REGULATORY INFLUENCE ON BUSINESS MODEL AND INDIVIDUAL BEHAVIOUR IN A EUROPEAN MULTINATIONAL BANK

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- For my love, Veronika -

Abstract

Purpose:

In response to the 2007-2008 financial crisis, regulatory requirements have increased over the years, forcing banks, employees and regulators to act in a sustainable manner. This thesis investigates the change and transformation process of major banks from an external and internal perspective. Therefore, the purpose of this thesis is to explore the implications of the regulatory influence on the banking business model and personal behaviour and motivations of bank employees and regulators from a multinational systematically important bank in the European Union.

Design/methodology/approach:

The researcher's epistemology concentrates on facts (positivist) and thinking (interpretivist), but with a focus on thinking. Also, researcher's axiology is not value free and it has biased opinions with possible generalizations. For the research philosophy, critical realism is chosen by bridging the existing and independent reality with individual views. As this research concentrates on opinions and attitudes of involved participants, the mixed method approach is applied. The choice of the research design is a case study. For the research methods, secondary data is collected for the quantitative part and semi-structured expert interviews are used for the qualitative part.

Originality/value:

This thesis contributes to knowledge in the field of change and transformation process for multinational banks, due to the growing regulatory requirements of previous years. It provides a unique analysis of the changes of the banking business model and the related changes of human behaviour and job motivation. In particular, the employees of a bank (ranging from new staff to established experts and from managers to members of the regulatory authorities) who give personal and deep insights into the challenges they face in their workplaces and reflect on the reasons for their actions and expectations.

Student declaration

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in the United Kingdom or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the University.

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List of abbreviations

ADKAR	Acronym for five Blocks of Successful Change
AG	German Public Limited Company (Aktiengesellschaft)
AIFMD	Alternative Investment Funds Managers Directive
ALS	Action Learning Sets
AMA	Advanced Measurement Approach
BaFin	German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht)
BCBS	Basel Committee on Banking Supervision
BIA	Basic Indicator Approach
BIS	Bank for International Settlements
BMW	Bayerische Motoren Werke AG
BRRD	Bank Recovery and Resolution Directive
BuBa	German Central Bank (Deutsche Bundesbank)
CAQDAS	Computer-assisted Qualitative Data Analysis Software
CAR	Capital Adequacy Ratio
CDO	Collateralized Debt Obligation
CDO	Chief Data Officer
CDS	Credit Default Swaps
CEO	Chief Executive Officer
CEPS	Centre for European Policy Studies
CET1	Common Equity Capital Ratio
CFO	Chief Financial Officer
CHRO	Chief Human Resources Officer
CIR	Cost-Income-Ratio
CO_2	Carbon Dioxide
CoE	Cost of Equity
CRD IV	Capital Requirements Directive IV
CRO	Chief Risk Officer
CRR	Capital Requirements Regulation
CV	Curriculum Vitae
DBA	Doctor of Business Administration
DGSD	Deposit Guarantee Scheme Directive
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EEA	European Economic Area
EFTA	European Free Trade Association
EIOPA	European Insurance and Occupational Pensions Authority
ENISA	European Union Agency for Network and Information Security

ESCB	European System of Central Banks
ESFS	European System of Financial Supervision
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETC	Enterprise Transformation Cycle
EU	European Union
EUR	Euro
FinTechs	Financial technology sector/companies
FSB	Financial Stability Board
G10	Group of Ten (most important countries)
G20	Group of Twenty (most important countries)
GDP	Gross Domestic Product
GmbH	German limited Company (Gesellschaft mit beschränkter Haftung)
G-SIBs	Global Systemically Important Banks
G-SIFIs	Global Systemically Important Financial Institutions
IAIS	International Organization of Securities Commissions
IASB	International Accounting Standards Board
IBM	International Business Machines Corporation
IFRS	International Financial Reporting Standard
IOSCO	International Organization of Securities Commissions
IPO	Initial Public Offering
IRB	Internal Ratings Cased
IT	Information Technology
KfW	German state-owned Investment and Development Bank (Kreditanstalt für Wiederaufbau)
KPI	Key Performance Indicator
LCR	Liquidity Coverage Ratios
LLC	Limited Liability Company
M&A	Mergers and Acquisitions
MiFID	Markets in Financial Instruments Directive (Directive 2014/65/EU)
NCA	National Competent Authorities
NSFR	Net Stable Funding Ratio
OFI	Other Financial Institution
OpRisk	Operational Risk
OTC	Over the Counter
P/B	Price-to-book
RD1	Approval of Research Degree
RESC	Research Ethics Sub-Committee
RoA	Return-on-Asset
RoE	Return-on-Equity

RWA	Risk Weighted Assets
S.p.A.	Società per azioni (Italian public limited company)
SIFIs	Systemically Important Financial Institutions
SLR	Supplementary Leverage Ratio
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
TLAC	Total Loss-Absorbing Capacity
TSA	The Standardized Approach
U.S./ US/ USA	United States of America
UK	United Kingdom
USD	US Dollar

1 Introduction

1.1 Personal motivation and originality of the research

While working as a student I was employed in a bank, a position that continued after my graduation. Over the subsequent years, I had the opportunity to work in various positions and within a range of hierarchies. As I matured, I asked myself the question of why a bank and its employees, myself included, handle change and transformation so badly. Everyone knows that the traditional personal service in the bank is used less and less by customer as banking has evolved and the offers and services shifted more and more towards internet-based digital banking. Ultimately, this has the advantage for them that they can carry out their banking transactions at any time of the day or night using their smartphone, laptop or tablet. However, new challenges arose in banking, both negative and positive, as old structures and systems were challenged and needed urgent re-evaluation in a race for relevance and purpose.

During the meetings, conferences, and also lunch time or free time activities, my colleagues often discussed that this has fundamentally changed the way that banking needs to operate as it has put more focus on regulatory demands, which are often excessive and not usually target-oriented. Frequently, this type of discussion started when someone complained or started an argument about the topic and other participants then joined in on the conversation. What became apparent was that nobody immediately stated their honest personal opinion, but instead started to complain generally about the issue.

The intended contribution to theoretical knowledge is to take up this issue and consider whether banking regulation has an impact on the banking business model of a systemically important bank and what kind of effects it might have on job satisfaction and personal motivation.

In case of practical applicability, my aim is to examine the asymmetric communication and help to develop a platform for joint working and to identify potential motivational reasons for working in a bank that are relevant now and especially in the future; where a bank as an organisation and my colleagues as individual persons and employees get a clear understanding of each other's aims, purposes and motivations.

As a ‘bank insider’, I can offer my personal opinion and communicate directly with colleagues and the regulator. With this knowledge and the access to the bank's participants, I aim to analyse the change and transformation process scientifically and hope that my research for regulatory influence on business model and individual behaviour in a European multinational bank is carried out successfully.

1.2 Research aims, questions and objectives

In 2007 a financial crisis occurred and, consequently, an urgent need to avoid significant future turmoil was brought back to the forefront of the banking sector. Subsequently, the regulatory institutions developed several measurements and action plans to control and influence the risk appetite of the financial industry (Ferran & Babis, 2013). The research topic focuses on the following practical issue: regulatory influence on business model and individual behaviour in a European multinational bank. This subject is concerned with the regulation of the financial industry by the state supervisory authorities and the required improvements of the banking sector on their business strategy, with sustainable orientation on the global economy.

The practical case is to show for one of the largest German banks, the UniCredit Bank AG (a subsidiary of the global system-relevant UniCredit Group), that the impacts of the regulatory actions are challenging for the employees and explore how and also why it enhances a deviation between the governmental regulatory requirements and the internal banking processes.

The aim is to determine the impact and influence of these regulations on the banking business model and also the involved individuals in terms of how, and above all why, it impacts on their behaviour in the workplace. The biggest challenge and intention is not only to describe how banking has changed and how the workplace has changed (which requires a possible transformation because there are already available first research results), but rather to explore what the individual affected people feel in the situation and to consider why they motivate themselves and how they deal with the transformation. All this should be considered from their own subjective perception, where the expectations are clearly revealed, but should also take into account the reality and truth of this situation. Such insights can mostly be gained through personal interviews.

To cover the most important potential dimensions, the interviewed persons are classified according to their competence area and position. These are: elites, who are managers; experts as knowledge carriers; juniors, who are beginners in their banking career.

For this thesis, the following two aims are set:

1) Exploring the regulation influence on the banking business model
2) Evaluating the impact of increasing regulatory demands on bank and regulators employees upon their behaviour and attitudes

As the aim is to determine evidence that there is an influence of regulation on the behaviour of the employees in a multinational bank, the following two research questions are asked:

1) How does the regulation influence the banking business model?
2) What is the impact of increasing regulatory demands on banks and regulators employees upon their behaviour and attitudes?

The aims and the related questions are transferred into three objectives for examination:

1) to evaluate the impact of increasing regulatory demands and identify the European authorities' regulation requirements for banks in case of the financial crisis of 2007-2008
2) to investigate the impact of the increasing regulatory requirements on the banking business models of European banks, and for a systemically important bank, such as the UniCredit Bank AG, through the change and transformation process
3) to evaluate the impact upon human attitudes and behaviour during the change process for managers, experts and juniors experienced with the UniCredit Bank AG and German regulatory authorities

1.3 Research design and conceptual framework

In order to fulfil the chosen aims and objectives, the choice of methodology and methods and the ethical principles are necessary. By breaking down the overall picture of the chosen paradigm to the proposed research methods, the position of a critical realist is selected who assumes this is an independently existing world while remaining aware that it can only be accessed incompletely, and research will inevitably be shaped by human opinion. In the position of a critical realist there can be a bridge between both extreme positions: positivism (objective view) and interpretivism (subjective view).

As the research also concentrates on the opinions and attitudes from the involved interview participants, the mixed method approach is chosen (Creswell, 2013; Creswell & Clark, 2007). The perception is a complex combination of both roles: structural factors of the world and human behavior. In an explanatory design and participant selection model there is the possibility to combine each to provide the quantitative and qualitative view.

For resolving the first research objective, firstly, the aim is to collect given facts and figures that are associated with general and banking-specific regulations. Afterwards in the analysis the relationship is examined between the perception of the new regulations by the banking industry, incorporating all relevant information about the general market and business regulation, European financial regulation framework, bank business management and model. In the analysis, as a critical realist, it is a fact that there could be no stable conceptual frameworks to assist in analysing the data.

Then, for the second objective, the change in banking regulation on the business models of European banks and the effect on UniCredit Bank AG are examined. Here, the extent to which a change or transformation effects the banks is discussed in detail, also taking into consideration the personal aspects of the interviewees.

In the third objective, the main issue is to examine the regulatory demands, change and transformation process and human behaviour and observe the human beings and their manner of acting in the workplace. Also, the literature review provides basic knowledge on human behavior at a workplace. Using this knowledge helps to develop relevant questions for the questionnaires and also enables for accurate selection of candidates for a 'deep dive' interview.

For the qualitative data collection and outcomes, the strategy is to get in contact with the selected participants. A personal interview face-to-face, has the opportunity to ask follow-up questions which is unlike mail surveys. The respondent has the advantage to talk about their opinions and impressions and is not only answering the questions. This provides the opportunity to react to the response and derive new questions for a substantial discussion, but before starting the qualitative data collection the right participants have to be identified.

The status for the selection of participants is that over 50 potential candidates are asked if they would be involved in an interview within the UniCredit Bank AG. There are 25 declines. Out of the remaining 25 persons, a selection of 15 participants is chosen. This means that a wide and effective coverage of experts could be ensured based on their job profile and experience level. From the UniCredit Bank AG five participants will be interviewed from the elite category, five from expert and five from junior level. Additionally, from the regulatory institution there are 2 persons, an expert and a manager, available.

The selection of the interview experts is concentrated to classify the potential participants according to their institution, that is the multinational wholesale bank UniCredit Bank AG and the European regulatory authorities. Additionally, the UniCredit Bank AG is classified in terms of working organization and job experience. The classification in sales, division, competence lines and subsidiary are important to know, as the potential participants have different influence from the regulations. The regulatory authorities have no further classification.

The further classification of the participants relates to the expert level. Three types of characters are identified:

a) Elites - powerful managers and decision makers, but they have limited specialist knowledge.
b) Experts - established expertise, but they are less involved in the decisions processes of a manager.

c) Juniors - started their career after graduation, but have only a general theatrical knowledge.

Questioning the elites, experts and juniors on their view of the research objective derives qualitative answers on this issue beyond the objective facts. Here it is claimed that the social interaction has an important impact on the knowledge and influence on its content.

The final interpretation will combine the various perception of the new regulations in the banking industry and the outcomes of the qualitative interview, where the involved persons respond on the changing work environment and their attitude to it. It describes how banking regulation, as an important steering mechanism, has been successfully implemented in Europe and also in UniCredit Bank AG after the financial crisis of 2007-2008. Reference is made to the way in which banks have adapted their business models and how internal processes at the bank have changed quickly but sustainably.

For a deeper analysis, the insights are provided by selected interview partners from both the bank and the German regulator, and the personal (rather than the official) opinion is requested to a greater extent. In addition, the interviewees report on how they themselves have accepted the change, what part they have played in it and why they see themselves as good bankers by considering their personal motivations. The conclusion discusses the opportunities that banks and employees have to improve their cooperation on both sides and to make them sustainable.

