitert das Spektrum der potenziellen Möglichkeiten und vermeidet Kirchturmpolitik.
121	Als Genossenschaftsvorstand lebt man die Nähe zum Kunden und nimmt dadurch das Feedback direkt auf
122	Erfahrung im Management von Komplexität wird zunehmend wichtiger.
123	Menschliche Größe und Empathie, und eine ausgeprägte Fähigkeit zur empfängergerechten Kommunikation
124	Mitentscheidend ist die Fähigkeit, die Sinnhaftigkeit unseres Tun und Handelns als Genossenschaftsbank den Mitarbeiter vor Augen zu führen.
125	Unternehmerische Skills stärken
126	Vernetzung mit der Region in der man tätig ist
127	Die Bank unter Beachtung der Grundsätze ordnungsgemäßer Geschäftsführung so führen, wie wenn es die eigene Firma wäre. Kein Streben nach kurzfristigem Erfolg, sondern langfristige strategische Planung.

No.	Replies
128	Mut, Weitsicht, Empathie und Bodenständigkeit
129	Durchhaltevermögen
130	In Regionalbanken müssen die Genossenschaftliche DNA, die gelebte Kundennähe und eine gute Marktausschöpfung ausgeprägt vorhanden sein.
131	Als Vorstand einer eG muss man das Kundengeschäft noch kennen! Dann kann man die Vorteile einer eG auch effizient nutzen.
132	Vor Beginn der Vorstandstätigkeit Einsatz in unterschiedlichen Bereichen der Bank
133	Art der Menschen-Führung, d.h. entsprechende Tools und vor allem viel Führungserfahrung, immer das richtige Fingerspitzengefühl ... und nicht zu vergessen den gesunden Menschenverstand!
134	Trotz aller notwendigen Fachkenntnisse ist der wichtigste Faktor die Führung der Mitarbeiter/-innen und diese dabei zu unterstützen ihre Fähigkeiten zu entwickeln.
135	Ich habe ferner bei der DVFA Frankfurt folgende Qualifikationen erworben: Certified Credit Analyst (CCrA) Certified Risk Analyst (CRA) Ein umfangreiches, tiefes Fachwissen schafft bei den Mitarbeitern große Akzeptanz, auch für schwierige/unpopuläre Maßnahmen.
136	Am besten in allen Abteilungen und Bereichen der Bank Erfahrungen sammeln und als Vorstand einen Gesamtüberblick zu haben und die Zusammenhänge zu verstehen. Sehr hilfreich ist der Ausbildungsweg als Verbandsprüfer.
137	Bodenständigkeit und Blick für's Wesentliche. Bei weiteren Fragen gerne anrufen: 08248/9691-25 Viel Erfolg bei der Arbeit! Markus Gast
138	Empathie Kommunikationsfähigkeit Weitblick
139	Zu diesem Thema könnte man ein ganzes Buch schreiben. Besonders wichtig sind Empathie (gegenüber Mitarbeitern, Aufsichtsrat, Prüfern, Bankenaufsicht, Kunden, Vertretern u.s.w.), um gute Lösungen für die Bank zu entwickeln. Wichtig ist auch Worklife Balance um die Drucksituationen zu meistern.
140	sich ständig den aktuellen Herausforderungen stellen und hierzu Lösungen erarbeiten welche die Zeit erfordert
141	Veränderungsbereitschaft und Mut zur Entscheidung. Empathie.
142	Bodenhaftung und gesunder Menschenverstand
143	Praxiserfahrung, Kundennähe und der Marktbereich sind für den Erfolg eines Vorstandes in der Bank sehr wichtig.
144	Allgemeinbildung und breites Fachwissen sind wichtig. Gute Kontakte zu Mitarbeitern und Kunden.
145	Unabhängigkeit in der Entscheidung ist das a und o. Dies erreicht man durch hohe Qualifikation und breitem Know How
146	Ich habe kein Diplom. Habe allerdings die Ausbildungen zum Bankfachwirt und Bankbetriebswirt mit jeweiligem Abschluss bei der Akademie Bayerischer Genossenschaften absolviert. Der diplomierte Abschluss wurde aufgrund der Bankgröße von der BaFin für die Zulassung nicht gefordert. Ich wurde für unseren in 2015 plötzlich verstorbenen stellv. Vorstandsvorsitzenden als Nachfolger zugelassen und durch den Aufsichtsrat berufen.
147	Menschlichkeit, eine hohe soziale Verantwortung für Kunden und Mitarbeiter, sowie eine hohe Empathie für alle Menschen runden das Anforderungsprofil eines Vorstandes, neben allen analytischen Eigenschaften, ab.
148	Je kleiner die Bank, desto mehr operative Tätigkeiten muss der Vorstand übernehmen.
149	Man sollte offen für Veränderungen sein, auch wenn sie die eigene Arbeit betreffen.

No.	Replies
150	1) Vorstände sollten auch in gewissen Abständen die Rollen Marktvorstand und Betriebsvorstand tauschen. Dies erweitert erheblich die Perspektive und auch das Verständnis sowohl für Kunden- als auch Betriebsbelange. 2) Tätigkeit in mehreren Banken erweitert den Horizont und lässt einen auch unterschiedliche Unternehmenskulturen kennenlernen
151	Vorstände müssen Entscheidungen treffen statt aufzuschieben und auch nein sagen können. Ganz entscheidend ist eine kollegiale Zusammenarbeit im Vorstand und Kompromissfähigkeit. Als Vorstand darf man nicht abheben, d.h. der Bezug zum Tages- Kundengeschäft sollte aufrecht erhalten werden und man sollte auch teilweise aktiv mitarbeiten um das Verständnis für die Erwartungen der Kunden und Mitarbeiter nicht zu verlieren. Mitarbeitern Freiräume zu lassen und Verantwortung zu übertragen fördert deren Eigenmotivation. Flexibel auf veränderte Rahmenbedingungen zu reagieren, statt stur an Strategien festzuhalten, verhindert Fehlentwicklungen. Eigene Meinung bilden statt Empfehlungen (auch der Verbände) unreflektiert zu übernehmen ist oft hilfreich. Der Erfolg ergibt sich aus der Summe vieler Kleinigkeiten. Durch ständiges Hinterfragen und Anpassen von Prozessen ergibt sich ein in der Summe bemerkenswerter Effizienzgewinn.
152	Empathie ausgeprägte Führungseigenschaften hohe digitale Affinität bzw. Spezialwissen hohe Veränderungsbereitschaft (Optimierer statt Bewahrer)
153	neben der Ökonomie sollten auch Kompetenzen im Bereich Soziologie etc. vorhanden sei. Den homo oeconomicus trifft man in der Realen Wirtschaftswelt nicht an. Wichtig für das Verstehen für das Zustandekommen von Entscheidungen.
154	Kunde und Mitarbeiter stehen im Mittelpunkt langfristige Planung und Betrachtungsweise ruhiges aber entschlossenes Handeln Vorstand ist Vorbild
155	Vorstandsaspirant wird i.d.R. praxisnah an die Vorstandsstelle herangeführt, Strategie von Genobanken ist langfristig ausgerichtet, die Bank ist ihren Mitgliedern verpflichtet und nicht Aktionären mit kurzfristigen hohen Renditeerwartungen, i.d.R. hat Vorstand einen regionalen Bezug und auch öffentliche Verantwortung für die Region, der genossenschaftliche Förderauftrag, der auch im Genossenschaftsgesetz verankert ist, Mitarbeiter leben in der Region und sind auch oft ehrenamtlich engagiert, es wird die genossenschaftliche Beratung (ganzheitliche Beratung) gelebt. Kein reiner Produktverkauf. Berater haben Interesse an einer langfristigen Kundenbeziehung und müssen auch in turbulenten Zeiten für den Kunden zur Verfügung stehen (insbesondere im Wertpapiergeschäft)
156	Konsequenz in der Umsetzung einmal beschlossener Maßnahmen und in der Personalführung.
157	Resilienz, Ehrlichkeit, persönliches Einfühlungsvermögen
158	die Begeisterung für den Genossenschaftsgedanken ist elementar für eine erfolgreiche Arbeit als Vorstand.
159	Nähe zum Kunden
160	Man muss den Menschen zuhören und sich selbst nicht so wichtig nehmen.
161	Ich halte es für wesentlich, dass man das Unternehmen auch wechselt bzw. zeitlich befristet in anderen Häusern Erfahrungen sammelt um nicht den Durchmarsch vom Azubi zum Vorstand mit entsprechender Betriebsblindheit zu erleben. Auch sollten Bankvorstände regelmäßig auf Schulungen gehen und sich persönlich weiterbilden, da sich das Umfeld schnell ändert.
162	Für den Erfolg als Vorstand einer Bank sind neben der erforderlichen Berufserfahrung von Wichtigkeit der gesunde Menschenverstand, weniger Misstrauen als vielmehr Vertrauen in die Mitarbeiter, ein Fordern und Fördern der Mitarbeiter sowie ein ausgeprägtes Wertedenken.

No.	Replies
163	- ein Vorstand sollte bevor er Vorstand wird, sowohl im Vertrieb als auch in den Betriebsabteilungen vor seiner Vorstandstätigkeit aktiv gewesen sein, nur so hat er wirklich einen vollständigen Überblick wie eine Bank funktioniert und welche Herausforderu
164	Im Tagesgeschäft immer dabei bleiben, damit der Blick auf die Kunden nicht verloren geht, sowohl intern als extern. Nicht alles für bare Münze nehmen was von unseren Verbänden teilweise kommt.
165	Neben der betriebswirtschaftlichen Ausbildung halte ich entsprechende Führungsqualitäten (Persönlichkeitskompetenz, Sozialkompetenz) für mindestens gleichwertig.
166	Offenheit für Neues, Nähe zu den Kunden und verlässliches und vertrauensvolles Handeln
167	Vorstände von Banken mit unterdurchschnittlichen Betriebsergebnissen müssen verstärkte Anstrengungen unternehmen, um zu Verbesserungen zu gelangen. Das Warten auf die Strategie-Agenda 2030 wird diesem Anspruch nicht gerecht!
168	Zukunftsorientierung für Bank ohne Übergewichtung persönlicher Interessen und damit Aufgeschlossenheit. Charakterliche TOP-Qualität.
169	Wichtige Erfolgskriterien sind für mich: 1. Die Zusammensetzung des Vorstandes (unterschiedliche Stärken) und 2. die Zusammenarbeit im Vorstandsgremium (wertschätzend).
170	Neben der fachlichen Qualifikation ist es wichtig integer, authentisch, bodenständig, offen und ehrlich zu sein.
171	Ergebnisoffen und gleichzeitig durchsetzungsstark nah am Menschen ob MA oder Kunde
172	Hohe Selbststrukturierung Nah bei Mitarbeitern, Führungskräften, Kunden und Mitgliedern
173	Blick auf das Wesentliche, Einfühlungs- und Durchsetzungsvermögen, Resilien
174	ERFAHRUNG !!! via Krisen via Führungserfahrung via Wissen um die Gesamtbanksteuerung
175	Die Auswahlverfahren sollten sich nicht nur auf die fachliche Kompetenz sondern auch auf die soziale Kompetenz und den Bezug zur Region beziehen bzw. mehr in den Fokus rücken, sowie die Einstellung zu den genossenschaftlichen Werten
176	Charakterstärke und eine offene Kommunikation mit den Kollegen und Mitarbeitern
177	nein
178	Persönlichkeitsprofil, Interaktionsfähigkeiten zwischen den Organen mit einer klaren focussierten Vision, einer hieraus abgeleiteten Strategie sowie deren konsequenter ergebnisorientierter Umsetzung unter Einbeziehung aller operativen Akteure...
179	Erfahrung, Erfahrung, Erfahrung Offen sein für neue Entwicklungen Mitarbeiter einbinden und mitnehmen
180	Bankvorstände dürfen nicht die Nähe zum Kunden verlieren und keine exzentrische oder narzisstische Züge aufweisen.
181	„Wissen, wo man herkommt“ - als Mensch, aber auch als Genossenschaft
182	Veränderungsbereitschaft und -fähigkeit. Berufliche Erfahrungen außerhalb der Bankenbranche
183	Als Bankvorstand sollte man das Gesagte auch immer vorleben durch TUN!
184	die Regionalität zu kennen, vor Ort aufgewachsen zu sein und heute hier zu wirken!!