Additionally, the protection of the interview partners is required. Therefore, the ethical principles are concerned with the treatment of others. Especially for the interviews, there will be consideration given to the privacy of this study participants and their responses will be protected. Participants and mentioned persons should only be named after request to ensure the anonymity in the research. Overall, in terms of questions relating to privacy the university's Research Ethics Sub-Committee (RESC) can be referred to.

1.4 Thesis structure

The following 'Literature Review', in chapter 2, provides an overview of the considered relevant sources and information for this thesis. The literature review focuses on the issues of market and bank regulation, the resulting laws and the directives of the European supervision authorities for banking industries. It then examines the business model of European banks before, during and after the financial crisis of 2007-2008. In addition, the focus is on UniCredit Bank AG and its development as a case study. Finally, it is considered how human behaviour and job satisfaction can be measured and shaped by models and the empirical evidence on this is explored.

The 'Methodology', in chapter 3, clarifies which methods and methodologies are chosen to answer the aims and objectives. A justification for the choice of the research paradigm as interpretivist and the chosen research philosophy as critical realist follows. In context, axiology, epistemology and ontology are discussed. In order to create a bridge between facts and opinions, the application of mixed methods sequential explanatory design is explained and a case study is used as research design. The research methods show how the collected data and interviews are analysed in this thesis and the ethical aspects are considered.

The next chapter 4 'Interview' first describes the definition and selection process of the experts for the semi-structured interviews resulting from the case study on UniCredit Bank AG. In addition, it explains how to measure the differences between given facts and personal opinions using a trust scale. It is explained how the semi-structured interviews are constructed, conducted and analysed. Subsequently, the six main questions of the interview partner's intention are presented.

The gaps from the literature review and the expert interviews are critically examined and analysed in the 'Discussion' chapter 5. The research aims, questions and objectives are answered. In addition, the limitations are mentioned and further research areas that could be explored in the next steps are outlined.

Finally, in the 'Conclusion', in chapter 6, the lessons that can be learned from this thesis are explicitly stated along with potential areas of improvement for banks and their employees.

2 Literature review

The chosen literature review is a base for a clear and prejudice-free approach to the defined research objectives. The aim of this chapter is to develop a framework to understand the regulations and their impact on the banking process and model and especially the impact that these regulations have on their employees.

To achieve this goal, five main research areas have been identified, which are chronologically interconnected. Essentially, the period before and after the financial crisis of 2007-2008 is used as a starting point and therefore provides a trigger event. In the first step, the general market and banking regulation is examined along with its history and necessity. This leads to a consideration of the laws and directives of the European supervision authorities for banking industry. These in turn have an influence on the banking business models after the financial crisis. Using a practical example, a major bank such as UniCredit Bank AG is analysed and, according to the literature, the possible influences on the behaviour of employees and persons in the regulatory authorities are examined. Especially the human behaviour at workplace is a big gap in the existing literature. This missing information can only be resolved by the interviews with experts conducted in chapter 4. Therefore, a research gap analysis at the end will be the base for the research of this thesis.

2.1 Influence of market regulation

Most modern economies are subject to regulation from governments, and some markets have traditionally been subject to more regulation than others. The general intention is to understand how the market regulation influences the business of an organization (Botero, Djankov, La Porta, Lopez-de-Silanes, & Shleifer, 2004; Simmons, 2001). Empirical analysis points to the important role that political institutions play due to their considerable influence in determining firms' regulatory business constraints (Macher & Mayo, 2012).

In this section it is described how the regulation, market and government are intertwined with each other with growing mutual influence and dependence. Understanding this is important if considering the implications for banks in the subsequent chapters (4 'Interview', 5 'Discussion', 6 'Conclusion') of this thesis.

However, additional regulation can also be seen to add burdens and limits to market players (Bailey & Thomas, 2015), though it has no influence on the death of existing firms, as companies benefit from regulation because it deters new entrants. Furthermore, regulation is associated with reduction in employment in affected firms. The financial industry can also be classified as highly regulated, but it is less controlled than the manufacturing industry from the 'old economy' (Al-Ubaydli & McLaughlin, 2015). Therefore, the regulation seems to have an important influence on the banks and hence also on the business models (section 2.3) and the behaviour of the employees (section 4.2).

2.1.1 Market regulation for corporates

Market regulations by the government have a long tradition and have been established over many years. Pigou (1948, 2013), and later on Stigler (1971, p. 393) consider the "state as the machinery and power of the state — is a potential resource or threat to every industry in the society." The government has the "power to coerce." This ability ensures the role of the state to help selectively help or hurt by spending or taking the money. The central task of regulation is that the laws are designed to help the market and are executed for the benefits of the industry (Macher & Mayo, 2012).

Hence, in the context of market regulation or market intervention it is understood that a government can make direct intervention in economic processes. The state influences the behaviour of companies and consumers in order to pursue certain objectives of general interest (Botero et al., 2004). Market regulation is also justified by market failures (Haidar, 2012).

It should be understood that a developed market is in flux, with regulations, macroeconomic conditions and customer behaviours changing at a rapid pace. Therefore, the regulation, also an artificial construct, is important part of modern economies. But competition policy must be viewed as a central part of regulatory policy in an economy activity (Gundlach, 1965;

Jasper, 1986); where Gumpold (1995) has a clear definition that, in modern economies, the distribution of resources is, in principle, left to the market mechanism. Nevertheless, the state uses influence on the development of economic activity and the shaping of the economic structures through, among other things, its competition policy and competition rules. In addition to fiscal policy, monetary policy and the provision of infrastructure and public services, aid can also be used within the framework of a systematic economic policy designed to influence the economic structure (Andel, 1970).

For innovation the entrepreneurship is an important pillar of the economy and market entry is a critical process (J. A. Schumpeter, Becker, & Knudsen, 2003). J. Schumpeter (2003) recognised that even in 1911 the old structures were edged out by a new combination of production factors which successfully displaced and eventually ‘destroyed’. The destruction is therefore necessary and not a system error, hence, a reorganisation can and often should take place. Based on the ideologies of Marx and Engels (2015) in 1848, where an economic development is based on the process of a ‘gale of creative destruction’; where a new economic order replaces an old one. New entrepreneurs are on one side that accelerate this process and also profit later from it. From this he coins the term 'constructive destruction'.

Regulations are either an artificial burden or a form of help to gain entry to the market (Haidar, 2012; Michalczyk, 2010). For Klapper, Laeven, and Rajan (2006) the requirements of entry into a market are directly linked to the entry costs, which are caused by the regulation. These regulation costs can contain the creation of new firms, the size of firms for a successful incorporation and the dynamism of incumbent companies.

Robert Baldwin, Cave, and Lodge (2012); Djankov, McLiesh, and Klein (2004) assert that regulations impede the setting up of businesses, increase the production costs and hamper economic growth, but regulation has also a positive effect (Robert Baldwin et al., 2012). The government provides comparable structures and conditions for all participants accessing the market. A complicated but binding regulation removes uncertainties and creates predictability before market entry.

2.1.2 Market regulation for banks

Financial institutions like banks can be seen as a main part of the economy. In addition to the basic banking transactions, such as lending for financial services and deposits for money laundering services, most banks offer other services: they carry out cashless payments, provide guarantees and guarantees and advise entrepreneurs and investors in financial matters and manage them for their client assets (Deutsche Bundesbank, 2014b; Friedman, 1968; Mishkin, 2007).

Banking regulation gets an important part of our economy and depends on historical events. Knowing about the motivations makes it easier to understand why it has become so necessary since the financial crisis of 2007-2008.

One main objective in an economic system is to facilitate the transfer of financial resources from suppliers to buyers by giving money, subsequently leading to a future claim, such as the borrower reclaiming the money back with added interest over time. The banking system consists of the commercial banks and the central bank. The central bank has a fundamentally different function from the commercial banks. Because of its responsibility for monetary policy, it is committed as the main objective of ensuring price stability. It alone is authorised to circulate legal means of payment. It is the bank of banks, as the commercial banks are dependent on the regulation rules of the central bank to maintain their ability to pay. In essence, the commercial banks are just economic enterprises that provide services around money as they accept money from private customers and companies, provide loans to the economy and operate payment transactions (Curdia & Woodford, 2011). This complex construct is required, as banks play an essential role in our economy. As an intermediate, a disruption can lead to an overall economic crisis and therefore it is essential for a society to have a well-functioning regulation.

In recent decades, the international financial system has changed considerably. In the modern world of free capital movements with less restriction, investors have more investment objectives and even more investment forms to choose from. From this point of view, the financial system has certainly become more powerful, but also more vulnerable (Sherman, 2009).

The regulation of money capital and banks is more complex in the globalised world as the money that is consigned in a bank or an investment fund can now be used practically anywhere in the world. International banks provide loans to large companies from all over the world and trade in securities regardless of their national origin (Farhi, Gourinchas, & Rey, 2011). The savers and investors are also interested in investing money abroad, where investment will generate higher returns or the risks are better spread.

The causes for the internationalisation of the financial markets are complex. Important impetus has been given by politics. For example, many states have decided to allow cross border capital movements. In Europe, with the introduction of the single currency, a currency area has emerged that is free of exchange rate risks in each member country. Rapid technological progress also plays a role. The intensive use of electronic data processing makes it possible to carry out complex financial transactions simply by 'pushing a button' (Deutsche Bundesbank, 2014b; Moritz, 2012).

Historically, the financial sector has undergone a series of changes. After successful years since the great recession in the 30s with the regulation of the banks, e.g. by Glass–Steagall Act from 1933 in US (Neal & White, 2012), in the 1970s there is a growing belief that government regulation is doing more harm than benefit in many areas of the economy and more and more is seen that "regulation is a public function done by private interest groups" (Moran, 1991, p. 14).

Sherman (2009, p. 1) points out that the "Supreme Court allows banks to export the usury laws of their home state nationwide and sets off a competitive wave of deregulation." It begins a "paradigm shift within the intellectual world of the regulators themselves, and by a shift in the priorities of politicians" (Moran, 2010, p. 14). Politicians have now seen themselves as (de)regulation experts. Therefore, especially in the USA, governments have significantly deregulated the financial markets since the 1980s. US President Ronald Reagan started in 1982 when he released savings and loan associations from state regulations and allowed banks to grant mortgage loans with adjustable-rate rates for the first time (Garcia et al., 1983). Over the years, the complexity in the lending structure has grown and the regulation barriers were phased out.

The ongoing deregulation triggered a chain of events leading up to the disaster that was the financial crisis in 2008. First of all, it should be mentioned that excessive lending destabilises the economy sooner or later, as a look at economic history shows. Schularick and Taylor (2012) study the development of twelve industrialised countries between 1870 and 2008 and find out that a boom in credit is historically the most reliable single indicator of financial crises. Until the financial crisis began, almost everyone was convinced that the development of the volume of credit in an economy was of no further relevance. It is sufficient only look at the development of consumer prices and possibly the money supply. Unfortunately, the mainstream was wrong.

Also the deregulation allows banks to expand their lending volumes and at the same time they cleverly "package" these loans as securitizations, sell them to investors, and create a new business model. Finally the transformation is that "banking has become a giant transaction-generating machine" with "mis-selling" products to their customers (Engelen et al., 2011, p. 124), which is also described in detail in the section 2.3.2 for banking business model and in section 4.2.2 for the expert interviews. However, the new opportunities also present new risks. Until the outbreak of the financial, economic and sovereign debt crisis in 2007-2008, many of the players in the financial markets had not always recognised these risks in full. For example, the high risk level of certain asset-backed securities have often been underestimated (Suárez-Lledó, 2011). The buyers of these securities suffered severe losses during the crisis. For national financial crises (Fahlenbrach, Prilmeier, & Stulz, 2012; Fidrmuc & Korhonen, 2010; Grugel & Riggirozzi, 2012; Sánchez, 2010) in recent decades, crises such as those seen in Mexico (1994/95), Asia/Russia (1997/98), Brazil (1998/99), Turkey (2000-2002) and Argentina (2003/04) play an important role: the internationalisation of the financial markets allows the transfer of financial resources to other countries. This makes sense as long as the financial systems of the countries to which capital flows can also be used productively.

Also the inflowing capital can change the exchange rate (upwards) of the country concerned. This, in turn, can affect the export economy and also trigger a speculative bubble on the country's real estate and equities market. If such a speculative bubble occurs, the foreign capital providers often want their money back as quickly as possible. This poses major problems for the banking and financial system in the original target countries (Blundell-Wignall, Atkinson, & Lee, 2008; Brunnermeier, Crockett, Goodhart, Persaud, & Shin, 2009).

But a surprising fact is that despite regulation and the economic crisis, the bank manager's actions and mindsets are still not affected (Engelen et al., 2011).

Crowther (2018) confirms that the senior management in banks still uses regulatory changes to profit themselves. The reasons can be that banks are 'too big to fail' and the financial system is susceptible to the 'lemon socialism' (Coelho & McClure, 2005), where the managers are allowed to privatise profits and socialise losses by benefiting from company earnings in good years and in bad years making the society responsible for the losses; as the public authorities and thus the taxpayers bail out banks and inject liquidity. This issue is critically addressed in the section 4.2 for the expert interviews.