No.	Replies
185	Innovationskraft und unternehmerisches Denken und die Fähigkeit, Dinge ins Laufen zu bringen, ist heute mehr denn je Schlüssel für den Erfolg. Hierzu ist Menschenführung unverzichtbare Voraussetzung. Ferner sind die Anpassungsfähigkeit und Flexibilität im Umgang mit Veränderungen wichtige Eigenschaften bzw. Fähigkeiten. Auch die Fähigkeit, Talente zu erkennen und als Mitarbeiter zu gewinnen und zu entwickeln hat eine hohe Bedeutung.
186	regionale Verwurzelung
187	Kundenorientierung, Unternehmer-Gen, Fähigkeit, Mitarbeiter zu begeistern.
188	Unternehmergeist
189	Authentizität, Bodenständigkeit und Verlässlichkeit
190	keine Ergänzungen nur eine höflich gemeinte Anmerkung: obwohl ich zu den weiblichen Vorständen gehöre bin ich der Meinung, dass man auf die Anrede Vorständin verzichten sollte. Diese Verbiegung unserer Sprache, nur um den wenigen Ausnahmefällen in ihrem Feminismus gerecht zu werden entzieht sich meinem Verständnis. Ich bin eine Frau und ich bin Vorstand. Viele Grüße
191	Der Vorstand einer Bank sollte seine Meinung selbstbewusst, in speziellen Angelegenheiten in Abstimmung mit dem Aufsichtsrat, vertreten. Das genossenschaftliche Prinzip muss Richtschnur des Handels der Kreditgenossenschaft (AR + Vorstand + Mitarbeiter) sein, allerdings in Übereinstimmung mit den gesetzlichen Regelungen.
192	Charakter WERTE

Table 48: Original replies from the questionnaire

Based on the procedure described above, the following reductions and coding (i.e. assignments to certain generic terms) resulted during further processing. In this context, a generic term was a paraphrase under which similar keywords were grouped. *Table 49 – Paraphrasing, reduction and assignment to a generic term* shows that the answers were first paraphrased as far as possible and necessary. In the next step they were reduced and assigned to a generic term.

It was not possible to assign certain keywords to only one generic term without creating ambiguity, so those keywords were assigned to multiple generic terms.

Paraphrase	First reduction	Generic term
In addition, the GBF in Montabaur completed	GBF in Montabaur	Qualification

Paraphrase	First reduction	Generic term
Personal qualities, such as strength of character, endurance, ability to deal with conflicts, persuasiveness, groundedness	Character, Perseverance, Ability to deal with conflicts, Persuasive power, Groundedness	Personal characteristics
Entrepreneurial thinking, flexibility with changes, taking employees along	Entrepreneurial thinking, flexibility with changes, taking employees along	Leadership qualities
Leadership with heart and mind. Role model function.	Leadership with heart and mind. Role model function.	Leadership qualities
Groundedness and determination	Groundedness and determination	Personal characteristics
Passion and team spirit	Passion and team spirit	Personal characteristics
Private regional reference to the business area and use of the networks	Regional reference and use of the networks	Regional roots
Social competence, empathy and willingness to change	Social competence, empathy and willingness to change	Personal characteristics
Entrepreneurial thinking, flexibility with new ideas, value orientation, promotion of society	Entrepreneurial thinking, flexibility with new ideas, value orientation, promotion of society	Personal characteristics
Management and credit experience, knowledge of the organisation of a cooperative bank	Management and credit experience, knowledge of the organisation of a cooperative bank	Experience
Experience in bank reorganisation, openness for	Experience, openness for new things, willingness to implement	Experience

Paraphrase	First reduction	Generic term
new ways, willingness to implement them		
Promote membership as a unique selling proposition	Membership as a unique selling point	Cooperative values
Social Balance Enthusiasm	Social Balance Enthusiasm	Personal characteristics
Groundedness !	Groundedness	Personal characteristics
Additional qualifications and thus personal development	Additional qualifications and thus personal development	Qualification
Digitisation and smart data are lacking in the training of board members, especially in the older	Lack of digitisation in executive education	Qualification
Harmony in the management team	Harmony in the management team	Conduct in the executive board
Interdisciplinary knowledge, knowledge outside the industry, knowledge of psychology or didactics	Knowledge Interdisciplinary, non-industry specific, psychology	Qualification
Good interaction with people and high willingness to change	Good interaction with people, willingness to change	Leadership qualities
Future-oriented Determined Emphatic Authentic	Future-oriented Determined Emphatic Authentic	Personal characteristics
Regional down-to-earthness and rootedness in	Regional rooting	Regional Roots

Paraphrase	First reduction	Generic term
the region as a success factor		
A balanced mix of theory and practice is important for board activities	Balanced mix of theory and practice	Practical instructions
Experience in auditing of financial service providers	Experience as an association auditor	Experience as an association auditor
Credibility and willingness to make decisions, looking to the future with a view to opportunities/risks.	Credibility and willingness to make decisions, looking to the future with a view to opportunities/risks.	Personal characteristics
Economic environment of the region	Economic environment of the region	Regional roots
In addition to professional qualifications, own authenticity is a model for employees and customers.	Professional qualification, authenticity as a role model	Qualification
Advantageous is a part-time study and practical experience	Part-time studies and practical experience	Qualification
Depending on the size of the bank, it is essential - especially in smaller banks - that the management board is involved in the day-to-day business.	Management Board should be involved in day-to-day business	Practical instructions
You have to be crisis-proof!	You have to be crisis-proof	Personal characteristics

Paraphrase	First reduction	Generic term
Empathy	Empathy	Personal characteristics
Regional market and customer knowledge as well as professional qualification and social competence as success factors for leadership.	Regional roots, qualification, social competence	Regional roots
Transactions whose risk can be estimated. Critical of DZ-BANK recommendations	Assessing risks, critical of DZ-Bank recommendations	Personal characteristics
Strategic and entrepreneurial thinking before regulation and expertise	Strategic and entrepreneurial thinking	Practical instructions
Cooperative self-image Strategic thinking High social competence	Cooperative values, strategic thinking, high social competence	Cooperative values
Experience in operative business and own customer care as well as learning are success factors	Operational activities and learning	Practical instructions
Structured and networked thinking	Structured and networked thinking	Practical instructions
Customer proximity	Customer proximity	Practical instructions
Values	Values	Personal characteristics
Experience as cooperative association auditor	Experience as cooperative association auditor	Experience as cooperative association auditor

Paraphrase	First reduction	Generic term
Leadership and motivation of employees as a success factor	Leadership and motivation of employees	Leadership qualities
Being grounded, identity with the region, Christian values (reliability, honesty, openness)	Being grounded, identity with the region, Christian values (reliability, honesty, openness)	Personal characteristics
Openness to issues outside the banking business and empathy	Openness to issues outside the banking business and empathy	Practical instructions
Leadership and management skills will in future be more important for board members than specialist skills	Leadership and management skills	Leadership qualities
Networking in the region	Networking in the region	Regional roots
Not only knowledge and skills are important, but also conveying meaning	Not only knowledge and skills are important, but also conveying meaning	Leadership qualities
Experience as cooperative association auditor	Experience as cooperative association auditor	Experience as cooperative association auditor
Keep to the ground	Keep to the ground	Practical instructions
Honesty, transparency and reliability towards employees and customers	Honesty, transparency and reliability towards employees and customers	Personal characteristics
Internship in a large bank as preparation for board activities	Internship in a large bank as preparation for board activities	Practical instructions

Paraphrase	First reduction	Generic term
Experience sharing	Experience sharing	Practical in- structions
Cooperative identity, know-how from networks	Cooperative identity, know- how from networks	Cooperative val- ues
Regionality, network, fea- sibility of decisions, con- nection with the region, rootedness	Regionality, network, feasi- bility of decisions, connec- tion with the region, root- edness	Regional roots
Regular further training and exchange with pro- fessional colleagues.	Regular further training and exchange with profes- sional colleagues.	Qualification
Practical suitability Ability to work in a team, i.e. leading by and with argu- ments	Practical suitability, ability to work in a team, leader- ship with arguments	Personal char- acteristics
Determination to succeed	Determination to succeed	Personal char- acteristics
Leadership competencies and involvement of the second management level take precedence over professional compe- tence	Management skills and in- volvement 2nd manage- ment level	Leadership qualities
Many years of experience as association auditor	Many years of experience as association auditor	Experience as cooperative as- sociation auditor
Down-to-earth attitude and a close connection to the business area.	Down-to-earth attitude and a close connection to the business area.	Personal char- acteristics
No need to study as a bank board member,	Study not necessary, co- operative values, reference to the base	Practical in- structions

Paraphrase	First reduction	Generic term
more important are cooperative basic values, the relation to the basis		
Customer understanding	Customer understanding	Practical instructions
Experience as association auditor, insight at many other banks	Experience as association auditor, insight at many other banks	Experience as cooperative association auditor
Willingness to change Strategic thinking	Willingness to change Strategic thinking	Personal characteristics
Change-Manager	Change-Manager	Personal characteristics
Consistent sales orientation, the courage to transfer competence and keep your feet on the ground	Consistent sales orientation, the courage to transfer competence and keep your feet on the ground	Practical instructions
Professional success follows childlike socialization. A down-to-earth and values-based parental home are success factors. Plus ambition and assertiveness.	The foundation for professional success is laid at home	Personal characteristics
Experience as cooperative association auditor	Experience as cooperative association auditor	Experience as cooperative association auditor
Professional qualification and social competence are important	Professional qualification, social competence	Qualification
Different focal knowledge of the individual board colleagues is beneficial.	Different focus knowledge in the board	Conduct on the executive board

Paraphrase	First reduction	Generic term
Bank directors should like people and bring empathy	Empathy	Personal characteristics
Knowledge and acceptance of the basic cooperative values	Knowledge and acceptance of the basic cooperative values	Cooperative values
Strategic thinking, consistent action, empathy, understanding of people, turning employees into co-entrepreneurs	Strategic thinking, consistent action, empathy, understanding of people, turning employees into co-entrepreneurs	Practical instructions
IT competence, leadership and dealing with employees	IT competence, leadership and dealing with employees	Qualification
Dealing with employees and the ability to motivate them is crucial for success	Dealing with employees and the ability to motivate them is crucial for success	Leadership qualities
Identification with the bank. Continuous development. Dedication & commitment.	Identification with the bank. Continuous development. Dedication & commitment.	Personal characteristics
Customer orientation, understanding for the region!	Customer orientation, understanding for the region	Practical instructions
Strategic orientation of the company and personal attitude to it is important. Risk assessment is more important than growth	Strategic orientation of the company and personal attitude to it is important. Risk assessment is more important than growth	Practical instructions

Paraphrase	First reduction	Generic term
Practical work experience in all areas of banking / Regional relation to the bank / Family situation and private environment / Life experience	Practical work experience in all areas of banking / Regional relation to the bank / Family situation and private environment / Life experience	Practical instructions
Regionality, groundedness,	Regionality, groundedness,	Regional roots
Creativity, openness to new things, courage to break new ground	Creativity, openness to new things, courage to break new ground	Personal characteristics
Practical experience and well-functioning management team	Practical experience and well-functioning management team	Practical instructions
Not just thinking as a banker, but as a businessman	Entrepreneurial thinking	Practical instructions
Entrepreneurial thinking and acting are just as important as professional qualifications. Employee involvement	Entrepreneurial thinking, involving employees	Practical instructions
Banking education and training is important. In the future, specialist skills will be transferred to 2nd management level due to larger banks	Qualification even more important in future	Qualification
Much practical experience in customer business.	Practical experience	Practical instructions

Paraphrase	First reduction	Generic term
Change historical CVs of board members, do not always stay within a defined range. Everyone should get to know each area. Board members should have leadership qualities and not just be alpha animals.	Putting practical experience, leadership qualities, personal interests aside	Practical instructions
Ability to think in a networked way Networking skills	Ability to think in a networked way Networking skills	Personal characteristics
Decision-relevant experience as a member of the board of directors increases if you have previously worked in a responsible position in others	Gain experience in other banks	Practical instructions
Leadership experience in a large bank	Leadership experience in a large bank	Practical instructions
Thinking from the customer and employee and making future-oriented decisions	Thinking from the customer and employee and making future-oriented decisions	Practical instructions
Experience, willingness to change and good personnel management	Experience, willingness to change and good personnel management	Practical instructions
Common sense and scientific training as well as decision-making ability and speed	Common sense and scientific training as well as decision-making ability and speed	Personal characteristics

Paraphrase	First reduction	Generic term
Strategic thinking, competence, experience, empathy for employees and customers, identification with cooperative values	Strategic thinking, competence, experience, empathy for employees and customers, identification with cooperative values	Personal characteristics
Roots in the region, social and political commitment	Roots in the region, social and political commitment	Regional roots,
Innovation, openness, appreciative thinking about new ideas, ability to work in a team on the board	Innovation, openness, appreciative thinking about new ideas, ability to work in a team on the board	Personal characteristics, Practical instructions, Conduct on the board
Acquire a broad spectrum Decision-making ability Think laterally Thick skin Openness	Acquire a broad spectrum Decision-making ability Think laterally Thick skin Openness	Practical instructions
Innovative spirit, communication skills, flexibility	Innovative spirit, communication skills, flexibility	Personal characteristics
Curiosity	Curiosity	Personal characteristics
Ongoing professional and leadership training	Ongoing professional and leadership training	Practical instructions
Greater focus on leadership and management qualities	Greater focus on leadership and management qualities	Leadership qualities
Role model function for employees and customers	Role model function for employees and customers	Practical instructions

Paraphrase	First reduction	Generic term
Leadership qualities and personal appearance, involvement of employees and promotion of the leadership and employee culture, binding appearance and consistent action	Leadership qualities and personal appearance, involvement of employees and promotion of the leadership and employee culture, binding appearance and consistent action	Practical instructions
Positive attitude, openness to change, consistency in implementation, ability to motivate employees	Positive attitude, openness to change, consistency in implementation, ability to motivate employees	Personal characteristics
10 years experience as association auditor	10 years experience as association auditor	Experience as cooperative association auditor
Common sense	Common sense	Personal characteristics
Be open to new things, but do not forget the roots	Be open to new things, but do not forget the roots	Personal characteristics
Ability to work in a team and leadership skills, ability to deal with people	Ability to work in a team and leadership skills, ability to deal with people	Leadership qualities
Many years of employment. No constant change, especially on the executive board	Many years of employment. No constant change, especially on the executive board	Practical instructions
Knowledge of the working methods of various banks to broaden the spectrum and avoid church tower thinking	Gain experience in other banks	Practical instructions

Paraphrase	First reduction	Generic term
Customer intimacy	Customer intimacy	Practical instructions
Experience in managing complexity	Experience in managing complexity	Practical instructions
Human greatness and empathy, and a pronounced ability to communicate	Human greatness and empathy, and a pronounced ability to communicate	Personal characteristics
Ability to motivate employees in a meaningful way	Ability to motivate employees in a meaningful way	Leadership qualities
Strengthen entrepreneurial skills	Strengthen entrepreneurial skills	Personal characteristics
Networking in the region	Networking in the region	Regional roots
Entrepreneurial thinking, managing the bank like your own company, long-term success is preferable to short-term success	Entrepreneurial thinking, managing the bank like your own company, long-term success is preferable to short-term success	Practical instructions
Courage, foresight, empathy and groundedness	Courage, foresight, empathy and groundedness	Personal characteristics
Persistence	Persistence	Personal characteristics
Cooperative values, active proximity to customers, good market exploitation	Cooperative values, active proximity to customers, good market exploitation	Cooperative values
Being active in customer business, so that the advantages of a cooperative bank can be used efficiently	Being active in customer business	Practical instructions

Paraphrase	First reduction	Generic term
Before taking up the position on the Board of Managing Directors Employment in various areas of the Bank	Gain experience in all areas of the Bank	Practical instructions
Way of leading people, a lot of leadership experience, right tact and common sense	Way of leading people, a lot of leadership experience, right tact and common sense	Leadership qualities
Leadership and support employees to develop their skills	Leadership and support employees to develop their skills	Leadership qualities
Gain experience in all departments of the bank. Experience as association auditor	Gain experience in all departments of the bank. Experience as association auditor	Experience as cooperative association auditor
Down-to-earth and an eye for the essential	Down-to-earth and an eye for the essential	Personal characteristics
Empathy Communication skills Vision	Empathy Communication skills Vision	Personal characteristics
Empathy towards employees, supervisory board, auditors, customers, banking supervision. Good work-life balance due to pressure	Empathy towards employees, supervisory board, auditors, customers, banking supervision. Good work-life balance due to pressure	Personal characteristics
Facing the challenges and developing solutions	Facing the challenges and developing solutions	Practical instructions
Willingness to change and courage to make decisions. Empathy.	Willingness to change and courage to make decisions. Empathy.	Personal characteristics

Paraphrase	First reduction	Generic term
Grounding and common sense	Grounding and common sense	Personal characteristics
Practical experience, customer proximity and the market area are important for the success of a board member	Practical experience, customer proximity and the market area are important for the success of a board member	Practical instructions
General education and broad specialist knowledge are important. Good contacts to employees and customers.	General education and broad specialist knowledge are important. Good contacts to employees and customers.	Qualification, Leadership qualities
Independence in decision-making, achieved through high qualification and broad know-how	Independence in decision-making, achieved through high qualification and broad know-how	Qualification
Humanity, high social responsibility for customers and employees and high empathy for all people	Humanity, high social responsibility for customers and employees and high empathy for all people	Personal characteristics
The smaller the bank, the more operational activities the management board has to take over.	Operating activities	Practical instructions
Openness to change, also with regard to your own work	Openness to change, also with regard to your own work	Practical instructions
Exchange of roles as market and operations director, which broadens the view for operational and sales issues. Getting to know several banks,	Exchange of roles as Market and Operations Director, gain experience in several banks	Practical instructions

Paraphrase	First reduction	Generic term
so that you get to know different cultures and broaden your perspective		
To be able to make decisions instead of postponing them, to say no. Collegial cooperation in the Board of Management, willingness to compromise, reference to daily business in order to understand the concerns of employees and customers. Transferring responsibility to employees, promotes self-motivation. Forming one's own opinion. Flexibility and not stubbornly clinging to strategies. Constantly questioning processes.	To be able to make decisions instead of postponing them, to say no. Collegial cooperation in the Board of Management, willingness to compromise, reference to daily business in order to understand the concerns of employees and customers. Transferring responsibility to employees, promotes self-motivation. Forming one's own opinion. Flexibility and not stubbornly clinging to strategies. Constantly questioning processes.	Practical instructions
Empathy Pronounced leadership qualities High digital affinity or special knowledge High willingness to change (optimizer instead of maintainer)	Empathy Pronounced leadership qualities High digital affinity or special knowledge High willingness to change (optimizer instead of maintainer)	Personal characteristics
Social competence, so that you understand how decisions are made.	Social competence	Personal characteristics
Customer and employees are the focus of attention. Long-term planning.	Customer and employees are the focus of attention. Long-term planning. Calm	Personal characteristics

Paraphrase	First reduction	Generic term
Calm but determined action. Management Board is a role model	but determined action. Management Board is a role model	
Board members are introduced to board positions in a practical way, strategy of cooperative banks is long-term oriented. Regional roots of the board and employees as a success factor	Practical executive training, long-term strategy, regional roots	Practical instructions
Consistency in the implementation of once decided measures and in personnel management.	Consistency in the implementation of once decided measures and in personnel management.	Practical instructions
Resilency, honesty, personal empathy	Resilency, honesty, personal empathy	Personal characteristics
Enthusiasm for the cooperative idea	Enthusiasm for the cooperative idea	Cooperative values
Customer intimacy	Customer intimacy	Practical instructions
You have to listen to people and not take yourself too seriously.	You have to listen to people and not take yourself too seriously.	Practical instructions
Gain experience in several banks, so that it does not come to operational blindness. Regular further training to develop personally.	Gain experience in several banks, regular further training	Practical instructions
Professional experience, common sense, trust in	Professional experience, common sense, trust in	Personal characteristics

Paraphrase	First reduction	Generic term
employees, challenging and encouraging employees and a strong sense of values	employees, challenging and encouraging employees and a strong sense of values	
Gain experience in all departments of a bank so that you know how a bank works	Gain experience in all departments	Practical instructions
Stay in day-to-day business so you know what's going on.	Stay in day-to-day business so you know what's going on.	Practical instructions
Personality competence and social competence as equivalent leadership qualities alongside business management training	Personality competence and social competence as equivalent leadership qualities alongside business management training	Personal characteristics
Openness to new ideas, proximity to customers and reliable and trusting action	Openness to new ideas, proximity to customers and reliable and trusting action	Personal characteristics
Future orientation of the bank, putting personal interests aside, open-mindedness, top character qualities	Future orientation of the bank, putting personal interests aside, open-mindedness, top character qualities	Practical instructions
Different priorities in the executive board as a success factor and appreciative cooperation	Different priorities in the executive board as a success factor and appreciative cooperation	Conduct on the executive board
Professional qualification, integrity, authenticity,	Professional qualification, integrity, authenticity,	Qualification

Paraphrase	First reduction	Generic term
down-to-earthness, openness, honesty	down-to-earthness, openness, honesty	
Open-minded results and at the same time strong implementation close to the people, whether employee or customer	Open-minded results and at the same time strong implementation close to the people, whether employee or customer	Practical instructions
High degree of self-structuring, proximity among employees, managers, customers and members	High degree of self-structuring, proximity among employees, managers, customers and members	Personal characteristics
Focus on the essential, empathy and assertiveness, resilience	Focus on the essential, empathy and assertiveness, resilience	Personal characteristics
Experience based on crises, management and overall bank management knowledge	Experience based on crises, management and overall bank management knowledge	Personal characteristics
Selection procedures should take into account not only technical but also social competence and relation to the region, as well as cooperative values	Technical, social competence, relation to the region	Personal characteristics
Strong character and open communication with colleagues and employees	Strong character and open communication with colleagues and employees	Personal characteristics
Personality, ability to interact between the organs with a clearly focused vision, resulting in	Personality, ability to interact between the organs with a clearly focused vision, resulting in a strategy	Personal characteristics

Paraphrase	First reduction	Generic term
a strategy that is consistently implemented, involvement of all stakeholders	that is consistently implemented, involvement of all stakeholders	
Experience, openness to new developments, involvement and participation of employees	Experience, openness to new developments, involvement and participation of employees	Personal characteristics
Proximity to the customer, no eccentricity or narcissism	Proximity to the customer, no eccentricity or narcissism	Practical instructions
Do not forget your origins, as a person and as a bank	Do not forget your origins, as a person and as a bank	Practical instructions
Willingness and ability to change. Professional experience outside the banking industry	Willingness and ability to change. Professional experience outside the banking industry	Personal characteristics
Role model function	Role model function	Practical instructions
Regional rooting	Regional rooting	Regional roots
Innovative strength, entrepreneurial thinking, ability to get things moving, leadership, flexibility in change, recognising and promoting talent	Innovative strength, entrepreneurial thinking, ability to get things moving, leadership, flexibility in change, recognising and promoting talent	Personal characteristics
Regional rooting	Regional rooting	Regional roots
Customer orientation, entrepreneurial thinking, ability to inspire employees	Customer orientation, entrepreneurial thinking, ability to inspire employees	Personal characteristics

Paraphrase	First reduction	Generic term
Entrepreneurship	Entrepreneurship	Personal characteristics
Authenticity, down-to-earth and reliability	Authenticity, down-to-earth and reliability	Personal characteristics
Opinion confidently represented to the Supervisory Board. Cooperative values	Opinion confidently represented to the Supervisory Board. Cooperative values	Practical instructions
Character VALUES	Character, Values	Personal characteristics

Table 49: Paraphrasing, reduction and assignment to a generic term

Table 50 – Summary of responses by number and generic terms summarises the number of responses assigned to each generic term:

Number	Generic terms
175	Evaluable feedback in total
33	Leadership qualities
85	Practical instructions
18	Qualification
10	Cooperative values
18	Regional routes
8	Experience as cooperative association auditor
82	Personal characteristics
2	Experience
6	Conduct on the executive board

Table 50: Summary of responses by number and generic terms

Table 51 – Key points mentioned under the generic terms shows the main points mentioned under the respective generic terms. In some cases, the same key points were mentioned several times.

Generic term	Number	Key points
Leadership qualities	4	Leadership and management skills
	4	Ability to motivate employees in a meaningful way
	3	Ability to motivate employees
	2	Type of leadership, a lot of leadership experience, the right instinct
	2	Take employees along
	2	Human greatness and empathy, and a pronounced ability to communicate
	2	Trust in employees, challenging and encouraging employees
	2	Involving employees
	2	Professional qualification, social competence
	1	Leadership with heart and mind
	1	Ability to work in a team, leadership skills, ability to deal with people
	1	Leadership and supporting employees to develop their skills
	1	Leadership qualities and personal appearance, involvement of employees and promotion of the leadership and employee culture
	1	Consistency in the implementation of measures once decided and in personnel management
	1	Good contacts ¹³² to employees and customers
	1	Being able to make decisions instead of postponing them, being able to say no, being involved in day-to-day business in order to understand the

¹³² Some of the translations sound strange in English. In order to avoid distortions, the above-mentioned keywords or individual parts of sentences have therefore been translated one-to-one from German into English.