This behaviour of banks and managers is a point of concern why financial innovation in the banking sector turns out to be an empty promise, where a "widely shared ideas exist about innovation as a process with positive outcomes in the form of a higher level of economic welfare" (Engelen et al., 2011, p. 40). Through the maximum seeking of profit with the transfer of the risks to the society, it is claimed in the run-up that "securitization promised great benefits including dispersion of risk, improved liquidity, superior capital allocation, and the democratization of finance" (Engelen et al., 2011, p. 40). The message is "powerful because, in this frame, new products, techniques, and organizational forms would increase liquidity, allow risk to be managed, improve pricing, and address problems related to asymmetric information" (Engelen et al., 2011, p. 40).

Therefore, financial engineering, with mathematical understanding, is promoted as a fundamental innovation. There are willing customers, like private equity and hedge funds, who demand an above-average return with supposedly reduced risk. The rating agencies also play an important role, using mathematical models to eliminate possible single risks by algorithm (White, 2013). As rating agencies' business model works from creating the rating, it got to the point that in 2007 Standard & Poor's officials claimed, "we rate every deal. It could be structured by cows and we would rate it" (Toscano, 2016, p. 309). This phrase says a lot about morality and the real urge to create innovation not for the society or real economy but for the bank's profit. Therefore, a desire for profit maximisation prevents the banks from initiating true innovation.

Regulations of the economy have been established over the years, and the analysis of the regulatory texts assess the applicability of each regulation to each of the industries (Al-Ubaydli & McLaughlin, 2015). A conclusion can be drawn that the old economy for petroleum and coal products, motor vehicle, pharmaceutical and medicine manufacturing are the most regulated industries. Despite the fact that the financial industry can also be classified as highly regulated, there is still an overall gap between the manufacturing and finance in terms of overall regulation.

2.2 Laws and directives of the European supervision authorities for banking industries

The business strategy is influenced from the regulatory framework for the banking industry as regulations effect operational processes and future strategy. Governmental supervision authorities set well-thought-out granular standards for nearly every banking process, from external lending to internal steering policies, through a strict process of monitoring which was established when the financial institutions lost their credibility in the financial crisis of 2007-2008. In Europe, government-related organisations like the European Central Bank Working Paper Series, Financial Stability Board, Basel Committee on Banking Supervision and their research institutes recognise the demand on the changing business models as a consequence of financial stability (Chortareas, Girardone, & Ventouri, 2012).

The German Central Bank (Deutsche Bundesbank, 2011) describes the European Union (EU) wide regulation for the last decades as an ongoing process. At the beginning of institutional cooperation the exchange of experience between the bank overseers was the focus, and this cooperation has since deepened considerably. As more and more international global activities evolve, there was a need for greater and wider global cooperation between regulators to develop and align minimum regulatory standards. This increase of cooperation is also needed to create competitive conditions and reduce the regulatory imbalance. In the next step, it was consistent that international financial institutions increasingly followed a more global discussion and coordination of measures to ensure financial stability, crisis prevention and crisis management. This international dependency makes regulation so difficult, which also leads to gaps in implementation that are especially mentioned in the expert interviews (section 4.2.3) and leads to changes in the business model (section 2.3.2).

At the European level, even more visible processes of intensification and harmonization of banking regulation can be observed through the bodies, which have largely been established on a legal basis. In banking regulation, it has reached a temporary high point with the creation of the European Banking Authority (EBA).

2.2.1 Banking groups in the European Economic Area

Ayadi et al. (2016) consider the international banking landscape and identify 2,542 banking groups for the Europen Economic Area (EEA) and Switzerland that accounted for more than 45 trillion EUR in 32 countries at the end of 2014. Over 2,193 institutions are located in 28 countries of the European Union (EU) and these cover approximatly 41 trillion EUR. 1,859 banks are placed in the 19 countries of the Euro Area and this represents 29 trillion EUR (the Euro Area isdominated by France and Germany, representing over 50% of the total assets). 334 institutions are located in the nine non-Euro countries, where the United Kingdom includes 77% of the 12 trillion EUR total assets. This holistic view of the entire banking landscape, with its changed key figures, shows how all banks are affected with different business models, which are examined in detail in section 2.3 of this thesis.

The majority of European banks are regionally active, but during the financial crisis in 2008 a sustainable weakness of the financial system was recognised when system-relevant banks like Lehman Brothers (De Haas & Van Horen, 2012) caused important financial institutions to collapse. Ultimately, this necessitated numerous costly state recovery programmes (Brunnermeier et al., 2009; Uhde & Heimeshoff, 2009). In May 2014 the European Banking Union was established (Busch & Ferrarini, 2015). The aim was to transfer the national competences to central institutions and tocreate uniform, common rules and regulations in the field of financial market supervision and the reorganization of financial institutions within the European Union or the Eurozone.

The new European Union framework for financial crisis management and resolution identifies in the Euopean Union major sustainable banks (Lannoo, 2014). The identification of the system-relevant banks in Europe is based on three pillars: the ECB (European Central Bank) supervised entities, banks involved in the EBA stress test and FSB’s list of global systemically important banks (G-SIBs).

On the side of quantity it means that at the end of 2020 (European Central Bank, 2020) 115 ECB supervised entities are indentified. The Financial Stability Board (FSB), the Basel Committee on Banking Supervision (BCBS) and central supervision authorities has identified a list of global systemically important banks (G-SIBs) (Financial Stability Board, 2020). In 2020 there are 30 banks worldwide, which have a sustainable influence on the market and require levels of additional capital buffers - it can be in lowest case 1.0% or in the highest 3.5%.

The Unicredit Group and their subsidiaries are involved in all three pillars. For the ECB supervision identifies relevant banks according the size of their assets, it is a stress test for relevant institutions and it operates multinationally. Also, according to the FSB, it requires a 1.0% additional buffer.

2.2.2 Evolving banking regulation

When financial markets and financial institutions worldwide threatened to collapse in 2008, it was immediately apparent that state aid was needed to prevent the worst outcome and protect the functioning of the financial sector as part of the world economy's infrastructure. The current steering and control mechanisms of the financial sector have to be rethought and, if necessary, reformed (Battiston et al., 2016; Bundesministerium für Wirtschaft und Technologie, 2010; C. Goodhart, Hartmann, Llewellyn, Rojas-Suarez, & Weisbrod, 2013). Therefore, it has an impact on the business model (section 2.3) and also the behaviour of the employee (sections 2.5 and 4.2.3).

State aid is an anomaly in the market economy order and it eliminates the liability mechanisms that are constitutive of this order. The national and international discussions and the G20 meeting in Pittsburgh in September 2009 prompted the banks to have stricter capital requirements, however, it has not been decided which factors are necessary to ensure that banks' capital is sufficient to resist a crisis (Richard Baldwin & Evenett, 2009; Levine, 2012).

2.2.2.1 Stability measurements for banks' regulation

Basel Committee on Banking Supervision (2009) presents key points for a reform of banking regulation at the end of December 2009. These key points include harmonization of the capital definition, a leverage ratio, measures to reduce the pro-cyclical effects of capital regulation and standards for the liquidity of financial institutions.

This financial crisis has made it clear that the regulation and supervision of individual banks is not sufficient to ensure the stability of the entire banking system. Of central importance is the systemic relevance of banks, i.e. the feedback between individual banks and the entire financial system. The following paragraphs in particular highlights the complexity of adequate regulation, as it is necessary first to understand the underlying stability measurements in order to be able to know which banking regulation is needed.

Therefore, in order to better monitor financial stability from a macroeconomic perspective and to identify systemic risks, central institutions for so-called macro-prudential regulation have been suggested by Bremus and Lambert (2014). Duffie (2017) examines the 2016 ECB Forum on Central Banking and he supports these necessary modifications also suggested by Greenwood, Hanson, Stein, and Sunderam (2017); Harrington (2009); Obstfeld and Rogoff (2009), which are required for a sufficient regulation.

A financial regulatory reform aims to cover several areas, where benefits overweight the associated costs and forces the banks to change or redesign their business models (Carmassi & Micossi, 2012; Greenwood et al., 2017). A heightened capital regulation makes the financial system more sustainable. The use of private equity puts banks in a position to absorb more losses in the event of a crisis. In addition, the effect of 'too big to fail' is reduced, as the taxpayer does not have to intervene immediately via the state when the first signs of a crisis appear.

Finally, a well-capitalized banking system can better cope with future economic downturns while continuing to provide the credit that the economy needs while reducing the risk of a credit crunch (Kashyap, Stein, & Hanson, 2010). The key to the success of the current regulatory efforts is to achieve a sustained and substantial increase in the banks' equity capital base. In the medium term, the aim is to achieve a capital requirement of well-over 10% of the not-weighted balance sheet total. This would make it easier for equity capital to assume its liability function, and would drastically limit certain systemic repercussions of a bank's imbalances. Nevertheless, equity can only be adjusted to the increased requirements after the crisis and only step-by-step in order to avoid possible negative repercussions on corporate financing (Bundesministerium für Wirtschaft und Technologie, 2010).

The stress test for banks examines the financial performance of the bank, the risks of investments and the business model. Stress testing and realistic capital planning improves the way that large banks manage their risks. Regulatory authorities draw conclusions about the actual stability of the individual banks (micro scenario) or the banking system (macro scenario). Bank stress test results are used to initiate appropriate measures to correct identified problems.

This means that banking stress tests are not only carried out in individual countries or the EU, but in many countries worldwide in order to enforce corresponding standards on the financial markets.

The aim of the external bank stress tests is to ensure that the micro stress tests carried out by individual banks themselves are not diluted by benevolent self-assessments and that certain minimum standards are met in the tests (Acharya, Engle, & Pierret, 2014; Ayadi, Arbak, & Pieter De Groen, 2012; Borio, Drehmann, & Tsatsaronis, 2014; Schuermann, 2014). Since 2000, a strategy has been pursued which is based on an illusion of the measurability of risks and which should be abandoned in order to achieve an ever-finer risk calibration of capital requirements. Abuses of the opportunities offered by risk calibration are a cause of the lack of capital even before the crisis (Bundesministerium für Wirtschaft und Technologie, 2010).

Liquidity regulation can be divided into three risk types: insolvency risk, refinancing risk and market liquidity risk. Insolvency risk is the risk that the bank will no longer be able to meet its current and future payment obligations in full or on time. The refinancing risk can be regarded as additional refinancing funds that can only be obtained at increased market interest rates. Market liquidity risk is caused by extraordinary events that assets can only be liquidated at a discount in the market. However, a market liquidity risk defined in this way is almost always allocated to market risk and not to liquidity risk management. The regulation is intended to ensure that financial institutions have sufficient liquidity. This buffer is needed to withstand run-on-the-bank events and other banks trust the recapitalization effort of the affected institutions (Pohl, 2008).

Regulation has to deal with regulatory migration, where actors on the international financial markets deliberately circumvent national regulations. For this purpose, banks can develop legal financial structures that are not covered by the applicable rules. A bank can conduct its business in its native country or a country of the world where it is subject to the fewest restrictions. The numerous national differences between the states of the EU in the regulation of financial markets offer banks additional profits through regulatory arbitrage (Houston, Lin, & Ma, 2012). The key to the success of the current regulatory efforts is to achieve a sustained and massive increase in the banks' equity base. Individual governments should therefore work to ensure that the most important countries for the financial system enter into negotiations on an agreement to regulate the relevant procedural and material issues and implement appropriate new regulations (Bundesministerium für Wirtschaft und Technologie, 2010).

It is mandatory to identify several areas of post-crisis reform where regulatory burdens are likely to outweigh the advantages of overall financial stability or that have the opposite effect. Premature crisis reforms in the requirement of leverage ratios makes it more attractive for the banks to push away from low-risk to higher risk activities (Allahrakha, Cetina, & Munyan, 2018; Fender & Lewrick, 2015). An overregulated area for capital requirements is the Supplementary Leverage Ratio (SLR), which applies to the largest and, thus, systemically important banks. In order to avoid excessive inflation of the bank's balance sheet, rules have been created to ensure that large banks have capital that exceeds a certain proportion of their total assets, irrespective of their risk.

A company's junk loan carries the same specific and accounted risk as a government treasury bill. As a result, banks tend to make profitable investments and neglect safe investments only in terms of return (Duffie, 2017). These biases even have a negative impact on the functioning of the treasury market. However, since repos are considered safe in a functioning market, they are insufficiently traded because of SLRs, thus affecting the liquidity of the market. However, this was one of the core problems of the crisis (Duffie, 2017).

The countercyclical capital buffer and capital conservation buffer is regarded as a macro prudential instrument of banking supervision (Bundesanstalt für Finanzdienstleistungsaufsicht, 2016). It is intended to counter the risk of excessive credit growth in the banking sector. The indication of an anti-cyclical capital buffer is as follows: in times of excessive credit growth, banks should build up an additional capital buffer, as this buffer generally increases the banks' ability to absorb losses. In the event of a crisis, the buffer may be explicitly used up and used to cushion losses. This is intended to prevent the emergence of a credit crunch (Jiménez, Ongena, Peydró, & Saurina, 2017; Keuschnigg, 2018; Kirschner, 2018). Overall, a buffer for systemic risks is necessary. The supervisory authority may determine further capital buffers, also from hard core capital.