Generic term	Number	Key points
		concerns of employees and customers. Transferring responsibility to employees, promoting self-motivation
	1	Strategic thinking, consistent action, empathy, understanding people, turning employees into co-entrepreneurs
		Good employee management
Cooperative values	3	Identification with the cooperative's ideas
	1	Membership as a unique selling point
	1	Enthusiasm for the cooperative idea
Practical instructions	6	Customer orientation
	5	Strategic and entrepreneurial thinking
	5	Willingness to change and courage to make decisions
	3	Practical experience
	3	Gain experience in other banks
	3	Gain experience in all areas of the bank
	3	Stay involved in day-to-day business so you know what's going on
	3	Role-model function
	2	Willingness to change
	2	Cooperation in daily business
	2	Sharing experience
	2	Entrepreneurial thinking, managing the bank like your own company, long-term success is preferable to short-term success
	1	Strategic thinking, consistent action
	1	Engaging appearance and consistent action

Generic term	Number	Key points
	1	Practical experience, putting personal interests aside
	1	Consistency in implementing measures once decided
	1	Expressing an opinion confidently to the supervisory board
	1	Openness to issues outside the banking business
	1	Sales orientation, courage to transfer competence
	1	Acquire a broad spectrum, decision-making ability, lateral thinking
	1	Openness to change, also with regard to your own work
	1	Future orientation of the bank, putting personal interests aside
	1	Open-minded about results and at the same time strong proximity to implementation for people, whether they are employees or customers
	1	Gain experience in several banks, regular further training
	1	Practical work experience in all areas of banking, regional relation to the bank, family situation and private environment, life experience
	1	Practical training in management, long-term strategy
	1	Many years of employment. No constant change, especially on the executive board
	1	Balanced mix of theory and practice
	1	Be practical and sensible
	1	Internship in a large bank as preparation for board activities

Generic term	Number	Key points
	1	Strategic orientation of the company and personal attitude to it is important. Risk assessment is more important than growth
	1	Thinking from the customer and employee perspective, and making future-oriented decisions
	1	Experience in managing complexity
	1	Facing challenges and developing solutions
	1	Exchange of roles as Market and Operations Manager, gain experience in several banks
	1	You have to listen to people and not take yourself too seriously
	1	Do not forget your origins, as a person and as a bank
	1	Know-how from networks
	1	Close proximity to customers, good market exploitation
	1	Assessing risks, critical of DZ-Bank recommendations
	1	Ability to think in a networked way, networking skills
	1	Down-to-earth and an eye for the essential
	1	Good work-life balance due to pressure
	1	Customers and employees are the focus of attention. Long-term planning. Calm but determined action
	1	Openness to new ideas, proximity to customers and reliable and trusting action
	1	High degree of self-regulation, proximity to employees, managers, customers and members
	1	Strong character and open communication with colleagues and employees

Generic term	Number	Key points
	1	Personality, ability to interact between the organs with a clearly focused vision, resulting in a strategy that is consistently implemented, involvement of all stakeholders
	1	Innovation, openness, appreciative thinking about new ideas
	1	Part-time studies and practical experience
	1	Network, feasibility of decisions
	1	Social and political commitment
	1	Independence in decision-making, achieved through high qualifications and broad know-how
	1	Common sense and scientific training as well as decision-making ability and speed
	1	To be able to make decisions instead of postponing them, to say no. Collegial cooperation in the executive board, willingness to compromise, reference to day-to-day business in order to understand the concerns of employees and customers. Transferring responsibility to employees, promoting self-motivation. Forming one's own opinion. Flexibility and not stubbornly clinging to strategies. Constantly questioning processes
Qualifications	4	Technical qualification
	2	Regular further training and exchange with professional colleagues
	2	Ongoing professional and leadership training
	1	Independence in decision-making, achieved through high qualifications and broad know-how
	1	IT competence
	1	General education and broad expertise
	1	Part-time studies and practical experience
	1	Personal development

Generic term	Number	Key points
	1	Digitisation
	1	Knowledge: interdisciplinary, non-industry specific, psychology
	1	Scientific education
	1	Social competence
Regional roots	2	Regionality, network, connection with the region, rootedness
	2	Regionality, groundedness
	1	Roots in the region
Personal characteristics	12	Empathy
	9	Groundedness and an eye for the essential
	7	Openness to new things (ideas and developments)
	7	Willingness to change
	5	Strategic thinking
	4	Common sense
	4	Social competence
	3	Character
	3	Honesty
	3	Decision-making power
	3	Innovative strength, entrepreneurial thinking, ability to get things moving, leadership, flexibility in change
	3	Entrepreneurial thinking
	2	Authenticity
	2	Persistence
	2	Flexibility
	2	Resilience, personal empathy
	2	Determination

Generic term	Number	Key points
	2	Future-oriented
	1	Type of leadership, a lot of leadership experience, the right instinct
	1	Pronounced leadership qualities, high digital affinity or special knowledge
	1	Professional experience, common sense, trust in employees, challenging and encouraging employees, and a strong sense of values
	1	Acquire a broad spectrum, decision-making ability, think laterally, thick skin, openness
	1	Change-manager
	1	Highest qualities of character
	1	Christian values (reliability, honesty, openness)
	1	Experience of crises, management and overall bank management knowledge
	1	Experience, openness to new developments
	1	Open-minded about results and at the same time strong proximity to implementation for people, whether they are employees or customers
	1	Technical, social competence
	1	Ability to think in a networked way, networking skills
	1	Flexibility about new things, value orientation, promotion of society
	1	Leadership qualities and personal appearance, natural behaviour and consistent action
	1	Credibility
	1	Good interactions with people
	1	Highly self-regulating
	1	Identification with the bank, continuous development, dedication and commitment
	1	Integrity, authenticity

Generic term	Number	Key points
	1	Communication skills
	1	Competence, experience, empathy for employees and customers
	1	Ability to deal with conflicts, persuasiveness, grounding in reality
	1	Consistent action, human understanding
	1	Creativity, openness to new things, courage to break new ground
	1	Crisis resistance
	1	Customer orientation, entrepreneurial thinking
	1	Passion and team spirit
	1	Human greatness and empathy, and a pronounced ability to communicate
	1	Humanity, high level of social responsibility for customers and employees
	1	Courage, foresight
	1	Proximity to the customer, no eccentricity or narcissism
	1	Curiosity
	1	Personality, ability to interact between the organs with a clearly focused vision, resulting in a strategy that is consistently implemented, involvement of all stakeholders
	1	Personal competences
	1	Positive attitude, consistency in implementation, ability to motivate employees
	1	Assessing risks, critical of DZ-Bank recommendations
	1	Calm but determined action
	1	Social, balance, enthusiasm
	1	Independence in decision-making, achieved through high qualifications and broad know-how

Generic term	Number	Key points
	1	Reliability
	1	Sales orientation, courage to transfer competence, traction
	1	Values
	1	Determination to succeed
Conduct on the executive board	2	Different expertise on the board
	1	Harmony in the management team
	1	Appreciative cooperation
	1	Well-functioning management team
	1	Many years of employment. No constant change, especially on the executive board
	1	Ability to work in a team on the board

Table 51: Key points mentioned under the generic terms

Appendix 6: Ethical approval and ethics consent form



Management, Leadership & Orgs REC

The Burroughs
Hendon
London NW4 4BT

Main Switchboard: 0208 411 5000

01/07/2020

APPLICATION NUMBER: 14523

Dear Hermann Josef Hoegel and all collaborators/co-investigators

Re your application title: Influence of Manager Qualities on Bank Performance - Amendments

Supervisor: Louise Andrea Dr. Boulter Dr. Werner

Co-investigators/collaborators:

Thank you for submitting your application. I can confirm that your application has been given APPROVAL from the date of this letter by the Management, Leadership & Orgs REC.

The following documents have been reviewed and approved as part of this research ethics application:

Document Type	File Name	Date	Version
GDPR Declaration	Data Protection Declaration Form_Hermann_Josef_Hoegel20200205	05/02/2020	V1
Data Protection Act checklist (LSI)	Data Protection Checklist_Hermann_Josef_Hoegel_20200205	05/02/2020	V1
Data Access Approval	CorrespondenceBISNODE	19/02/2020	1
Methods and data	Questionnaire MDX 2020 06 30	30/06/2020	1
Participant Information Sheet	MLO PIS template_HH_ 2020 06 30	30/06/2020	1
Participant Information Sheet	MLO PIS template_HH_ 2020 06 30_German_Translation	30/06/2020	1

Although your application has been approved, the reviewers of your application may have made some useful comments on your application. Please look at your online application again to check whether the reviewers have added any comments for you to look at.

Also, please note the following:

1. Please ensure that you contact your supervisor/research ethics committee (REC) if any changes are made to the research project which could affect your ethics approval. There is an Amendment sub-form on MORE that can be completed and submitted to your REC for further review.
2. You must notify your supervisor/REC if there is a breach in data protection management or any issues that arise that may lead to a health and safety concern or conflict of interests.
3. If you require more time to complete your research, i.e., beyond the date specified in your application, please complete the Extension sub-form on MORE and submit it your REC for review.
4. Please quote the application number in any correspondence.
5. It is important that you retain this document as evidence of research ethics approval, as it may be required for submission to external bodies (e.g., NHS, grant awarding bodies) or as part of your research report, dissemination (e.g., journal articles) and data management plan.
6. Also, please forward any other information that would be helpful in enhancing our application form and procedures - please contact MOREsupport@mdx.ac.uk to provide feedback.

Good luck with your research.

Yours sincerely

Section 1 - Applicant details

1. Details of applicant

Given Name

Family Name

Hermann Josef

Hoegel

Middlesex Email

HH494@live.mdx.ac.uk

1.1 This application is for YOUR.... (please specify)

- ☐ Undergraduate research - individual project/dissertation (e.g., BA/BSc)
- ☐ Undergraduate research - group project/dissertation
- ☐ Postgraduate masters research - individual project/dissertation (e.g., MA/MSc/MRes)
- ☐ Postgraduate masters research - group project/dissertation
- ☒ Postgraduate research e.g., MPhil/PhD or MProf/DProf
- ☐ Staff research (not part of a qualification requirement)
- ☐ Module to cover research activities within your module (UG or PG)
- ☐ Sponsorship for an external researcher(s) conducting research within Middlesex University

1.1a Postgraduate research programme details

Programme of study e.g., MPhil/PhD, MProf/DProf

MPhil/PhD

Year of study

7

Working towards: registration, transfer, programme approval, completion? (please specify)

Completion

Resubmission

1.1f Please indicate below:

- ☒ This is a NEW application, not submitted before.
- ☐ This is a RESUBMISSION of the application to address issues raised by the reviewers.
- ☐ This is a resubmission to address MINOR AMENDMENTS.

Supervisor details

1.2 Supervisor details (see information button for guidance)

Given Name

Family Name

Louise

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l.boulter@mdx.ac.uk

1.2 Supervisor details (see information button for guidance)

Given Name

Family Name

Andrea

Dr. Werner

Email

a.werner@mdx.ac.uk

Co-investigator/collaborator details

1.3a: Are you the Chief/Principal Investigator? (see information button for guidance, e.g., supervisors are usually the Chief or Principal Investigator (PI), unless the applicant is a doctoral student)

☒ Yes

☐ No

1.3c: Will the study require data collection by proxy (someone else doing part of all of your data collection) or with co-investigators?

☐ Yes - with co-investigators/research collaborators

☐ Yes - data collection by proxy

☒ No

Please note: When working with research collaborators, or collecting data by proxy, MU researchers need to ensure that the highest ethical standards and procedures are adopted by all research partners/fieldworkers, especially if we are leading the project and require data from the partner(s) to be included in our research findings.

Please ensure the research ethics application/details, approved consent forms, participant information sheets, and all other relevant documents, and all correspondence from the review process are shared with your research collaborators, where relevant.

Use the SHARE button on the left hand side to share the form. The ROLES button allows you to specify whether someone is your supervisor, co-investigator, or the principle investigator.