These buffers are designed to absorb risks that could affect the entire economy (e.g. risk-weighted assets from certain countries or sectors of the economy). Systemically relevant banks are also required to build up additional capital buffers. Credit institutions must therefore not only increase their equity capital, but also incorporate dynamic components into the existing monitoring, both for processes and IT (Vickers, 2016).

2.2.2.2 Stability measurements realisation

Regulation of the banking sector is an ongoing process. It becomes more granular and refined through the changes in the market and the demands of society over time. Brunnermeier et al. (2009, p. 17) note that “our solution is not more regulation, per se, though that may well be required in some areas, but better and different regulation. This is not the first banking crisis that the world has seen.”

Current bank regulation has its origin in the bankruptcy of the German Herstatt-Bank (Bankhaus I.D. Herstatt K.G.a.A.) in 1974, caused by the leaving of fixed exchange rates in 1971 and a worldwide boom in foreign exchange trading. In 1973, Herstatt-Bank speculated wrongly on the US dollar exchange rate and went bankrupt. As a consequence, the Basel Committee on Banking Supervision (BCBS) was founded in the same year and the initiators were the (ten) G10 states (Belgium, Canada, Germany, France, Italy, Japan, the Netherlands, Sweden, the United Kingdom and the United States) (Mourlon-Druol, 2015).

The committee is chaired by representatives of the central banks as well as regulatory and supervisory authorities. The Basel Committee on Banking Supervision (BCBS) has an autonomous and independent character, but has been closely affiliated and supported by the Bank for International Settlements (BIS). The objectives of the Basel Committee are defined by three core tasks: exchange of information, development and improvement of supervisory techniques, development of minimum supervisory standards (Schenk & Mourlon-Druol, 2016).

The chronological structure of Basel I to Basel III/IV shows how, from regulation to regulation, the relevant topics have to be covered and thus implemented. The following description is relevant in order to recognise the influence on the business model (section 2.3) and that there is more workload required for the affected employees in the bank, which mentioned in the expert interviews (sections 4.2.3, 4.2.4 and 4.2.5).

BASEL I

In 1988 a first decisive draft was adopted and, with the acceptance of the member states, Basel I was applied in the banking sector (Lichtenstein, 1991). The core elements of Basel I are rules for minimal capital requirements for core capital (Tier 1) and supplementary capital (Tier 2). A globally identical calculation of equity capital is also now possible. Additionally, the risk weighting is determined by the assets according to the expected credit risk. There were five groups defined with 0%, 10%, 20%, 50% or 100% to the individual values as risk-bearing ratios and potentially for the default. These weightings were named and are known as risk-weighted assets (RWA) key figure.

The sum of RWA had to be backed by equity capital, at least 8%, whereby minimum 4% had to come from Tier 1. Overall, the regulation should be rational and not against fundamental principles (Brunnermeier et al., 2009). In a further update in 1996 (Basel Committee on Banking Supervision, 1996) the market risk was included especially for interest rate risk, equity position risk, currency risk, commodity price risk and options. With the introduction of the standardised approach and internal models for credit risk, the standardised approach was intended to provide a choice of approach that provided separate methods for each risk group. The BCBS criteria allowed the institutions to use the internal risk model instead of the standard approach. At the end the volume of equity capital should be increased.

Basel I is a milestone, finally there is a standardised system of banking regulation. It is therefore the guiding principle for further regulation.

BASEL II

Basel II was a logical next step to refine the regulatory framework, to eliminate competing approaches and to unify it even more. This step was more than essential to improve regulation.

Therefore, the Basel II guidelines were introduced as a revised framework in 2004 (Basel Committee on Banking Supervision, 2004) and finally, when it became binding, there were a few adjustments in the 2006 version (Basel Committee on Banking Supervision, 2006). Obvious weaknesses have been corrected for misallocations and operational risks not yet taken into account. Other issues designed to further strengthen the stability of the international banking system beyond capital requirements were also introduced. Since under Basel I the capital backing for loans to a customer segment was independent of the creditworthiness of the borrower, there was an incentive to grant loans to customers with poorer levels of creditworthiness and claim higher interest rates from them.

In addition, there was a lack of conformity in supervisory review and publication of risk information. To date, there have been no international standards for regulatory review and publication of risk information. In order to achieve this goal, Basel II established a three pillar system (Balthazar, 2006).

Three pillars in Basel II systems are available. The first pillar handles the minimum capital requirements and is based on statistical, quantitative models. The second pillar handles the processes in the supervisory review for more soft facts (the main issue to improve the processes for more efficiency and effectiveness). The third pillar covers the qualitative component. The regulator has recognised the fact that individual companies can make further important diverse publications. Hence, the banks should publish more information that they consider important but are not directly mandatory under Pillars 1 and 2 (Basel Committee on Banking Supervision, 2006; Borio, 2003).

Pillar 1 largely corresponds to Basel I, where credit risks and market risks are covered; operational risk (OpRisk) is additionally included. For credit institutions the OpRisk is the risk of losses resulting from the inadequacy or failure of internal procedures, people, processes and systems (Bank for International Settlements, 2001).

For credit risk the simple calculation of the RWA from Basel I has been stretched through a more comprehensive approach: standardized, foundation IRB (internal ratings based) or advanced IRB approach. Now the banks are allowed to develop their own empirical model to estimate their risk ratios, the local regulators have to approve the methods and models. Estimation through these models is complex and it is usually only done for selected credit portfolios (Balthazar, 2006; Basel Committee on Banking Supervision, 2006).

Market risk can be estimated by the Standardized or the Internal Models Approach. Standardized approach is following the requirements of the standard rules and formulas from credit risk. It considers the specific risks, which defines the movements in market value of the individual security owing to factors related to the individual issuer. For general risk, the loss is originated from changes in interest rates or general market movements in case of equities (Linsmeier & Pearson, 2000; A. Saunders & Allen, 2010).

Operational risk is defined “as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.” This definition includes legal risk, but excludes strategic and reputational risk Basel Committee on Banking Supervision (2001, p. 3). There are three approaches available, the modest and simplest is the Basic Indicator Approach (BIA), the most complex is the Advanced Measurement Approach (AMA) and the Standardized Approach (TSA) is an intermediate approach between the BIA and the AMA (Basel Committee on Banking Supervision, 2014c).

Pillar 2 considers the Supervisory Review Process and the aim is that supervisors should ensure that banks have a strong process in place to assess their risk exposures. One of the core elements is the requirement from the regulator to the banks to develop an Internal Capital Adequacy Assessment Process (ICAAP) (European Central Bank, 2018). It is a framework to analyse the internal risk-bearing capacity process and investigate an adequate relationship between the risks and the risk coverage potential.

Pillar 3 (Basel Committee on Banking Supervision, 2015, 2018a) aims to strengthen the market discipline by increasing the disclosure requirements within the framework of banks' external reports. For increasing transparency the banks provide additional key information to market participants. The reported regulatory capital and risk in Pillar 1 need supplementary information to improve the understanding and the investors can react more efficiently to force the banks into improving their situation (Basel Committee on Banking Supervision, 2014b).

BASEL III

Basel III required urgent action in the aftermath of the financial crisis and targets exactly the issues of business models that are discussed in detail in this thesis. Consequently, at their summit meeting in Pittsburgh in September 2009, the leading industrial nations (G20) quickly agreed, still under the impression of the crisis, that more comprehensive and uniform regulation of banks and other systemically important financial market players is necessary. The reason was the financial crisis and false incentives for globally active banks to invest in higher risk assets. The key to the success of the current regulatory efforts is to achieve a sustained and massive increase in the banks' equity base.

Individual governments should therefore work to ensure that the most important countries for the financial system enter into negotiations on an agreement to regulate the relevant procedural and material issues and implement appropriate new regulations.

A key issue between the two largest banking centres, the US and the EU, remains the use of internal models to calculate risk. With the agreement on Basel III (Basel Committee on Banking Supervision, 2010) in December 2010, a multi-stage reform process began. Since then, the member states have gradually transposed the new provisions into national law along the agreed ‘road map’ (Daniels, 2017; Herzberg, 2017; Herzberg, Mausner, & Snyderman, 1959).

The Basel Committee on Banking Supervision (2010) keeps the three pillars system from Basel II and focuses on the capital, risk coverage and also on the liquidity requirements. The arrangements for implementation and rising rates in Basel III start in 2013 and should be completed in 2023.

Pillar 1 focuses on improvements for capital, risk coverage and containing leverage (Basel Committee on Banking Supervision, 2010, 2014a, 2017). The quality and level of capital is raised in three steps from 3.5% in 2013, 4.0% in 2014 to 4.5% in 2015 and thereafter for common equity capital ratio (CET1). A capital conservation buffer of 0.625% was introduced in 2016 and rose to 2.5% by 2019. It is added to the common equity capital ratio (CET1), raising the total common equity standard of risk-weighted assets to 7.0%. This ratio is important for the dividend policy, if the bank stays below the 7.0% hurdle it is not allowed to distribute any money to their stockholders.

The Tier 1 capital, which consists of CET1 and supplementary capital and may include silent participations, rises from 4.5% in 2013, 5.5% in 2014 to 6.0% in 2015 and thereafter. At the end, the minimum total capital including the capital buffer should be not less than 8.0% in 2014 and rises over the years to 10.5% in 2019. Overall, the regulator reserves the right to individually set an additional countercyclical buffer for each bank of 0% to a maximum of 2.5%, when the authorities have the opinion that credit growth is unacceptable and additional systematic risk exists.

For global systemically important banks (G-SIBs), identified on a revised methodology from BCBS (Basel Committee on Banking Supervision, 2018b), which still includes the UniCredit Group in 2020 (Financial Stability Board, 2020) additional capital buffers are considered to guarantee a total loss-absorbing capacity (TLAC) (Basel Committee on Banking Supervision, 2016b, 2018b)) ranging from 1.0%, e.g. the UniCredit Group, to 2.5%. Next to capital, risk coverage topics (Basel Committee on Banking Supervision, 2010) are revised and are mandatory as of 2017.

One of the topics is the trade exposure that qualifies central counterparties to receive a 2.0% risk weight and default fund exposures will be capitalized according to a risk-based method, which simply estimates risk from such a default fund. The others are standardized approaches to counterparty credit risk, where new requirements are met by more stringent advice in measuring the exposure: for capital incentives to use central counterparties for derivatives and higher capital for inter financial exposures. The securitization and interest rates framework aims to conduct more rough analyses in the banking book. Finally, all original Basel II risks for standard approach, IRB framework, operational risk, market risk and output floors will be revised in 2022. Output floors are introduced with the background that even when internal models are used, the bank’s capital at least does not fall below a supervisory desired level (Basel Committee on Banking Supervision, 2014a).

In Basel III the Pillar 2 primarily concerns itself with risk management and banking supervision (Basel Committee on Banking Supervision, 2010, 2016a, 2017; European Banking Authority, 2017). The main topics are a better integration of firm-wide governance and risk management; a wider expansion and capturing off-balance sheet exposures and securitization activities for risk activities; managing risk concentrations; establishing a long-term risk return practice with valuation, stress testing and higher accounting standards for financial instruments in corporate supervisory governance. The main point is that the management is more committed in their response and aim to increase the possibility of criminal prosecution.

This goal will be strengthened through the revised Pillar 3 disclosure for market discipline (Basel Committee on Banking Supervision, 2014a, 2015). Therefore, the banks need a comprehensive explanation of bank’s estimations for regulatory capital. In Basel III the liquidity issues are covered with the ‘global liquidity standard and supervisory monitoring’ framework with the short term liquidity coverage ratios (LCR) (Basel Committee on Banking Supervision, 2013) and long term net stable funding ratio (NSFR).

Basel III also remained a compromise, therefore Basel IV proposes to include new standards according to which banks need to calculate their capital requirements (Basel Committee on Banking Supervision, 2017).

2.2.2.3 European Union legislation for banking industry

The political level of the European Union consists of three main institutions (European Commission, 2005, 2014b; Lecher, Platzer, & Weiner, 2018): the European Commission has the role of the executive; the European Parliament and the Council of the European Union together form the legislative body; legislative proposals are submitted by the Commission. Both the legislative and executive powers are always involved in legislative processes. The implementation of international agreements, such as the rules drawn up by the Basel Committee, must therefore first be translated into legislative proposals by the European Commission before they are approved by European Parliament and the Council.

The principle of power sharing is a fundamental rule of the EU, which is also applied to banking regulation. Here in this section it is shown that this fact has an impact on the way legislation is conducted and in the next section 2.3 it is shown how it influence the business model. A distinction is made between several legislative procedures, the most important of which is the ordinary legislative procedure. Depending on which procedure is used, Parliament has different rights and obligations. EU legislation has different types of decrees and they differ in their legal force (Bieber, Epiney, Haag, & Kotzur, 2016). The two most important are the regulation and the directive. Regulations become valid immediately after their approval by the Council and Parliament and they are directly binding on all member states. Directives provide a kind of framework for implementation in the national legal systems. Directives can therefore be used to organize certain regulations in a more decentralized manner and to incorporate national laws. Regulations, on the other hand, apply equally to all states, they are used to set standards and harmonize the jurisdiction.