Ethics committee

1.4: Select the Research Ethics Committee (REC) your application should be submitted to: (Mauritius Campus RECs and the Dubai Campus REC are listed at the end)

Management, Leadership and Orgs REC

[Click the 'Next' button on the left to go to Section 2](#)

Section 2 – Details of proposed study

2.1a Short Study Title (max of 5-6 words) (See information button for guidance)

Influence of Manager Qualities on Bank Performance - Amendments

2.1b Full Study Title (This should be consistent on all documents relating to this research study.)

The Influence of Manager Qualities and Executive Board Composition on the Performance of German Cooperative Banks as a Decision Criterion in the Selection of New Executive Board Members

2.2 Proposed start date for research/data collection (This must be a minimum of 25 days after submission of your application to allow for the review process.) Do NOT commence data collection until you have your approval letter.

01/04/2020

2.3 Proposed end date for research/data collection (to be approved for the next 2 years)

01/12/2020

Aim(s)

2.4 Please state the main aim(s) and research question(s) with references and citations (where applicable).

In summary, the main aims are as follows:

It is an aim of the research project to gain a better understanding of the connections between management education and bank performance.

A purpose of the research project is to determine whether experience and age actually play a prominent role, as suggested by the literature.

Proving empirically if there is a (positive) connection between the proportion of women in the executive board and bank performance.

Helping to clarify whether different constellations in the executive board composition have an impact on performance.

An outcome of the current research will be a good practice guidance for the supervisory board of German cooperative banks, who appoint future executive board members.

The research project deals with two main research questions:

To what extent do managerial qualities influence the performance of German cooperative banks?

To what extent do executive board composition and executive board size influence the performance of German cooperative banks?

2.4a Would you like to upload a document detailing your main aim(s) and research question(s) with references and citations (where applicable) and/or your preregistration of research plan? (see info button for guidance)

☐ Yes

☒ No

Summary of research study and rationale

2.5 Please provide full details of the method(s), study design, data to be collected/used, how data will be obtained, with rationale and information about participants, hypotheses, data analysis, with references and citations (where applicable).

Note:

I already have an approved application (previous application number 12942). However, as I have an additional method of data collection (manual gathering of data on managerial qualities via a questionnaire), I am submitting a new application.

Background to the research, potential benefits of the research, why it is important and the study design and methodology

The focus of this thesis is on German cooperative banks. Constituting 55,54% of the German banking landscape (Arts, 2016), cooperative banks play a fundamental role in the German economy (Deutsche Bundesbank, 2016; Fischer, 2011). The issue of bank performance has been studied from different other aspects like ownership, regionality, merger effects and optimal bank size (Gorton and Schmid, 1999; Manetti and Bagnoli, 2013; Greve, 2002; Maurer, 2016), but not adequately studied in terms of managers quality. Executives who run a business typically have a significant impact on business policy and, consequently, on the company's success - expressed as performance, defined by Stegeman and Gavrea (2010); Lakhai (2014) and Gupta et al. (2014). Personal character traits of CEOs can influence company performance (King et al., 2016; Malmendier et al., 2011; Kaplan et al., 2012; Fee et al., 2013; Graham et al., 2013). Likewise, the number of managers (if there are multiple), their composition and, above all, the personal qualities of the executives have a decisive influence on the performance of a company.

Existing studies only illuminate one aspect at a time (e.g. performance within German cooperative banks or managerial qualities within industrial firms).

A fundamental goal of the current study is therefore to close this gap in the literature and thus contribute to the existing theoretical knowledge. This research will highlight and identify the managerial qualities that influence a bank's performance. The existing knowledge (King et al., 2016; Malmendier et al., 2011; Kaplan et al., 2012; Fee et al., 2013; Graham et al., 2013) will be expanded and supplemented.

A major aim of the present research project is to provide the supervisory board with decision support for the appointment of new executive board members.

Research questions

The research project deals with two main research questions.

To what extent do managerial qualities influence the performance of German cooperative banks?

To what extent do executive board composition and executive board size influence the performance of German cooperative banks?

Within the research project there are different theories examined and how these theories relate to each other in context. It is intended to use the Gross Profit Margin (GPM) as an appropriate measure for bank performance.

There are many factors that can affect the performance of German cooperative banks. While some of them are difficult to measure, it is the intention of the author in this research project to focus on those variables that can be measured. For this purpose, age, education, experience and gender were identified as variables on the part of the manager qualities, as well as executive board size and executive board composition as variables that influence the executive board composition.

A mixed method approach is planned for this research project.

Six hypotheses were derived:

H1: There is a positive relationship between the average level of education of board members and the performance of German cooperative banks.

H2: Executive board member experience has a positive influence on the performance of German cooperative banks.

H3a: The higher the average age of two (or more) executive board members (shared leadership without a CEO), the greater the positive impact on the performance of a German Cooperative Bank.

H3b: The higher the average age of two (or more) executive board members (with one of them acting as a CEO), the greater the positive impact on the performance of a German Cooperative Bank (with a significant difference to hypothesis H3a).

H4: The presence of one or more female members on the executive board positively affects the performance of German cooperative banks.

H5: Any number of executive board members that exceeds two people (given the legal minimum number) will adversely affect the performance of German cooperative banks.

H6a: The composition of the executive board with two (or more) equal CEOs (shared leadership) has a positive impact on the performance of German cooperative banks.

H6b: The composition of the executive board with one CEO and one (or more) non-CEO has a negative impact on performance of German cooperative banks.

Method and data gathering

This research project is realised with a quantitative analysis of data from balance sheets and other directories. For analysing and comparing bank performance and managerial qualities within the individual German cooperative banks, this study intends to use pre-existing secondary data sources to evaluate the performance of German cooperative banks over a time period of ten years, namely 2008 to 2018.

Ideally, the "Bisnode Hoppenstedt Manager Database", a database which contains educational data, information about gender and

place of residence from the managers of all German cooperative banks, could provide excellent information. The intention is to obtain at least temporary access to Bionode. For this purpose, requests will be made to various institutions that have full access (e.g. several German universities or the KMU Austria as a cooperating university of the Middlesex University).

A second data source is the Commercial Register (in German: "Handelsregister"), a database containing data about companies and year of entry of the executive board members (in addition to the above mentioned database "Bionode-Hoppenstedt Company Database").

A third data base is the Electronic Federal Gazette (www.bundesanzeiger.de), a database (consisting of PDF documents) with data about balance sheet positions and income statements from all German cooperative banks from the last ten years.

For measuring bank performance the gross profit margin is chosen. It can be expressed in a single measurement and is very common in practice and also in the literature. Furthermore the gross profit margin has been identified as the dependent variable. Independent variables are the professional experience, gender of executive board members and the executive board composition. The age of the manager is a control variable.

The economic performance indicators of the individual cooperative banks are taken from or calculated on the basis of available sources. For the calculation, data must be collected from the profit and loss account of the respective bank. This is done by online access to the homepage of the electronic Federal Gazette (www.bundesanzeiger.de). All capital companies (and thus also cooperative banks) are legally obliged to publish their annual company figures, consisting of balance sheet, profit and loss account, notes and management report in the Federal Gazette. The data of the last 10 years is available to everyone. The retrieval cannot take place automatically, but by a preceding safety inquiry (Captcha) in each case only for a bank for a single financial year. The data retrieved appear in text form and can either be displayed on screen, saved as an HTML file or as a PDF file. For better traceability, the data retrieved are saved as PDF files for the purposes of this research project. Subsequently, the data contained therein are manually extracted and converted into a suitable, further processable file format, e.g. Microsoft Excel or SPSS.

Statistical analysis

The statistical analysis consists of different parts. First it is intended to determine the necessary data. This data concerns German cooperative banks and provides information about key figures. Afterwards, the numerical values from the different hypotheses (expressed by a numerical value) will be regressed on the GPM as an influencing determinant on bank performance.

Absolute and relative key figures are used in this paper. The absolute key figures provide information about the size of a business issue. There are individual figures, differences, totals and mean values. Relative key figures are formed as a quotient of two absolute numbers that are related to each other. There are measurement numbers, classification numbers and relationship numbers. The ROI key figure system is used to evaluate the data or summarize it as a key figure. In the ROI key figure tree, the peak key figure return on equity after taxes is determined. Individual earnings components are combined in this key figure tree and successively subsumed to the key figure of return on equity.

The dynamic analysis is divided into time comparison, target/actual comparison, company comparison and sector comparison (Küttling et al., 2015). The subject of the static analysis are key figures that are based on the same refer to time. Due to the lack of a standard for comparison, this form of analysis only displays limited information content. In contrast to static analysis, dynamic analysis evaluates the key figures determined by using standard values. The content of the comparison of time is the comparison of variables that refer to the same object but to different points in time or time periods. In the target/actual comparison, target values derived from planning are compared with actual values. The object of the company comparison is to evaluate the key figures of one's own company against those of selected comparable companies. In the industry comparison, the industry averages provide the assessment yardstick. In practice, the combination of several comparison methods often occurs (Botsis et al., 2012). It is intended to process the collected data with the software "IBM SPSS Statistics" and "Microsoft Excel". Therefore it is essential to gather data (primary and secondary) in an appropriate and standard format.

Hypothesis 1 examines the relationship between the CEO's education (measured by the highest educational attainment) and the average gross profit margin of the last 5 years (sample 1) or 10 years (sample 2). Therefore, the variables are first checked for the existence of a normal distribution using the Kolmogorov-Smirnov test. Since this produced a significant value in each case, a significant deviation from the normal distribution can be assumed, which is why the non-parametric correlation measure Kendall-Tau-B is used to calculate the correlation. The gross profit margins of the past 5 or 10 years are added and divided by the number of years included to determine the arithmetic mean. This mean gross profit margin is then correlated with the education of the CEOs and Kendall-Tau-B is calculated. In the case of a significant correlation value, a linear regression is also calculated. In this regression, the average gross profit margin is used as a criterion and the education of the CEO as a factor.

Hypothesis 2 assumes a positive correlation between the CEO's experience and the performance of the German cooperative banks. The experience itself is a complex variable which is recorded by means of various questions and values (see Chapter 5.2.2): the 1) length of service of the CEOs in the sense of professional years (general professional experience) and 2) years of service that the CEO has already worked in banks (industry experience) and 3) years in the current position (management experience) as well as 4) the number of previous management positions. This includes four numerical key figures to illustrate experience, which are used as individual variables in the analysis. In addition, 5) a subjective assessment of professional experience is collected, whereby the CVs of the CEOs are evaluated by an external consultant on a five-level scale with regard to professional experience - providing a value from 1 (no experience) to 5 (best experience). These values, too, are first checked for the existence of a normal distribution using the Kolmogorov-Smirnov test and then a correlation analysis of the characteristic values is carried out in order to determine the relationships to the average gross profit margin of the last 5 years (sample 1) or 10 years (sample 2). The values are then included in a multiple regression, gradually incorporating the CEOs' experience indicators to determine which measure of experience can best predict the gross profit margin.

Hypothesis 3 assumes that the average age of executive board members is positively related to the performance of German cooperative banks. For this purpose, the age is determined for all members of the executive board of the banks and the arithmetic

mean of the age data is calculated for the members of the executive board of the bank. After a test of the normal distribution, a correlation between the average age of the executive board members and the gross profit margin is carried out, as is a linear regression.

Hypothesis 4 assumes that the presence of at least one woman on the executive board has a positive influence on the bank's performance. For this purpose, the gender of the members of the executive board is determined and a dummy variable is introduced which indicates whether one of the members of the executive board is female. The influence of this dummy variable on the gross profit margin is then tested using a t-test for independent samples. First, however, it is determined whether the variances of the two groups to be compared (with a woman versus no woman on the executive board) are the same.

Hypothesis 5 assumes a negative influence of more than two executive board members on the performance of the banks. For this purpose, the number of members of the executive board is determined and a dummy variable is introduced that indicates whether an executive board has a maximum of two or more than two members. The influence of this dummy variable on the gross profit margin is then also examined by means of a t-test for independent samples, in which it is determined beforehand whether the variances of the two groups to be compared (a maximum of two members of the executive board or more than two members of the executive board) are the same.

Finally, hypothesis 6 refers to the concept of shared leadership and assumes that the composition of the executive board with two (or more) equal CEOs has a positive effect on the performance of the German cooperative banks. For this purpose, it is determined whether the banks each have at least two CEOs with equal rights. Whether this is the case is expressed by a dummy variable that can assume two values: two CEOs with equal rights versus more than two CEOs with equal rights. The influence of this dummy variable on the gross profit margin is then checked again using a t-test for independent samples and it is determined beforehand whether the variances of the two groups to be compared (at least two CEOs with equal rights versus only one CEO) are equal.