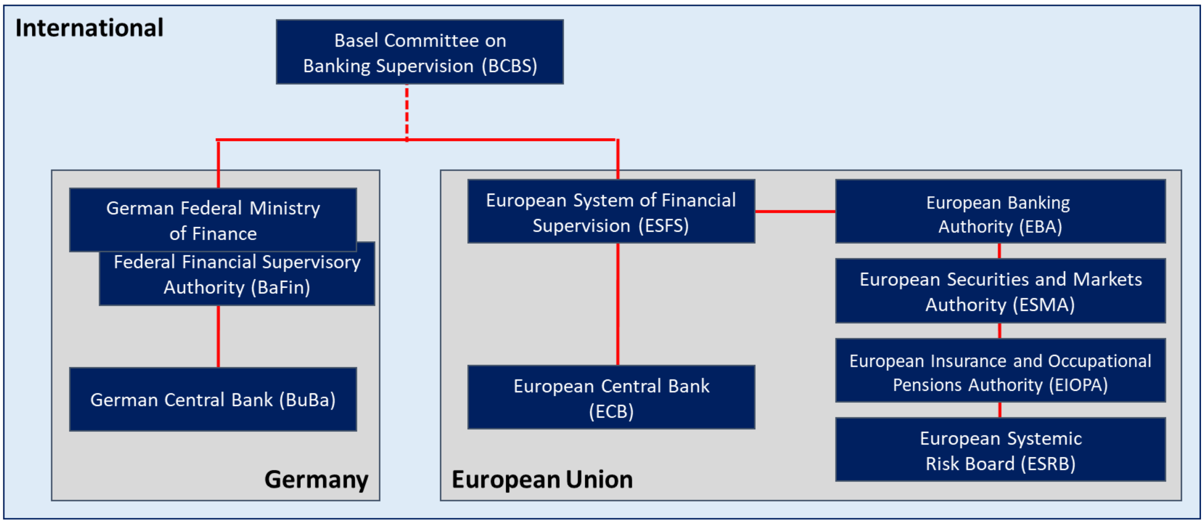

Figure 1: Banking supervision institutions in Germany and the European Union

Figure 1 shows the structure of banking supersvision in the European Union. On national level (National Competent Authorities, NCAs), in this case displayed for Germany, there are supervision institutions based on the federalism structure on a single state as 'supervisory authority for public sector institutions' and on the federal level the most important organizations are the independent German Central Bank (Deutsche Bundesbank, BuBa) and the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin), which falls under the supervision of the German Federal Ministry of Finance.

On the European level, in 2009 the European Commission established the European System of Financial Supervision (ESFS) (European Parliament, 2010a) with the aim of strengthening community regulation of European financial markets. The ESFS consists of four main authorities: European Banking Authority (EBA), European Insurance and Occupational Pensions Authority (EIOPA), European Insurance and Occupational Pensions Authority (EIOPA), European Securities and Markets Authority (ESMA) and European Systemic Risk Board (ESRB). The central task of the EBA is to develop supervisory standards for European banks, but the national supervisories still keep the jurisdiction and the EBA can intervene only in case of violation of EU law.

The European Central Bank (ECB) acts as an independent counterweight to the ESFS in the European Union regulation system. As the ECB is only responsible for Euro-dominated countries, it cooperates with the national central banks in the European System of Central Banks (ESCB) for all member states of the European Union. The main objective of the ECB is price stability in order to avoid large fluctuations in the value of money. This is controlled by the inflation rate. This results in an effort to achieve a balanced economic development in the respective country in order to avoid a recession (Europäische Union, 2012).

Persistent crises in the Euro area have revealed weaknesses in the architecture of the monetary union. In addition to a common monetary policy, there should also be joint banking supervision at European level. The solution was the establishment of a banking union in 2014, consisting of a European banking supervisory authority, bank liquidation and common standards for deposit guarantees (Busch & Ferrarini, 2015; Demary, 2014; European Commission, 2014a).

The banking union is based on two pillars, the Single Supervisory Mechanism (SSM) for major banks with a balance sheet total of over 30 billion euros or 20 percent of a country's economic output. It provides centralised banking supervision for large banks mainly in the Euro area and the Single Resolution Mechanism (SRM), which is a central resolution authority for the organized liquidation of illiquid large banks. This is achieved by the implementation of Capital Requirements Regulation (CRR) (European Parliament, 2013b) and Capital Requirements Directive IV (CRD IV) (European Parliament, 2013a) packages, which has been valid in the EU since January 1, 2014, guidelines on Bank Recovery and Resolution Directive (BRRD) (European Parliament, 2014b), Deposit Guarantee Scheme Directive (DGSD) (European Parliament, 2014a) and supplementary regulations based on EBA proposals.

With the launch of the SSM in early November 2014, the ECB assumes direct supervision of 115 banks in the euro area as of December 1st 2020 (European Central Bank, 2020), which represented almost 85% of the balance sheet total of all banks in 2014 (Deutsche Bundesbank, 2014a).

The SRM applies in principle to the large banks placed under the supervision of the ECB. There are two instruments available: the BRRD, which defines the identical recovery rules for all banks throughout the EU and the single restructuring mechanism, which develops uniform rules for the major banks in the euro area and has a common fund for financing regular bank recovery. The SRM only applies to eurozone, but non-eurozone countries can participate voluntarily.

All national and European authorities cooperate with the international think tanks, the most notable are the Basel Committee on Banking Supervision (BCBS), Bank for International Settlements (BIS), International Association of Insurance Supervisors (IAIS), International Organization of Securities Commissions (IOSCO), International Accounting Standards Board (IASB) and European Union Agency for Network and Information Security (ENISA).

In addition, there is a watchlist drawn up annually by the Financial Stability Board (FSB) for the banks relevant to the global system (Systemically Important Financial Institutions, called SIFIs). The methodology is based on a consultation paper from Basel Committee on Banking Supervision (2011a) and in 2020 there are currently 30 banks on the list (European Central Bank, 2020). According to this document, UniCredit Group needs an additional capital buffer of 1.0%.

2.3 Banking business model for system-relevant banks

Before the banking business can be described it is important to know which banks are in the scope of this research. The main focus lies on the major retail, commercial and wholesale banks, which operate universally in all banking activities where they offer ordinary banking business for private and corporate clients (Benston, 1994; Canals, 1997; Deutsche Bundesbank, 2017).

As the case study deals with a systemically important bank, the extended regulatory requirements, additional hurdles and the impact on the major banks are described here; therefore, further interrelationships can be better understood and challenged with the opinion of the interviewed experts. A holistic regulatory view of the entire banking landscape mentioned in the section 2.2.2 leads to following analysis for relevant KPIs in this section.

2.3.1 System-relevant bank

First of all, the definition of systemically important banks is of interest, as the case study (section 2.4) is primarily concerned with such banks. A bank can be classified according to specific criteria: total assets, radius of effect and place of business or number of employees. Büschgen (2013) separates the private banking sector into regional, private, foreign and major banks. Regional banks are universally active banks that operate primarily in certain regions in a single country. Traditionally they have only branches in a specific geographical area, e.g. federal states or economic regions. Private banks are organized under private law, but they are in private ownership and not in cooperative ownership. Foreign banks are located in their domestic country and operate subsidiaries in foreign countries. Major banks are corporations with significant financial and economic power. They operate worldwide and also claim a special status in the international financial markets.

There is also a big difference between a European bank and a bank from the United States. (Allen, Chui, & Maddaloni, 2004). Traditionally, in the United States, there is a separation between retail/commercial and investment banks (Benston & Harland, 1990). The reason is the Glass–Steagall Act from 1933, which was created in the United States to avoid further financial crises (Neal & White, 2012). This act has been repealed in the recent decades and allows the creation of universal banks in the United States. In Europe there are no restrictions: they are allowed to unite all services of an investment bank and commercial bank and provide them within one entity (Crawford, 2011).

For commercial banking, Somashekar (2009) identifies the core functions and they fulfil the 'general banking' purposes. The relevant business is the acceptance of deposits and responsible lending and creation of credits, for private clients and corporate. A further service, next to financing, is to facilitate electronic transfer of funds, act as payment agents and provide guarantees, offer locker facilities and operate foreign exchanges.

Overall, the commercial banks take the risk as they use the money from deposits for lending. Investment banking business strategy is based on the fact that they do not take the risk directly and provide a platform, where their function is to be an intermediate who brings the customers together (Brinker, 2013; Geyfman & Yeager, 2009). Trading on own book is only used for ware-housing until it can be transferred via a preferred structure to a customer. The investment banking business usually includes services for public offerings and private placements of debt and equity securities, raising capital or security underwriting, mergers and acquisitions (M&A), financial advisory structured finance and securitization.

Many European universal banks have combined all relevant financial services in one entity and have grown up to become global players (Kindleberger, 2015). Such an important role of a bank can be also relevant to systems for global financial markets. In connection with the financial crisis, a bank is considered global systemically important (G-SIBs) if its difficulties or collapse seriously affected the functioning of the global financial system and the real economy (Financial Stability Board, 2011; Gerster et al., 2007).

Beginning in 2011, the Financial Stability Board (FSB) has identified around 30 banks globally as systemically important (Financial Stability Board, 2011, 2012, 2013, 2014, 2015, 2016a, 2017a, 2018a, 2019, 2020) on the basis of certain defined criteria. The list of the banks is reviewed almost annually and these criteria are determined in the BCBS207 regulatory framework (Basel Committee on Banking Supervision, 2011b, 2011c).

Indicator-based measurement approach		
Category	**Individual Indicator**	**Weighting**
Cross-jurisdictional activity	Cross-jurisdictional claims	10%
	Cross-jurisdictional liabilities	10%
Size	Total exposures as defined for use in the Basel III leverage ratio	20%
Interconnectedness	Intra-financial system assets	6.67%
	Intra-financial system liabilities	6.67%
	Wholesale funding ratio	6.67%
Substitutability/financial institution infrastructure	Assets under custody	6.67%
	Payments cleared and settled through payment systems	6.67%
	Values of underwritten transactions in debt and equity markets	6.67%
Complexity	OTC derivatives notional value	6.67%
	Level 3 assets	6.67%
	Held for trading and available for sale value	6.67%

Source: Basel Committee on Banking Supervision (2011b, 2011c)

Table 1: Indicator-based measurement approach and weights

The chosen indicators reflect financial institutions' global cross-border activities, size of the banks, interdependence, lack of substitutable financial institutions or financial infrastructures for their services and their complexity. The main indicators can be additionally separated in further single classification and at the end the results are weighted. The weights of the indicators are shown in Table 1.

This classification is reviewed annually. These G-SIBs banks, among other things, have stricter capital requirements to better absorb any losses. In addition, they may be subject to additional regulatory requirements, such as the obligation to draw up recovery and resolution plans. The G-SIBs are a subset of the Global Systemically Important Financial Institutions (G-SIFIs). In 2020 the Financial Stability Board (FSB), in discussion with Basel Committee on Banking Supervision (BCBS) and local authorities, has updated their list and identified 30 global systemically important banks (G-SIBs) (Financial Stability Board, 2020). The UniCredit Group is one this list, which justifies its use as a practical example in the case study of this thesis.

2.3.2 Banking activity and business model

In order to understand the regulatory demand for the banking industry it is important to understand their business models (Ayadi, Arbak, & De Groen, 2011) and how they have been customised in the case study and also critically analysed by the experts in the interviews (sections 2.4 and 4.2.4). A banking business model depends on two main factors: on the one hand there is the market and the provided finance products should meet the requirements of the customers, on the other hand the product placement is limited or enhanced by the governmental regulations (Altunbas, Manganelli, & Marques-Ibanez, 2011).

Hence, the business model depends on the internal strength of a bank to identify and implement the right strategy, but maintain the underlying rules of the government. The financial crisis of 2007-2008 shifted the focus to supervision, as the market failed (Ivashina & Scharfstein, 2010). According to this event the business model can be considered under the view of the regulation on the timeline before and after 2008. Ayadi et al. (2011) point out that the efficiency and the performance of the banking industry has a major impact on a country's economy. Therefore, first of all Ayadi et al. (2011) analyse 26 European major banks before and after crisis.

The banks are classified in three alternative business model categories: retail banks, investment banks and wholesale banks. Within the alternative business models unique implications of five main dimensions are identified: risk characteristics, systemic stability, bank performance, efficiency and corporate governance. Ayadi et al. (2016) consider a more comprehensive analysis with a huge sample of 1859 banks and granular examination.

The latest study by Ayadi, Cucinelli, and De Groen (2020) has been extended to include the years up to 2017. The conclusion is that the major change in the business model of banks after the financial crisis occurred until 2013-2014 and that no further exogenous shocks and new findings were added. A similar approach is used by Altunbas et al. (2011), they have analysed the business model for the largest European banks by using cluster analysis methodology on earnings and profitability, asset and liability structure, stability and governance aspects. For Altunbas et al. (2011) the financial crisis enhanced the focus from the government to challenge the existing business strategy.