After the hypotheses 1 to 6 have been tested, a summary multiple regression will be calculated in which all relevant variables influencing the gross profit margin will be tested: 1) CEO's education (highest educational achievement), 2) CEO's experience (the indicator that provides the highest gross profit margin predictor in the regression), 3) average age of the executive board members, 4) presence of at least one woman on the executive board, 5) influence of more than two executive board members and 6) composition of the executive board with two (or more) equal CEOs. This regression method extends the results of simple linear regressions to describe the interaction of the factors influencing gross profit margin.

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2.5a Would you like to upload a document with further information?

- ☒ Yes
☐ No

Please use the 'Upload Document' button below.

Type	Document Name	File Name	Version Date	Version	Size
Methods and data	Questionnaire MDX 2020 06 30	Questionnaire MDX 2020 06 30.docx	30/06/2020	1	29,6 KB

2.6 Please specify the benefits of this research:

It is an aim of the research project to gain a better understanding of the connections between management education and bank performance.
A purpose of the research project is to determine whether experience and age actually play a prominent role, as suggested by the literature.
Proving empirically if there is a (positive) connection between the proportion of women in the executive board and bank performance.
Helping to clarify whether different constellations in the executive board composition have an impact on performance.
An outcome of the current research will be a good practice guidance for the supervisory board of German cooperative banks, who appoint future executive board members.

[Click the 'Next' button on the left to go to Section 3 of 9](#)

Section 3 - Method(s) and data source(s)

3. Step 1: Please indicate design/methods included in the study. (Please tick all that apply)

- ☐ Simulation, computational, theoretical research, product design/build, AI development
- ☒ Analysis/exploitation of existing/publicly available data e.g., digital forensic investigation techniques etc
- ☐ Desk-based research e.g., reviews/analysis based only on published and/or grey literature: systematic literature reviews, scoping reviews, policy analysis, realist synthesis etc
- ☐ Case study (in-depth investigations of a single person, group, event or community, may require observations & interviews)
- ☐ Direct observation(s) and/or taking photographs, video recordings etc of participants
- ☐ Action research, insider/participatory research, ethnography
- ☒ Survey e.g., using questionnaire(s)
- ☐ Interview(s)/focus group(s)
- ☐ Field study
- ☐ Lab-based study (excluding computer lab)
- ☐ Experiment/quasi-experiment (e.g., with control groups/interventions)

Now go to Step 2 below:

Step 2: Please indicate data source(s) below. (Please tick all that apply)

- ☐ Simulation/computational generated data, and/or AI development
- ☒ Existing/archived data or documents, e.g., from UK Data Service, external organization, internet site, social media site, mobile device(s), app(s) etc
- ☐ Human participant(s) - children (under 18yrs), vulnerable adults or with impaired mental capacity to give consent
- ☒ Human participant(s) - non-vulnerable groups, but may include adults in an unequal power relationship to the researcher e.g., students/employees
- ☐ Human participant - ONLY my own individual case study data (e.g., single individual personal data)
- ☐ Collection or use of human tissue/products (e.g., blood, saliva)
- ☐ Archived human tissue samples stored under MU HTA licence (e.g., overseas or pre-2004 samples)
- ☐ Archived human tissue samples stored under MU HTA licence with consent
- ☐ Genetically modified/engineered organisms (GMOs)
- ☐ Primary human cell lines (directly cultured from their source organ tissue or blood cells)
- ☐ Well-established cell lines
- ☐ Imported human or non-human samples
- ☐ Human or non-human materials requiring transfer between UK institutions
- ☐ Materials from UK tissue banks
- ☐ Animal(s) or animal parts (not included in above categories)
- ☐ Flora, foliage, minerals or precious artefacts

Please ensure you have completed Step 1 and Step 2 above.

Section 3 – Location of research: To be completed by ALL applicants

3.2 Will the research, or any part of it, require travel to another country or countries?

- ☐ Yes
- ☒ No

3.2a Will this research require in-country travel and/or be conducted in a location that may present potential hazards? (e.g., fieldwork - see info button for guidance)

- ☐ Yes
- ☒ No

Approval from an external research ethics committee

3.3 Do you HAVE evidence of research ethics committee approval from an EXTERNAL UK Research Ethics Committee for this research study? (e.g., another Higher Education Institution etc)

- ☐ Yes
- ☒ No
- ☐ N/A

3.3d Does the research REQUIRE approval from an EXTERNAL Research Ethics Committee e.g., through IRAS or NHS REC (e.g., for research with adults lacking mental capacity) or other HEI/Health REC etc. (See the information button, and/or go to Templates to download the Middlesex Guidance for Research in the NHS and Social Care.)

- ☐ Yes, and I would like to upload the draft form as part of this review process
- ☐ Yes, but I require MU ethical approval first
- ☒ No

Compliance with existing legislation

3.6 Will you ensure that the collection of data and outputs from the research (e.g., products, guidelines, publications etc) will comply with existing legislation (i.e., not require the researcher(s) to engage in illegal activities)?

- ☒ YES: my research will be carried out to comply with existing legislation
- ☐ NO: my research will NOT be carried out in a way that complies with existing legislation
- ☐ I'm UNSURE and need further guidance

3.6a Could the data/outputs from the research (e.g., products, guidelines, publications etc) cause harm to others directly, or through misuse?

- ☐ Yes
- ☒ No

Security sensitive categories

3.7 Does your research fit into any of the following security-sensitive categories? If so, indicate which:

- ☐ Commissioned by the military
- ☐ Commissioned under an EU security call
- ☐ Involve the acquisition of security clearances
- ☐ Concerns terrorist or extreme groups
- ☒ None of the above

Click the 'Next' button on the left to go to Section 4 of 9.

Questions in the next section are dependent on answers previously provided. It is YOUR responsibility to ensure your answers to ALL questions are completed FULLY and ACCURATELY.

Section 4 - Using existing data

4. Please specify details of the existing data set to be used and how it will be obtained.

The economic performance indicators of the individual cooperative banks are taken from or calculated on the basis of available sources. For the calculation, data must be collected from the profit and loss account of the respective bank. This is done by online access to the homepage of the electronic Federal Gazette (www.bundesanzeiger.de) or – if possible – via access to the BISNODE database.

With help of these data the Gross Profit Margin will be calculated.

By offsetting all total income against operating expenses, one obtains the Gross Profit Margin, which is used as a measure of performance in this research project. The Gross Profit Margin is obtained by placing it in relation to the average balance sheet total.

Relevant data on the individual managers will be collected from the following sources: Management Reports, the Bisnode Hoppenstedt Commercial Register, the Bisnode Hoppenstedt Company Database, the Manager Database, the Internet or the homepage of the respective bank, from the imprint of the bank websites, press reports and other publications on the respective bank. Management report: data is retrieved from the Federal Gazette. The data retrieved also include the annual management report. In the management report, all executive board members are listed by name as well as any entry and exit dates if there have been changes in the relevant financial year. From this, the following data can be determined manually: 1) the number of executive board members (executive board composition), 2) the gender of executive board members (since first name and surname are mentioned), 3) the possible date of entry or departure and 4) CEO/non-CEO.

Commercial register: The commercial register contains data on all companies operating in Germany. Some of the publicly accessible information in the register includes the following information: 1) the date of entry of the executive board members, 2) the name of the executive board members and 3) the date of birth of the executive board members.

Bisnode Hoppenstedt Firmendatenbank: Access to the "Bisnode Hoppenstedt Firmendatenbank" is via university access. The database contains the following data, among others: 1) the name of the executive board members, 2) the age of the executive board members, 3) the gender of the executive board members, 4) the date of entry of the executive board members, 5) the board composition (CEO/non-CEO) and 6) the executive board size/number of executive board members.

Bisnode Hoppenstedt Manager Database: The Bisnode Hoppenstedt Manager Database a database containing educational data, information about the gender and place of residence from the managers of all German cooperative banks. At the moment there is no access to this database. It is intended to get access to the database by asking the responsible managers.

Internet / Homepage of the respective bank / Imprint: The following information can be taken from this: 1) the name of the executive board members, 2) the gender of the executive board members, 3) the executive board composition (CEO/non-CEO), 4) the executive board size/number of executive board members.

XING and LinkedIn: Both platforms are career networks and are used by specialists from the academic environment to present their own curriculum vitae. In addition to information on training or studies, data on previous and current activities as well as on work experience in general can also be found here.

Amendment on 29 June 2020:

The data on manager qualities are to be retrieved from social media (Xing, LinkedIn, Facebook etc.) Furthermore, information from press articles will be used.

In order to generate a more solid database and to fill gaps in the manual collection of data, individual members of the executive board will be contacted by e-mail.

The e-mail contains a total of nine questions about age, education, work experience and studies. In the last (open-ended) question, the participant has the opportunity to indicate factors and characteristics that he believes have an influence on the success of a cooperative bank.

In order that the members of the executive board can be contacted, the e-mail addresses of the members of the executive board are collected on the respective bank's homepage.

The data is processed anonymously and data protection regulations are observed. Participants are advised that participation is voluntary and that they can object at any time.

Further details regarding the content of the survey can be found in the appendix. The same document contains both the English and the German version.

4.1 Do you have the necessary approval or licence to access the data?

- ☒ Yes
☐ No
☐ N/A

Please submit evidence of approval to use existing data:

Type	Document Name	File Name	Version Date	Version	Size
Data Access Approval	CorrespondenceBISNODE	CorrespondenceBISNODE.pdf	19/02/2020	1	205.0 KB

Details of participants or other data sources

4.2 Describe the inclusion criteria for data in your study (e.g., the biographical characteristics for your participants (age, sex etc), or the type and size of organisations to be included in your study etc. or location, date of information needed from websites etc)

The main inclusion criteria is 'executive director of a German cooperative bank' with all the 'managerial quality' attributes, and the cooperative banks and their financial data

Recruitment of participants

4.3 Will you need to approach and/or recruit participants?

- ☐ Yes
☒ No

Materials/Equipment

4.4 Please provide details of materials/equipment to be used in the research (e.g., copies of questionnaires, or samples of questions for surveys, indicative interview questions, topic guide/prompts, visual images may need to be submitted with this application). (Make sure you include a version number and date.) Please also provide details of recording devices (e.g., computer software/apps, digital recorders/smart phones etc.) that may be used in the study.

Personal Computer
Microsoft Excel
IBM SPSS

4.4i Would you like to upload further information/copies of materials/details of equipment to be used in the research?

- ☐ Yes
☒ No

4.4a Are you using any specialised instruments, e.g., psychometric questionnaires, screening or diagnostic tests?

- ☐ Yes
☒ No
☐ N/A

4.4b Will you be collecting human tissue e.g., blood, saliva, skin etc or other 'relevant materials' under the Human Tissue Act (2004)? (see info button)

- ☐ Yes
☒ No

4.4c In the event of unexpected disclosures, diagnosis from specialist instruments or observations of inappropriate behaviour by participants that could require notification to others (e.g., police, GP etc) and/or follow-up actions (e.g., referral to other professionals), please describe how this will be handled, and ensure this protocol is covered in your consent form and information form to participants?

N/A

Use of translated materials and communication needs

4.5 Will this research be conducted in a language other than English?

☒ Yes

☐ No

☐ N/A

4.5a Please provide details of the language(s) to be used for data collection and, where relevant, explain how you will ensure the data collection tool(s) preserves the same meaning across different languages used for data collection

The data collection takes place in German.
A comparison of the relevant contents is carried out in both English and German.
The German-speaking supervisor Dr. Andrea Werner ensures that the contents are consistent.

4.5b What arrangements have been made for persons who might not adequately understand English or who have communication needs? (e.g., translation or use of interpreters etc). Provide details of any reasonable adjustments that have been made/may be needed.

N/A

Possible issues

4.18 What possible research issues do you anticipate that have not been covered so far and how will these be managed?

N/A

[Click the 'Next' button on the left to go to Section 5 of 9.](#)

Questions in the next section are dependent on answers previously provided. It is YOUR responsibility to ensure your answers to ALL questions are completed FULLY and ACCURATELY.

Section 5 – Anonymity, confidentiality and consent

5. Will the research involve collecting or processing/analysing PERSONAL data? (i.e., participants are individually recognisable or identifiable in some way, e.g. name, email, phone number, address, IP address, VOICE recordings, VISUALS of a person) or a key/code linking them to their signed consent form?

Click the information button for further guidance.

- ☒ Yes
☐ No
☐ N/A

- 5.1 Please go to the information button to access the online Data Protection GDPR video. A "GDPR Guidance for Researchers" document is available in the Help/Templates of the system. Please ensure you are familiar with the main points and your responsibilities as a researcher, then download and sign the GDPR Declaration from the Help/Templates Menu and upload.

Type	Document Name	File Name	Version Date	Version	Size
GDPR Declaration	Data Protection Declaration Form_Hermann_Josef_Hoegel20200205	Data Protection Declaration Form_Hermann_Josef_Hoegel20200205.docx	05/02/2020	V1	47.7 KB

When collecting/processing personal data consider irreversibly anonymising data, if possible, by removing names and other linked or identifying information which may still identify an individual without their name.

Please ensure you include an appropriate PRIVACY NOTICE to provide to individuals at the point you collect their personal data. (see info button for guidance)

- 5.1a Will you audio and/or visually record interviews, focus groups and/or observations?

- ☐ Yes
☒ No
☐ N/A

- 5.1b Will you need consent from people who appear in visual data (e.g., photos or films or use of drones)?

- ☐ Yes
☐ No
☒ N/A

- 5.1c Will the research involve collecting or processing/analysing SENSITIVE PERSONAL data? (i.e., personal identifiable information along with racial/ethnic origin, political opinions, religious beliefs, trade union membership, physical or mental health condition, sexual life, biometric and genetic data, commission or alleged commission of offence or related information surroundings proceedings of offences) NOTE: biographical information can be collected anonymously.

- ☐ Yes
☒ No
☐ N/A

5.1d For Anonymous Data Collection please confirm:

- ☒ The research data will NOT include participants' names, email/IP addresses or other direct identifiers e.g. auditory or visual recordings
- ☒ The research data will NOT include participants' indirect identifying information e.g., workplace, occupation, salary or age details
- ☒ You will NOT be obtaining consent forms with participants' names/signatures
- ☒ Participants' consent will be implied by their engagement in the study and this will be explained in the Participant Information Sheet or at the beginning of a questionnaire or interview etc
- ☒ The Participant Information sheet will include a clause stating that an individual's responses will not be used in any way that would allow his/her identification. The information sheet should also provide details about any plans for sharing the data.

If any of the above requirements cannot be confirmed, then you will be collecting and/or processing personal data.

Please go back to the beginning of this Section and check your answers.

Click the information button for definitions and guidance. See templates for 'Specific Issues for Researchers/Supervisors to Consider' regarding compliance with GDPR and the OU guide on how GDPR affects research.

Personal data security

5.2 Will lists of identity numbers/codes or pseudonyms for individuals and/or organisations (i.e., linking keys to personal identifiers) be stored securely and separately from the research data and destroyed after the study to avoid any risk of confidentiality being compromised?

- ☒ Yes
- ☐ No
- ☐ N/A

5.2b Please describe the physical security arrangements for storing personal data during the study. (NOTE: It is strongly advised that staff and students store the data on OneDrive only. Some RECs require UG and Masters students to store their data on their supervisor's OneDrive area with shared access.)

It is intended to use OneDrive.
Files are password protected.

5.2c How will you ensure the confidentiality of personal data?

Personal data are collected within the first step. After that only anonymised data will be processed.

5.2d Who will have access to participants' personal data during the study?

Only the researcher (myself) will have access to the data.

5.2e Where will the data generated by the study be analysed and by whom?

Data will be generated and analysed in Germany by the researcher (myself).

5.2f Who will have control of and act as the custodian for the data generated by the study? (It should not be transferred outside the European Economic Area (EEA) without a formal agreement.)

Only the researcher (myself) will have control and acts as the custodian for the data generated by the study.

5.2g How long will personal data be stored or accessed after the study has ended, and how will it be destroyed? (See info button for guidance)

After the study has ended and the outcomes have been published (for the purposes of the thesis and possibly following papers) all personal data will be destroyed with help of a suitable software tool.

Please complete the 'Data Protection Checklist for Researchers' and consider the 'Specific issues regarding GDPR'. (Make sure

you include a version number and date.)

Type	Document Name	File Name	Version Date	Version	Size
Data Protection Act checklist	(LSI) Data Protection Checklist_Hermann_Josef_Hoegel_20200205	(LSI) Data Protection Checklist_Hermann_Josef_Hoegel_20200205.docx	05/02/2020	V1	56.9 KB

Written informed consent

5.3 Will you need to obtain Informed Consent directly from research participants?

NOTE: Prospective, voluntary and fully-informed consent is a fundamental principle of research ethics - regardless of whether you are collecting anonymised, personal or sensitive personal data.

To comply with the GDPR, you cannot collect sensitive personal data without EXPLICIT consent. This means you must ensure that you are fully informing your participants about the research and how their data will be used, stored, and shared etc, and allow them to agree or disagree to each term of the research (giving explicit consent) before they take part in the study.

☒ Yes

☐ No

☐ N/A

5.3a Please specify how this will be achieved (e.g., using participant information sheets and written informed consent forms for participants to sign, or through an oral consent process): (See information button for guidance)

Participants' consent will be provided by their completion and return of their questionnaire. Information about the study and what the information gathered by the questionnaire will be used for will be clearly explained at the beginning of the questionnaire.

5.3c Is consent being sought for the dataset to be used for future research projects (i.e., in a way that allows all or some of the data you collect to be 'open' and maximises the value of the data for wider research use)? (see information button for guidance)

☐ Yes

☒ No

☐ N/A

Procedures for participants unable to give valid (informed) consent

5.4 Does the research involve participants who are unable to give valid (informed) consent (e.g., children or adults lacking mental capacity)?

☐ Yes

☒ No

5.4f How will the participants' objections to participate be recognised and respected?

N/A

Accessing participants within MIDDLESEX UNIVERSITY and/or in EXTERNAL organisations (i.e., through gatekeepers)

5.5 Will you need to obtain PERMISSION (Letter of Access)/written informed consent directly from a gatekeeper (e.g., person responsible for access to the participants e.g., within Middlesex, or external organisation, business, school, sports teams, social media site etc)? see info button for guidance

- ☐ Yes
☐ No
☒ N/A

Covert observation and deception

5.6 Will it be necessary for participants to take part in the study without their knowledge and consent at the time, or by deception e.g., covert observation of people in non-public places?

- ☐ Yes
☒ No
☐ N/A

5.6b Will the research take place in a public space, (either physical or virtual e.g., a town or meeting open to the public or public tweets, a public chat room) where participants might reasonably expect their behaviour to be observed? (see information button)

- ☐ Yes
☒ No
☐ N/A

Voluntary participation

5.7 Will you inform participants that their participation is voluntary and that they have a right to withdraw from the research, without penalty, at any time?

- ☒ Yes
☐ No
☐ N/A

Confidentiality

5.8 Will you tell participants that their data will be treated confidentially and the limits of confidentiality and anonymity will be made clear in your Participant Information Sheet? (For guidance on potential obligation to disclose information - see information button)

- ☒ Yes
☐ No
☐ N/A

Managing withdrawal of consent

5.9 Will you have a process for managing withdrawal of consent up to a specific point in the data collection process? (and explain to participants in the information sheet the implications for their data if it is collected on an anonymous basis) (see info button for guidance)

- ☒ Yes
☐ No
☐ N/A

5.9a Please provide further details and rationale:

The data can be withdrawn by the participant within 14 days if they change their mind about participation. This will be communicated in the participant information sheet.

Details for participant information

5.10 Will you provide your contact details, as well as those of your supervisor (for students), and/or the Research Ethics Committee (for staff) to your participants (as per the PIS template), so they know who to contact in case of questions or complaints? (see info button)

- ☒ Yes
☐ No
☐ N/A

5.10b Please upload your Participant Information Sheet (PIS) and/or Consent Form.

Type	Document Name	File Name	Version Date	Version	Size
Participant Information Sheet	MLO PIS template_HH_ 2020 06 30	MLO PIS template_HH_ 2020 06 30.docx	30/06/2020	1	25.5 KB
Participant Information Sheet	MLO PIS template_HH_ 2020 06 30_German_Translation	MLO PIS template_HH_ 2020 06 30_German_Translation.docx	30/06/2020	1	30.9 KB

Internet and intranet based research

5.13 Does the research involve the use of the internet, intranet or social media platform(s)?

- ☒ Yes
☐ No

5.13i Provide details of the internet search terms, intranet, app(s) or social media platform(s) to be used and/or data to be used/analysed:

Xing
XING is a Hamburg-based career-oriented social networking site, operated by New Work SE. The site is primarily focused on the German-speaking market, alongside XING Spain, and competes with the American platform LinkedIn.

LinkedIn
LinkedIn is a social networking website for people in professional jobs. Users can make connections with other people they have worked with, post their work experience and skills, look for jobs, and look for workers.

Both platforms are career networks and are used by specialists from the academic environment to present their own curriculum vitae. In addition to information on training or studies, data on previous and current activities as well as on work experience in general can also be found here.

5.13ii Have you read the Terms and Conditions of the internet/intranet sites, app(s) or social media platforms you intend to use?

- ☒ Yes
☐ No

5.13iii Have you read the Acceptable Use Policy (AUP)? (See Help/Template menu to download)

- ☒ Yes
☐ No

5.13ia Does the research involve analysing users' data/posted information or asking users to respond to intranet (e.g., on MyLearning) or internet surveys, emails, chatroom discussions, blogs, interactive games, social media and networking sites etc?

- ☒ Yes
☐ No

5.13a How will you obtain permission from the website authors, or informed consent from participants, and ensure anonymity and

protect confidentiality in an environment that generates significant amounts of background information e.g., data logs, IP addresses, cookies and caches and/or with low levels of system security? Please provide details:

By agreeing to and abiding by the user guidelines and privacy policies of the Xing and LinkedIn platform.

5.13b How will you protect yourself (and co-researchers) from online abuse e.g., from trolls and/or cyber attacks etc? Do you plan to meet with participants e.g., for follow-ups?

There are no meetings planned. Furthermore the computer is protected by antivirus-software.

Debriefing participants

5.14 What impact of change may result from your research on participants/organisations/researchers or others directly or indirectly involved in the study?

Recruitment procedures may become more professional. In this respect, potential board members will benefit.

Will you need to provide a DEBRIEFING to avoid any possible misconceptions and ensure that participants understand the research study (usually required for experimental design research)?

- ☐ Yes
- ☐ No
- ☒ N/A

Incentives and payments to researchers

5.16 Are there likely to be any personal payments, benefits or other incentives that the Principal Investigator and/or other research collaborators may receive for conducting this research?

- ☐ Yes
- ☒ No

[Click the 'Next' button on the left to go to Section 6 of 9](#)

Questions in the next section are dependent on answers previously provided. It is YOUR responsibility to ensure your answers to ALL questions are completed FULLY and ACCURATELY.

Section 6 – Avoiding harm: risk assessment and management, safety and legal issues

6.1 Does the study involve drugs, placebos or other substances (e.g., food substances, vitamins) to be administered to the participants?

- ☐ Yes
☒ No

Ultrasound, imaging techniques & non-ionising radiation

6.2 Does the study involve imaging techniques such as MRI scans, ultrasound or sources of non-ionising radiation (e.g., lasers)?

- ☐ Yes
☒ No

Physically intrusive procedures

6.3 Does the study involve physically invasive, intrusive or potentially harmful procedures of any kind e.g., physical exercise?

- ☐ Yes
☒ No

Sensitive topics

6.4 Will the research include sensitive topics? (e.g., sexual activity, drug use etc) ?

- ☐ Yes
☒ No

Potential for participant disclosure

6.5 Could the research lead to disclosure from the participant of confidential information (e.g., concerning their own involvement in illegal or other activities that represent a threat to themselves or others, such as professional misconduct)?

- ☐ Yes
☒ No

Potential for more than mild discomfort

6.6 Is pain, a change of mood or more than mild discomfort likely to result from the study?

- ☐ Yes
☒ No

Stress and anxiety

6.7 Could the study induce psychological stress or anxiety or cause harm or negative consequences beyond the risks encountered in normal life?

- ☐ Yes
☒ No

Touch

6.8 Will the research require the researcher(s) to touch/lay hands on participants?

- ☐ Yes
☒ No

Data collection sessions

6.9 Please provide details of length of each data collection session, number of sessions and location of data collection with rationale and information on how participants will be supported.