Such regulation frames corporate action in particular markets, including the development of strategies and actions – and is said to create a barrier to new entrants (Osterwalder & Pigneur, 2010; Zott & Amit, 2008, 2010).

By now the effects and relevance of the Covid-19 pandemic for the business model mean that the statement may potentially change, as the effects are not yet fully measurable. Richard Baldwin and Di Mauro (2020) summarize the positive argument that, after years of tighter regulation, capital buffers are higher and the banking system can be considered to be safer, the European banks will still be in good shape. However, only at a later date can this be confirmed or denied.

2.3.2.1 Business activities of banks

Banking business activities can vary significantly and depend on a wide variety of factors. This section explains how the individual business activities differ from each other and how they can be classified. Only through this knowledge is it possible to derive how a bank acts in case of the financial crisis 2007-2008. Therefore, banks may differ in offering their products, as well as providing different products. They usually concentrate on their strength by selecting their balance sheet structure to fit their business objectives.

In a competition of growth opportunities with other financial institutions, banks choose a business model to leverage their knowledge of their organisation (Roengpitya, Tarashev, & Tsatsaronis, 2014). The Bank for International Settlements (BIS), in its general function as a ‘bank of all central banks’, manages parts of the currency reserves of numerous countries and international financial institutions (Pikler, 2006).

At the same time, this institution is also one of the think tanks for central banks across the world. They identify three business models and allocate them to a retail-funded commercial bank, a capital markets-oriented bank and a wholesale funded commercial bank, which exactly corresponds to the classification of retail, investment and wholesale banking according to Ayadi et al. (2011) from the Centre for European Policy Studies (CEPS) and Altunbas et al. (2011) from the European Central Bank (ECB).

Nevertheless, Ayadi et al. (2016) classify European banks into five business models: investment banks, wholesale banks, focused retail and diversified retail type 1 and type 2. A granular classification is always possible, but the authors (Roengpitya et al., 2014) from Bank for International Settlements (BIS) and Ayadi et al. (2011) have the opinion that there is no advantage for further classification to describe a general business strategy of the banks for a small sample. Only a few years later, Ayadi et al. (2016) examine a larger sample of 1859 banks and provide a more comprehensive analysis on the business model. Since banks have different business models, it is of interest to find out how UniCredit Bank can be classified in order to better classify it in the used case study, see section 2.4.

Ayadi et al. (2011) considers a retail bank as an institution, which is close to their original traditional banking model. Their primary source of funding is customer deposits and providing customer credit loans, with limited trading exposures. Wholesale banks are more active in the interbank markets and remain on the domestic market; Investment banks are specialised in trading activities, like derivatives transactions. These banks are more likely to actively manage their balance sheets on short-term funding.

In the study of Ayadi et al. (2011), the authors show that six classifications are relevant: customer deposits, trading assets, loans to banks, total derivative exposure, tangible common equity and domestic activity. These clusters seem to be the best choice, as a further diversification is strongly correlated through similarities. Removing one of the six clusters led to an indistinct concentration. This formation of six clusters ensures that they are statistically dissimilar between themselves, Ayadi et al. (2011, p. 22):

(1) Customer deposits identifies the share of deposits from non-bank and private customers e.g. households or enterprises.
(2) Tangible common equity focuses on the most loss-absorbing parts of a bank's capital structure, providing an insight into the bank's risk attitudes and its leverage.
(3) Trading assets are defined as non-cash assets other than loans, a greater value would indicate the prevalence of investment activities that are prone to market and liquidity risks.

(4) Derivative exposures aggregate all the positive and negative derivative exposures of a bank.

(5) Loans to banks measure the scale of wholesale and interbank activities, which are proxy for exposures to risks arising from interconnectedness in the banking sector.

(6) Domestic activity: while banks that are more domestically-oriented are likely to face less cross-border risks, they may also face more concentration risks.

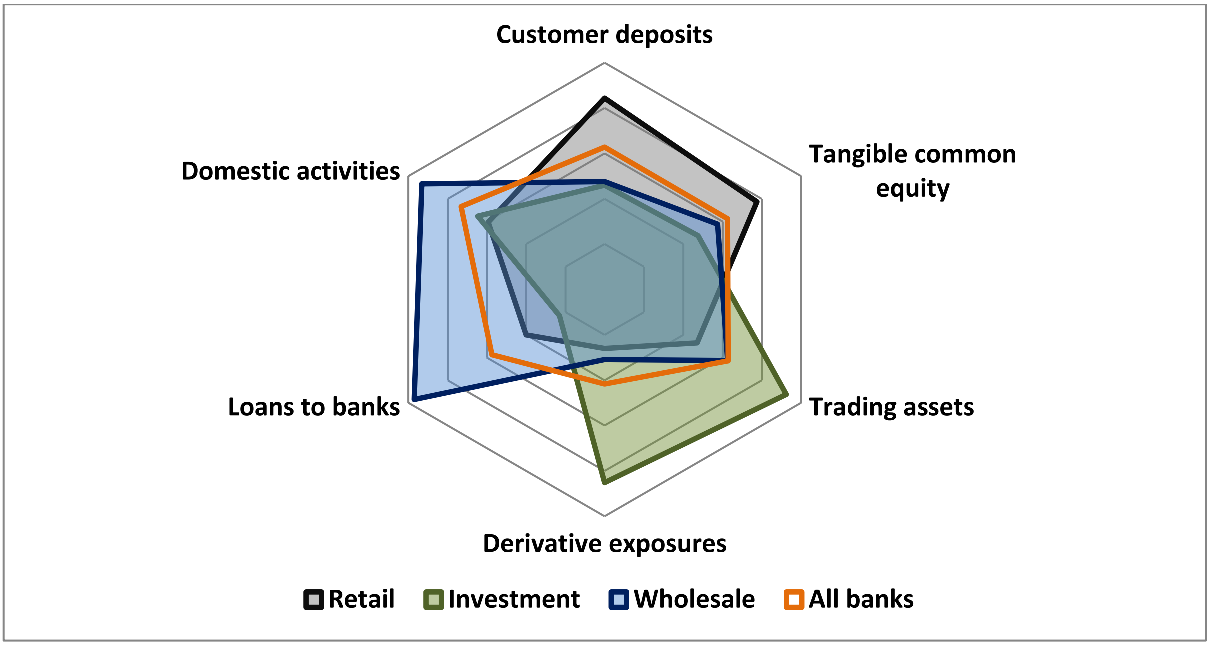

Figure 2: Banks core competence and business strategy by Ayadi et al. (2011)

Figure 2 shows a spider web analysis according to the analysis of Ayadi et al. (2011), with six dimensions, which are shown above. It can be identified that the three bank types (retail, investment and wholesale) each refer to two unique core competences. Retail banks concentrate on collecting and managing their customer deposits and their tangible common equity to total assets ratio is greater than the averages of the banks. Hence, the deposits and high tangible common equity make available a relatively high level of possible loss absorption and provide them a comfortable risk buffer. Investment banks align their corporate strategy predominant to trading assets and derivative exposures.

They have a tendency to engage in investment activities and are much less likely to engage in interbank lending and are extensively more leveraged. Derivative exposures arise from their trading activities on book and for their customers. Derivatives are often identified as one of the key risky financial exposures of banks (Bartram, Brown, & Conrad, 2011; Frank & Goyal, 2009). Wholesale banks are strong in domestic activities and loans to banks, and there are wholesale-oriented and active in the interbank markets.

Like investment banks, the concentration of customer deposits in total liabilities is lower. This type of bank arranges deals with larger, institutional clients, such as large corporations and other banks. These banking services are usually kept only for pension funds, corporations and government agencies with outstanding financial relevance (Gertler, Kiyotaki, & Prestipino, 2016).

Business model profiles
Average values of ratios to total assets (net of derivate)

Model profiles	Retail	Wholesale	Trading	All banks
Gross loans	62.2%	65.2%	25.2%	57.5%
Interbank borrowing	7.8%	13.8%	19.1%	11.2%
Wholesale debt	10.8%	36.7%	18.2%	19.1%
Trade	22.4%	20.7%	51.2%	26.5%
Trading book	5.1%	7.1%	17.3%	7.1%
Interbank lending	8.5%	8.2%	21.8%	10.5%
Stable funding	73.8%	63.1%	48.6%	66.9%
Deposits	66.7%	35.6%	38.0%	53.6%
Number of banks/year	*737*	*359*	*203*	*1299*

Source: Roengpitya et al. (2014)

Table 2: Business model profiles

Roengpitya et al. (2014) uses classification of the three bank types: retail, investment and wholesale, similar to Ayadi et al. (2011). The outcomes are shown in Table 2. The classification procedure categorizes three different business models. Three out of eight figures are identified as the key distinctive variables:

1) share of loans as gross loans
2) share of non-deposit debt as wholesale debt, considered as other deposits plus short-term borrowing plus long-term funding
3) share of interbank liabilities to total assets as interbank liabilities

The share of gross loans is the only variable which relates to the composition of the bank's assets. The two other key figures differentiate the banks in terms of their refinancing structure. This selection meets the required criteria of robustness, parsimony and stability.

The other five of eight figures have a descriptive character for analysis purposes, which are:

4) trade as trading assets plus liabilities, net of derivatives
5) trading book as trading securities plus fair value through income book
6) interbank lending as loans and advances to banks plus reverse repos and cash collateral
7) stable funding as total customer deposits plus long-term funding
8) interbank borrowing as deposits from banks plus repos and cash collateral

The bank sample considers a period from 2006 until end of 2013. Therefore, the number of banks per year is counted each time for every single year of a sampled bank. Roengpitya et al. (2014) point out that the first business model group is referred to as a commercial bank specialising in deposit business as retail funded. Their distinguishing characteristics are a high proportion of loans in the balance sheet and strong dependence on stable refinancing sources, which also includes deposits. Customer deposits account for about 66.7% of the total liabilities of the average bank in this group. This is the largest group of all banks observed with 737 bank numbers over the year for the entire period of 2006 until 2013.

The second business model group is referred to as a commercial bank refinanced on the interbank, respectively the capital market as wholesale funded. The average bank in this group is similar to that of retail funded banks. The main difference between the two groups is the refinancing mix. The banks of the second group have a higher proportion of interbank borrowing, which lies at 13.8% compared to 7.8%. Also they show a much higher proportion of wholesale debt, which lies at 36.7% compared to 10.8%. In return, the share of customer deposits is smaller, which lies at 35.6% compared to 66.7%. The second group has only 359 observations over the years, as it has half as many samples as the first.

The third group is more capital market oriented. The banks in this category hold 51.2% of their assets in the form of tradable securities, and they primarily refinance in markets. The average bank of this group is most active on the interbank market; the corresponding assets and liabilities account for around one fifth of the balance sheet total. This business model group is referred to as a bank specialising in capital market business and is labelled as a trading bank. With 203 observations over the years, it is the smallest group of the three.

The study of Roengpitya et al. (2014) shows that the popularity of a business model differs depending of the geographical location of a bank (Table 3). Considering only the data from 2013, the North American banks examined here either fall into the group of deposit-taking banks or the capital-market-oriented group; none falls into the wholesale funded group, as the US hampered such banks (Shen, 2005). One third of European banks pursue the model wholesale bank. But banks in emerging economies, in turn, clearly prefer up to 90% the retail funded model.

Bank institutes distribution of business models in 2013

Region	Retail	Wholesale	Trading	All banks
North America	16	-	6	22
Europe	36	22	9	67
Pacific (Japan/Australia)	11	3	3	17
Emerging market economies	45	2	3	50
G-SIBs	14	2	12	28
Non-G-SIBs	94	25	9	128
Total	*108*	*27*	*21*	*156*

Source: Roengpitya et al. (2014)

Table 3: Geographical dominated business models in 2013

Given the fact that the considered UniCredit Group is classified as global systemically important banks (G-SIBs) (Financial Stability Board, 2020) from the beginning in 2012 (Financial Stability Board, 2012), the considered G-SIBs (Financial Stability Board, 2013) data for 2013 includes 28 banking institutions of 29 that were part of banking groups that have been designated. Banks on the G-SIB list from advanced and emerging economies are more or less evenly distributed across the retail-funded and trading models.

2.3.2.2 Banking business model performance

Llewellyn (2013, p. 319) correctly notes that “bank business models are not static but evolve over time and under the influence of a complex mix of exogenous and endogenous pressures.” But only few researchers have addressed the issue on the banking business model. Roengpitya et al. (2014) and Ayadi et al. (2011) analysed selected key figures from worldwide selected banks. A sufficient analysis for European banks according to Ayadi et al. (2016), in context of evolving market structures and regulations intension, was first introduced by Ayadi, Llewellyn, Schmidt, Arbak, and Pieter De Groen (2010) for relevant banking institutions.

The crises and the regulatory impact on the business model are described in this section, in particular to show how it negatively affects the profitability of banks in the new regulatory environment. The negative effects on business activities are described here on the basis of selected key figures.

Llewellyn (2013, p. 319) outlines in his overview of fifty years in the evolution of bank business models that the results of changes are caused by “structural evolution and internationalisation of the financial system and financial markets; the macro-economic environment in which banks and their customers operate; the decisive impact of EU and national regulation; the competitive environment in banking markets; financial innovation; the impact of technology, and the chosen business objectives of banks.”