Data will be collected by a questionnaire, starting in July and ending in September.
Participants will be informed about data protection and anonymously data processing.

Risks to researcher from participants

6.10 Could being alone with individual participants or group of participants place you at risk?

- ☐ Yes
- ☐ No
- ☒ N/A

Safety issues

6.11 Are there any adverse risks or safety issues (e.g., from potential hazards) that the research may present for you and/or for your participants or others? (Please see info button)

- ☐ Yes
- ☒ No

Support for participants

6.13 Will it be necessary for a researcher to be available to discuss the study with participants and monitor any potential negative effects or misconceptions?

- ☐ Yes
- ☒ No
- ☐ N/A

Potential impact of the research

6.14a Will you be selecting data from the wider data set and/or participants views, that may not accurately represent the wider data set and/or participants' views, which may cause bias? (Please see info button)

- ☐ Yes
- ☒ No

6.15 Please state any negative impact(s) that might result from your research, and how this might be managed?

There are no known negative effects that could arise from the results of the research project.

[Click the 'Next' button on the left to go to Section 7 of 9.](#)

Questions in the next section are dependent on answers previously provided. It is YOUR responsibility to ensure your answers to ALL questions are completed FULLY and ACCURATELY.

Section 7 – Research funding and resources

7.1 Is the research part of an application for external funding or already funded e.g., by the ESRC?

☐ Yes

☒ No

Resources for research

7.2 Provide details of any additional resources required for your research (e.g., equipment, travel costs, devices needed to access data etc), how these resources will be obtained, estimated costs and who is covering the cost.

There are no additional resources required.

[Click the 'Next' button on the left to go to Section 8 of 9.](#)

Questions in the next section are dependent on answers previously provided. It is YOUR responsibility to ensure your answers to ALL questions are completed FULLY and ACCURATELY.

Section 8 – Final Check – to be completed by ALL applicants

8. Please tick whether your research involves any of the following.

- ☐ ANIMALS or animal parts
- ☐ DARK WEB access required and/or researching illegal activities
- ☐ DRUGS, placebos or other substances (e.g., food, caffeine) given to participants
- ☐ GMOs: Genetically modified/engineered organisms
- ☐ HUMAN CELLS: Primary cultured (not commercially available)
- ☐ HUMAN TISSUE/BLOOD: Collection/analysis or use other human body parts
- ☐ Adults who lack MENTAL CAPACITY to give consent
- ☐ NON-compliance with legislation (engagement in illegal activities)
- ☐ RADIOACTIVE materials
- ☐ Potential to have a negative impact on the REPUTATION of the university
- ☐ SECURITY SENSITIVE research e.g., terrorist or extreme groups
- ☐ SERIOUS HARM likely to others or the environment
- ☐ TRAVEL to regions not recommended by the Foreign and Commonwealth Office (FCO) website
- ☒ None of the above

8.a Please tick whether your research involves any of the following, (see information button for guidance/definitions and information resources or download the definition from Templates in the Help menu)

- ☐ CHILDREN (under 18yrs) or VULNERABLE ADULTS (e.g., with a learning disability or cognitive impairment, or in an unequal or dependent relationship with the researcher, in hospital etc)
- ☐ CRIMINAL OFFENCE DATA: Personal data about criminal convictions or offences, for which you must have both a lawful basis under Article 6 and either legal authority or official authority for the processing under Article 10.
- ☐ DECEPTION or COVERT activity: Research conducted without participants' informed consent
- ☐ EXPERIMENTS with human participants (e.g., pre-post interventions, or inclusion of control groups)
- ☐ FINANCIAL inducements (other than reasonable expenses and compensation)
- ☐ GATEKEEPER: Requires permission from a manager, headteacher etc to allow access to participants in an organisation
- ☐ INTRUSIVE procedures or excessive repetitive testing or physical exercise
- ☒ INTERNET use: data collection from social media sites, apps, emailed questionnaires, online surveys or visual/vocal methods where participants may be identified and/or researcher is vulnerable to cyberbullying/attacks
- ☐ Medical DEVICES, imaging techniques, ultrasound or ionising & non-ionising radiation, EEG
- ☒ PERSONAL DATA (NON-SENSITIVE): Collection and/or processing of data which identifies participants (e.g., participants' name, email, IP address, code/key linked to their signed consent form etc or other characteristics that could identify participants)
- ☐ PERSONAL DATA (SENSITIVE): SPECIAL CATEGORY DATA: i.e., personal data that is sensitive; racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, genetic data, biometric data, data concerning health or data concerning a natural person's sex life or sexual orientation
- ☐ PROGRAM/SYSTEMS/MOBILE DEVICES/DRONES & PHONE APPS: use or development with potential to collect/examine personal/sensitive data (e.g., stored on phones, sat navs, smart TVs etc) and/or utilise AI which has potential for problematic negative outcomes
- ☐ SAFETY: Researcher(s) physical and/or psychological health may be at risk (e.g., field work, travel to another country, research with gangs, in prisons etc)
- ☐ SENSITIVE/POTENTIALLY SHOCKING material: e.g., questions/topics/materials/photos/recordings (e.g., illegal, violent, sexual behaviours, politics, drugs use etc)
- ☐ SHARING CONFIDENTIAL DATA beyond initial consent (e.g., when there is a risk of participant disclosure)
- ☐ STRESS, ANXIETY (e.g., panic attacks, claustrophobia) HUMILIATION, HARM or negative consequences beyond those encountered in everyday life and/or work e.g., induced motion sickness
- ☐ None of the above

8.1 Does the research involve any ethical and/or legal issues not already covered that should be taken into consideration?

- ☐ Yes
- ☒ No

8.1b Are there any other documents you would like to upload?

- ☐ Yes
☒ No

Data protection issues

8.2 Do you or your researchers require further information on requirements for data protection? Please be aware that personal data breaches under the GDPR (from May 2018) must be reported to the Data Protection Officer at MU within 72 hours. Maximum fines can be up to 20m Euros or 4% global turnover.

- ☐ Yes
☒ No

Other ethical and/or legal issues

8.3 Does the research raise any other risks to safety for you or others, that would be greater than you would encounter in everyday life?

- ☐ Yes
☒ No

Conflict of interests

8.5 Are there any conflicts of interests to be declared in relation to this research?

- ☐ Yes
☒ No

Data management, ownership and intellectual property

8.6 Do you have a Data Management Plan? (If you are applying for research funding you may be required to submit a Data Management Plan as part of your grant application.)

- ☐ Yes
☒ No

It is important that you are aware of your responsibilities regarding your research data.

The MU Data Management Policy and an example template can be download from the templates option in the Help menu. Further information can be found at <http://www.mdx.ac.uk/our-research/research-data>

8.7 Who will be the owner of the data from this research?

Usually the owner will be the Principal Investigator, and the supervisor for undergraduate and master's level students' projects. Doctoral students are usually considered to be Principal Investigators and the owners of their data. However, such issues are worth clarifying and you may need to check who owns the data if collecting data within an organisation.

The Principal Investigator:

8.8 If there are any intellectual property issues regarding any documents or materials you wish to use, provide details below:

None

Click the 'Next' button on the left to go to Section 9 of 9.

Questions in the next section are dependent on answers previously provided. It is YOUR responsibility to ensure your answers to ALL questions are completed FULLY and ACCURATELY.

Section 9: Declaration

9.4 As a student researcher I confirm that I have:

1. Read and agree to abide by the relevant Code(s) of Ethics appropriate to my research field and topic.
2. Reviewed the information provided in this form and believe it accurately represents the proposed research.
3. Read and agree to abide by the University's *Code of Practice For Research: Principles and Procedures*.
4. To inform my Research Ethics Committee of any adverse effects or changes to the research procedures.
5. Understood that research/data may be subject to inspection for audit purposes and I agree to participate in any audit procedures required by the Research Ethics Committee (REC) if requested.
6. Understood that personal data about me contained in this form will be managed in accordance with the Data Protection Act.
7. Completed and signed a risk assessment for this research study (if applicable).

To indicate that you 'Agree' with the above declaration please check the box below.

☒ Agree

Once you have agreed to the declaration and requested your Director of Studies/Supervisor's or Academic Consultant's signature. Once he or she 'signs' your application, you will be able to 'submit' your application.

After feedback from your supervisor, or the reviewers, remember to SAVE your changes before resubmitting.

Signed: This form was signed by Ms Louise Boulter (L.Boulter@mdx.ac.uk) on 01/07/2020 08:47

9.4a As the Director of Studies/Supervisor/Academic Consultant for this research I confirm that I have:

1. Reviewed all the information submitted with this research ethics application and believe it accurately represents the proposed research.
2. Accept responsibility for guiding the applicant so as to ensure compliance with the terms of the protocol and with any applicable Code(s) of Ethics.
3. Understand that research/data may be subject to inspection for audit purposes and I agree to participate in any audit procedures required by the Research Ethics Committee (REC) if requested.
4. Confirm that it is my responsibility to ensure that students under my supervision undertake a risk assessment to ensure that health and safety of themselves, participants and others is not jeopardised during the course of this study.
5. Understand that personal data about me contained in this form will be managed in accordance with the Data Protection Act.
6. Seen and signed a risk assessment for this research study (if applicable).
7. If this is an application that the student deems to be **minimal risk research project** (see question 3.1c) please check this is consistent with the information provided and your understanding of the project. If it is not, then do NOT 'sign', but 'reject' the application and guide the student to revise the information provided.

Please note that by clicking the **'Sign'** action tile on the left you are agreeing to the above declaration, and approving the application if it is a minimal risk application. Alternatively you can click the **'Reject'** action tile to refer this back to the student for further work before submission.

Appendix 7: Summary of good practice recommendations

When appointing new executive board members, supervisory boards should consider the following good practice recommendations:¹³³ first, the candidate's education should include a bank apprenticeship, university-level studies in business administration or a bank-related subject, and additional training leading to qualification as a certified bank manager; second, a candidate should not have held more than one previous position as an executive board member; third, ideally, younger board members should be appointed; for example, younger than the median (53 years)¹³⁴; fourth, the supervisory board should ensure that the executive board never includes more than the two board members required by law; fifth, induction and transition periods should be made as short as possible in the event of a change in the executive board members; sixth, it is advisable not to have a single CEO, but two equal CEOs; seventh, consider limiting service contracts to a maximum of 5 years.

¹³³ While also considering ethical and legal considerations.

¹³⁴ The results of the statistical analyses indicate that banks with younger board members perform better than banks with older board members. At the same time, it must be pointed out that discrimination on the basis of age is not permitted under the General Equal Treatment Act (in German, *Allgemeines Gleichbehandlungsgesetz, AGG*).

Appendix 8: VIF values from the multicollinearity tests

Variable	VIF
Female board members	1.024
Number of board members	1.132
More than one CEO	1.217
Unemployment rate	1.961
Insolvency rate	1.861
Gross value added	1.205
Average age	1.019

Table 52: VIF values from the multicollinearity tests for regression analysis for 5-year Gross Profit Margin with the control variables unemployment rate, insolvency rate, gross value added and independent variables from Hypotheses 1–4 (number of board members, more than one CEO, average age, female board members)

Variable	VIF
Female board members	1.030
Number of board members	1.155
More than one CEO	1.226
Unemployment rate	1.964
Insolvency rate	1.868
Gross value added	1.193
Average age	1.020

Table 53: VIF values from the multicollinearity tests for regression analysis for 10-year Gross Profit Margin with the control variables unemployment rate, insolvency rate, gross value added and independent variables from Hypotheses 1–4 (number of board members, more than one CEO, average age, female board members)

Variable	VIF
Number of board members	1.017
Unemployment rate	1.039
Average age	1.168
Education categories 1-7	1.124
Experience categories 1-6	1.329
Previous positions as a board member	1.082

Table 54: VIF values from the multicollinearity tests for the large-scale regression analysis for 5-year Gross Profit Margin with control variable unemployment rate and independent variables number of board members, average age, including variables from Hypotheses 5 and 6 (education categories 1-7, experience categories 1-6, previous board positions)

Variable	VIF
Number of board members	1.023
Unemployment rate	1.048
Average age	1.174
Education categories 1-7	1.141
Experience categories 1-6	1.409
Previous positions as a board member	1.104

Table 55: VIF values from the multicollinearity tests for the large-scale regression analysis for 10-year Gross Profit Margin with control variable unemployment rate and independent variables number of board members, average age, including variables from Hypotheses 5 and 6 (education categories 1-7, experience categories 1-6, previous board positions)

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