But the author outlines that these central aspects are limited to the impact of financial crisis, as the measurements at the end did not prevent the future crises. Llewellyn (2013) traces the first period from the early 1960 to 2000 and designates it as the ‘traditional model’. The second period, the pre-crisis period is from 2000 to 2007, so that the next period is the ‘financial crisis’ and the last is the ‘medium-term post-crisis period’, where the dates for the beginning and ending of the crisis are uncertain.

From almost exactly 2000, deregulation takes effect on business activities, which can be seen from the historical progression; in the following section, it can be derived how it has an effect and why it leads to problems for the bank's business models, also in the UniCredit Bank AG (sections 2.4 and 4.2).

Alternative Banking Models			
	before 2000	*after 2000*	
Banking Models	**Traditional**	**Securitisation**	**CDS**
Accept deposits	√	(√)	√
Originate loans	√	√	√
Utilise comparative advantage:			
- Information	√	√	√
- Risk analysis	√	√	√
- Monitoring	√		
Transform into loans	√	√	√
Accept risk	√		
Hold on balance sheet	√		√
Capital backing	√		
Default-Risk Taking	Internal	Shift	External
Source: : Llewellyn (2013)			

Table 4: Alternative banking models and changes before and after 2020

The traditional banking business model remains mostly unchanged until 2000 according to Llewellyn (2013). The original functions are consulting to accept deposits, to transform and to originate loans (compare also to Table 4). The bank accepts the risk by taking the loans and holds them on its own balance sheet. It utilises the comparative advantage by screening the market information, establishing a risk analysis and monitoring their customers. The whole business is backed up by its own capital for defaults. As a bank monitors their risk with internal models, they are faced with asymmetric information problems. Hence, they deal with adverse selection and moral hazard problems. For this reason, as no external party can estimate the risk properly, they insure the defaults internally.

Starting in the 1980s a decade of deregulation emerged in the financial industry. Several national legislative bills and state proposals have been approved for further banking activities (Evanoff, 1985; Evanoff & Israilevich, 1991; Hammond & Knott, 1988; Isik & Hassan, 2003).

The deregulation of the bank led to new business activities and in 2000 they started to reach an excessive weight in the financial world. The main new financial product aimed to pool various types of contractual debt into securitizations, which can be backed by residential mortgages, commercial mortgages, auto loans or credit card debt obligations, residential or commercial mortgages, auto loans or also credit card debt obligations (Vink & Thibeault, 2008). Empirical financial tests show that the risk can be diversified. In Table 4 the traditional bank model is opposed to the securitizations, the main characteristic is that a securitization can be sold and thereby shifted from the balance sheet. The originated loans are now pooled, but the required deposits can be reduced as the risk is sold.

Hence, the bank has no need for capital backing as the risk is sold and the analysis for the securitizations is only need before pooling and selling, with a lackadaisical approach to monitoring. A central business strategy for many banks is now the securitization of loans, and various forms have appeared such as a Collateralized Debt Obligation (CDO), the business model shifted away from holding the risk and now aim to sell it within a new product. Simultaneous, Credit Default Swaps (CDS) were established. They are similar to the securitization model except only the risk is sold as the originated asset, like a loan, remains on the balance sheet of the originating bank. In this case the banks can offer Credit Default Swaps (CDS), as a derivative instrument whose value is based on the risk of default of an underlying asset and can be sold to another party.

Hence, the original loan business can be pooled in the risk portion of a Collateralized Debt Obligation (CDOs) and the Credit Default Swaps (CDS) for the underlying asset. Both product types are now saleable. Especially the Credit Default Swaps (CDS) which can be created on assets, that are not on their own books. In 2008 an amount of USD 60 trillion was reached according to the quarterly reviews from the Bank for International Settlement (BIS). For comparison, at the end of 2007 the Gross Domestic Product (GDP) was estimated at USD 54.3 trillion (für politische Bildung, 2007).

For the period from 2006 until 2013, Roengpitya et al. (2014) examined the performance for retail, wholesale and trading banks. The following KPIs and the analyses over the years are later compared with the KPIs from the case study (section 2.4), with the result that UniCredit

AG is struggling with the same to similar decreases in its earnings. The chosen ratios are return-on-equity (RoE), cost-income-ratio (CIR) and the price-to-book (P/B), which are expressed as a percentage. The return-on-equity (RoE) measures the profitability of a business in relation to the book value of shareholder equity. RoE is equal to the net income divided by the total equity. Also the RoE is preferred for comparing companies in the same industry, as it is a measure of ability to generate income from the equity.

The larger this figure is, the more profitable the equity on a relative comparison. Cost-income-ratio (CIR) measures the costs to the income. The CIR is an important figure for companies. Basically, the smaller the cost-income ratio, the more cost-efficient the banks operate. The price-to-book (P/B) ratio has the function to compare a stock's market value to its book value. Hence, even if the fundamental book values have not changed, the P/B ratio can decrease if the market has negative expectations for the company, the industry segment or the world market (Brealey, Myers, Allen, & Mohanty, 2012; Copeland, Weston, & Shastri, 2005; Schierenbeck & Moser, 2013).

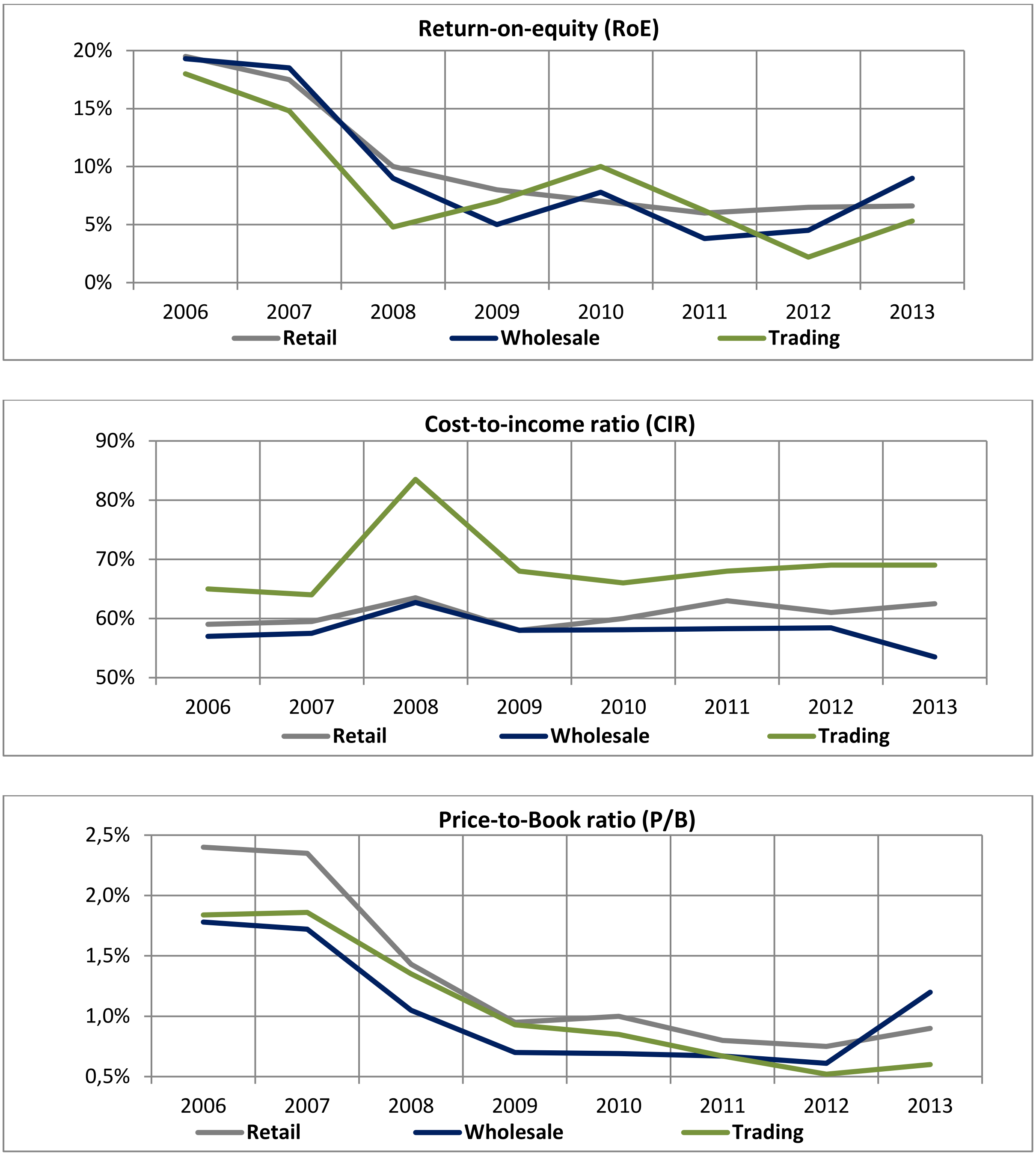

Figure 3: Efficiency and earnings profiles by Roengpitya et al. (2014)

In Figure 3 are shown the results from Roengpitya et al. (2014) for the ratios return-on-equity (RoE), cost-income-ratio (CIR) and the price-to-book (P/B) and the retail, wholesale and trading bank over the years. These ratios are target variables as the result of the interaction between the strategic choices made by the financial institutions and the market environment. Earnings power and efficiency vary greatly between banking business models as well as over time. In 2008, the return-on-equity (RoE) of banks dropped across all business models. But while it stabilised for the banks specialising in retail after 2009, it remained volatile for wholesale and trading banks that predominantly refinance via the capital and interbank markets, or that specialise in the capital markets business.

Trading banks have the largest increases in return on equity in 2009 to 2011. But according to their volatility they swing between the top and bottom positions of the rankings of the three business models. In all three business models, costs are relatively stable relative to income revenues. A short-term upturn in the cost-income-ratio (CIR) around 2008 can easily be explained by the drop in the middle of the crisis. Notably, trading banks that specialised in the capital markets business had a consistently high cost base throughout the analysis period, although they had a more mixed picture of profitability.

The cost-to-income ratio remained high after 2008, although the profitability of these banks declined. According to Roengpitya et al. (2014), a possible explanation is the personnel costs, which are difficult to read from the data used, as they are only one part of total costs.

Considering the price-to-book (P/B) ratio the market appears to be skeptical about the outlook for all three business models since 2008. This ratio relates the stock market capitalization of a bank to the share capital reported in its financial statements. A value greater than 1 suggests that the stock market is more positive about the goodwill of a bank than is reported under accounting rules. A value below 1 indicates a negative assessment. Around the crisis, this value dropped dramatically for banks in all three business models. Since 2009, it has remained below 1, reflecting the markets' skepticism about their outlook.

Risk-adjusted key indicators for the three business models				
Financial ratios	**Retail**	**Wholesale**	**Trading**	**All banks**
Return-on-assets (RoA)	1.16%	0.45%	0.98%	0.94%
Risk-adjusted RoA	0.68%	0.09%	0.57%	0.48%
Return-on-equity (RoE)	12.5%	5.81%	8.08%	9.95%
Risk-adjusted RoE	8.76%	2.57%	-9.55%	4.29%
Share of fee income	22.1%	23.3%	44.3%	25.8%
Capital adequacy	14.6%	12.2%	17.3%	14.3%
Cost of equity	12.0%	3.00%	11.0%	9.00%
Total assets (in USD bn)	362	322	788	417
Number of banks/year	*737*	*359*	*203*	*1299*
Source: Roengpitya et al. (2014)				

Table 5: Risk-adjusted business model key indicators by Roengpitya et al. (2014)

Capturing the analysis of Roengpitya et al. (2014), they estimated risk-adjusted performance key indicators on the entire sample period. Table 5 compares the results of the three business models. In addition to the return on assets (RoA) and return on equity (RoE), which confirm the ranking in Figure 3. The RoA and RoE are similar, the RoA measure return on the total assets with liabilities, the RoE measures the return on equity whitout debt (Easton, 2004).

The risk-adjusted version of this profitability statistic constitutes the earning variable, which deducts the cost of capital required to cover the risks associated with the bank's activities. This aproach is a common measure of measuring investment performance and comparing the profitability of various businesses (Crouhy, Turnbull, & Wakeman, 1999; Froot, 2007; Perridon, Steiner, & Rathgeber, 2014).

Hence, the gross income of the Bank is deducted from operating expenses, losses, including credit losses and provisions and the cost of equity capital to cover potential future losses. The last component is the product of the quantity of equity held by the financial institutions and multiplied with the weights of the cost of equity. Notably, “the cost of equity here is measured in terms of the systematic relationship between the rate of return on the stock of the bank in excess of the risk-free rate and the excess return on the corresponding broad market price index" (Roengpitya et al., 2014, p. 62); a similar opinion is also shared by (Dhaliwal, Li, Tsang, & Yang, 2011).

Considering Table 5 for the three business models, the highest return on assets (RoA) is generated by the retail funded bank, followed by the trading and wholesale funded. In this case, where the risk is not considered as risk adjusted RoA, the retail funded banks still have the highest return on assets; it is very closely followed by trading and far behind wholesale funded. A similar appearance is shown for the return on equity (RoE) and the risk adjusted RoE. It is worth noting that the risk adjusted RoE is negative for trading banks.

It means that the positive return is only generated by taking the risk. A primary business of trading banks is collecting the money through fees, the share of fee income is about 44%, which is almost double that of the other business models. Whole-sale funded banks have the lowest capital buffer of the three types and cost of equity (CoE). In general, trading banks are twice as large, when measured by total assets, as other banks.

2.3.2.3 Post crisis impact on business models

The financial crisis started in the subprime market in late summer 2007 and it developed into an international banking crisis with the collapse of the system-relevant investment bank Lehman Brothers on September 2008 (De Haas & Van Horen, 2012). This incident was unexpected as in December 2006 the European Central Bank (ECB) made the conclusion in their reports (European Central Bank, 2006, p. 4) that "in view of the earnings performance of the banking sector over the past three to four years and given that profitability is expected to improve further in the near-term, the vulnerability of the sector to adverse disturbances has diminished considerably."

Even in June 2017 the ECB Financial Stability report (European Central Bank, 2007, p. 9) still argues that "the likelihood that the euro area financial system could be significantly challenged by adverse scenarios related to these vulnerabilities is not judged to be high at present."

The global financial crisis led to reworked and expanded regulations, rules and controls (C. A. Goodhart, 2009). Llewellyn (2013, p. 320) formulates that appropriate "business models respond to regulation which, in turn, responds to the evolution of new business models." Roengpitya et al. (2014) perform analysis that shows that the business models were changed before and after the crisis. Next to the ECB reports, Ayadi and De Groen (2014); Demirguc-Kunt, Detragiache, and Merrouche (2010) explicitly analyse the impact of business models in the banks. With sufficient time after the financial crisis, a systematic pilot exercise was performed of 147 banks and published by Ayadi et al. (2010). Hereinafter, Ayadi et al. (2016) complete a deep study on the business model performance in European banking for 1859 banks.

The following analysis shows how unwilling the banks are to fundamentally transform their business that can also be observed at UniCredit Bank AG (section 2.4) and which is also criticised by the experts in the interviews (sections 4.2.4, 4.2.5 and 4.2.6).

Business model profiles
Shift of business models from 2005 to 2007 and 2007 to 2013

	Business Model	Business model in 2007			
		Retail	Wholesale	Trading	*All banks*
Business model in 2005	Retail	53	10	0	63
	Wholesale	3	25	2	30
	Trading	2	0	13	15
	Total	*58*	*35*	*15*	*108*
		Business model in 2013			
Business model in 2007	Retail	57	1	0	58
	Wholesale	16	16	3	35
	Trading	3	1	11	15
	Total	*76*	*18*	*14*	*108*

Source: Roengpitya et al. (2014)

Table 6: Consistency of the business model from 2005 to 2007 and 2007 to 2013

Roengpitya et al. (2014) investigates the consistency of the three business models (retail, wholesale and trading) for 108 banks in 2005, 2007 and 2013. Most changes in recent years have occurred between the retail business model and wholesale-funded models. The group of capital market-oriented banks is fairly consistent throughout the period until 2007. The outcomes in Table 6 illustrate the trend that from 63 retail banks in 2005 almost 53 kept their model, only 10 changed to wholesale and none to trading. A similar picture can be considered for 30 wholesale banks, as 25 kept their model, 3 changed to retail and 2 to commercial trading banks.

For 15 trading banks only two changed to retail and none transformed to wholesale. At the end there remain 58 retail, 35 wholesale and 15 trading banks. However, the direction of a change in the business model of banks is very different after the crisis than it was before 2007.

In the boom phase, this market environment promotes refinancing on the interbank and capital markets, and banks preferred to use these market conditions (European Central Bank, 2009a, 2009b). In 2013, compare Table 6, there was a big shift of wholesale banks to retail, and at the end only 18 banks remain there. The more resilient retail bank model was preferred by 76 banks. The commercial proportion remains nearly stable with 14 institutes.

Ayadi et al. (2011) analyse a sample of the 26 large banks and banking groups, which represent 55% of total EU banking assets in the period of 2006 to 2009. Before the crisis, on the capital raising side, the excess leverage and an under capitalisation expanded faster and to a higher level (Alessandri & Haldane, 2011). On one hand, the banks reduced their holdings of liquid assets and expanded the access to the wholesale funding market. On the other hand, the matching maturities principles were neglected and short maturity money funding were used to finance long term credits (Entrop, Scholz, & Wilkens, 2002).

One of the representative examples is the British bank, Northern Rock plc, where the shortage on short term financing led the bank into bankruptcy (Shin, 2009). A common short term financing method is the use of reverse repurchase agreements, shortly called as reverse repos, and repurchase agreements, shortly called as repos. Banks sell a security or buy it (in the case a reverse repo). Later they buy or sell it back and for quick financing it is extremely suitable for this purpose (Lumpkin, 1987).

A distrust in lending between the banks led to a reduced contract volume of repos. All three banking business models reduced their repos from the peak in 2007 to 2009. The biggest impact could be measured for the investment banks, as their repos dropped by nearly one-third in the crisis phase between 2007 and 2008. Next to a dry out of refinancing, the banks are also faced with drops of asset prices and quality of their loans, as uncertainties about their borrowers occurred. Ayadi et al. (2011, p. 34) make the conclusion that “troubled banks have two options to meet its regulatory requirements: it can either raise more capital – a costly option in bad times – or, more likely, shrink its asset.”

A ‘flight of quality’ (Bernanke, Gertler, & Gilchrist, 1994) started and impacted the associated banks; a recession-related deterioration of the creditworthiness of companies led to an increasing risk in trading activities. Banks tried to reduce trading products and aimed to provide loans only to a safer class of customers. The result was a competitive devaluation in the financial industry.

The financial crisis reduced the earnings and changed the source of income. Ayadi et al. (2011) analyse the period from 2006 to 2009. In 2006 retail and wholesale banks generated nearly 50% of their income from interest products, like loans. The main driver for investment banks were the trading products. Commission and fee income were for all business types homogenous and it contributed one-quarter of the total earnings. Other income has only a subordinated role. In 2007 there was a large displacement for trading activities, only retail banks had measurable trading income, for wholesale and investment banks it eroded to zero or negative.

Interest related products and commission fees were for all three bank types profitable. In 2008 a substantial drop in earnings from trading occurred, it could be only slightly compensated by other income streams, which is mostly generated for investment banks from insurance premiums. By comparing 2006 to 2009, in 2009 all three bank types increased their income for interest-related activities. It's notable that for wholesale banks it was nearly the only profitable income. Retail and investment banks reduced their trading earnings, but kept their commission and fees business stable.

The shift and reduction of the source of the earnings income have a massive influence on several important key performance indicators (KPI). Historically, the relative rapid changes between 2006 and 2009, which can be compared with the crisis in 1929 (Michler & Smeets, 2011), led to reorganisation. Ayadi et al. (2011) compare the KPIs Return on assets (RoA), return on equity (RoE), Risk-weighted Assets (RWA) and Tier-1 capital ratio from 2006 to 2009. From 2006 to 2009 the profitability measured by RoA and RoE decreased for all business models.

But only retail has a positive return, and wholesale banks suffer most. Significantly, the RoE in 2006 is on similar level at 20% for all banks, but in 2009 it shows a different picture. Retail is still positive, investment is only slightly positive and wholesale has a high negative return. The crisis led to a prudent approach on the banking activities and it can be considered that the RWA could be reduced. Also the Tier-1 ratio was increased, as the regulation forced better capitalization.

Demirguc-Kunt et al. (2010) analyse the business models for different countries, their conclusion is that the banking business models are affected worldwide and no country can be excluded. In a first attempt Ayadi and De Groen (2014) analyse 147 banks, hereinafter Ayadi et al. (2016) complete a comprehensive study on the business model performance in European banking for 1859 banks and, according to the authors, it covers the entire European banking sector for the first time. They compare the changes of the banking business model before, during and after the crisis in 2007 and they investigate if the changes in the business models are sustainable and provide the policy-makers with key findings to reduce systemic risk in the financial sector and to introduce proportionality in bank regulation.

Ayadi et al. (2016) identify the bank business models of sampled 2,542 banks that cover more than 95% of total assets of the European Union and countries from the European Free Trade Association (EFTA) Island, Norway, Liechtenstein and Switzerland (Steppacher, 2014), for the years 2005 to 2014, which means a sample of 13,040 bank year observations. The huge sample allows the authors to cluster the business models in five sections: investment and wholesale banks still exist, the retail banking is now divided into ‘focused retail’, ‘diversified retail (type 1)’ and ‘diversified retail (type 2)’. The chosen difference for the retail-oriented banks depends on the concentration of their business models.

Focus retail banks are most active in the traditional deposit-loan intermediation. By measuring on total assets the customer deposits account for 69.5% and customer loans account for 78.5%. In 2014 these banks represent nearly one quarter of the sample, but they represent only one twentieth of the total assets of all banks.

These financial institutions are regionally embedded. Diversified retail (type 1) has more trading assets (31%) and 10% are bank loans. On the one hand, they have a high dependence on customer deposits, but on the other they have a limited reliance on bank deposits and debt liabilities.

In 2014 diversified retail (type 1) represents 40% of the sample, but is still less than 21% of the total assets. Diversified retail (type 2) has more diverse assets and liabilities than focus retail banks, especially for the trading assets. The main difference between the retail business models is the funding, they also rely more on debt liabilities. In 2014 diversified retail (type 2) represents 12% of the sample, but it includes 28% of total assets. This business model is regionally embedded, but globally linked. In comparison, wholesale and investment banks represent only 6%, respectively 11%, of the sample and cover 3%, respectively 42% of total assets.

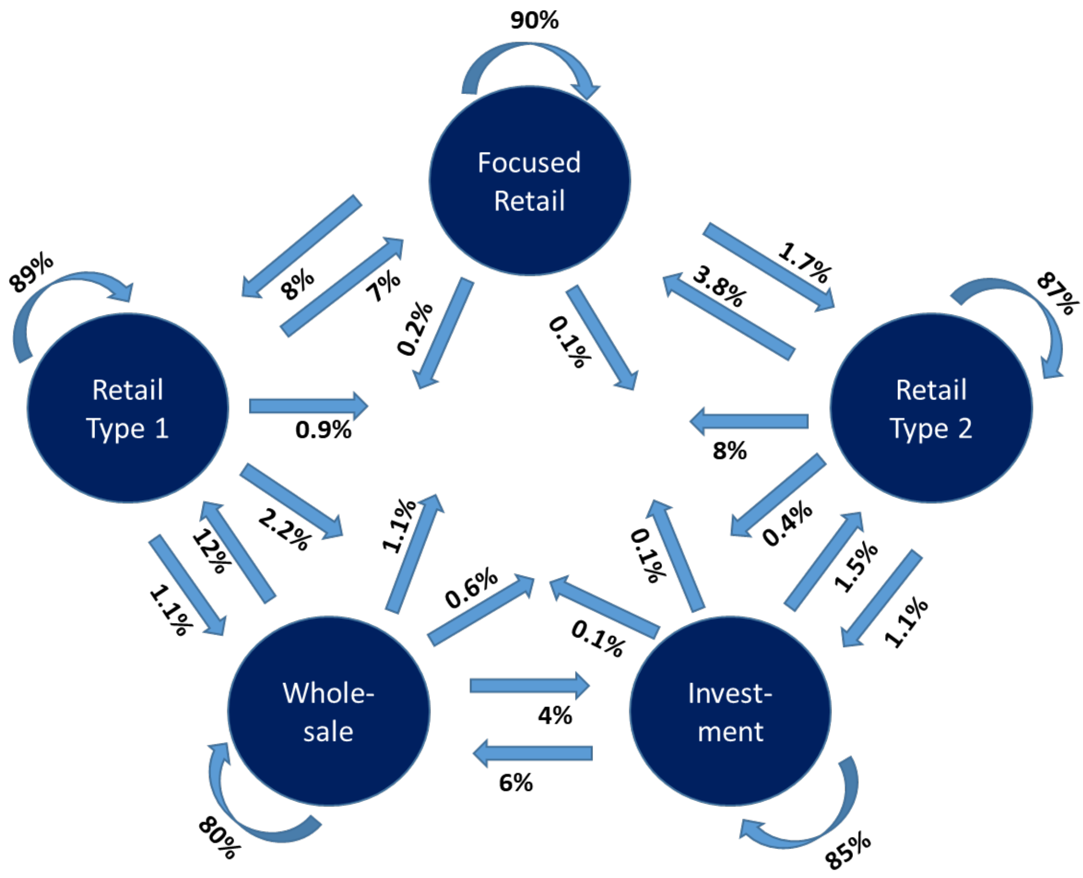

Figure 4: Transition of business models from 2005 to 2014

Figure 4 illustrates the transition of the five business models from 2005 to 2014, hence it includes an ex-ante and ex-post view on the financial crisis. It can be argued that all business models stay relatively stable. The focused retail, diversified retail type 1 and type 2 remains stable at 90%, respectively 89% and 87%. Wholesale banks have the lowest stable value of 80%, and also 85% of the investment banks remain the business. The biggest transitions are between the retail banks.

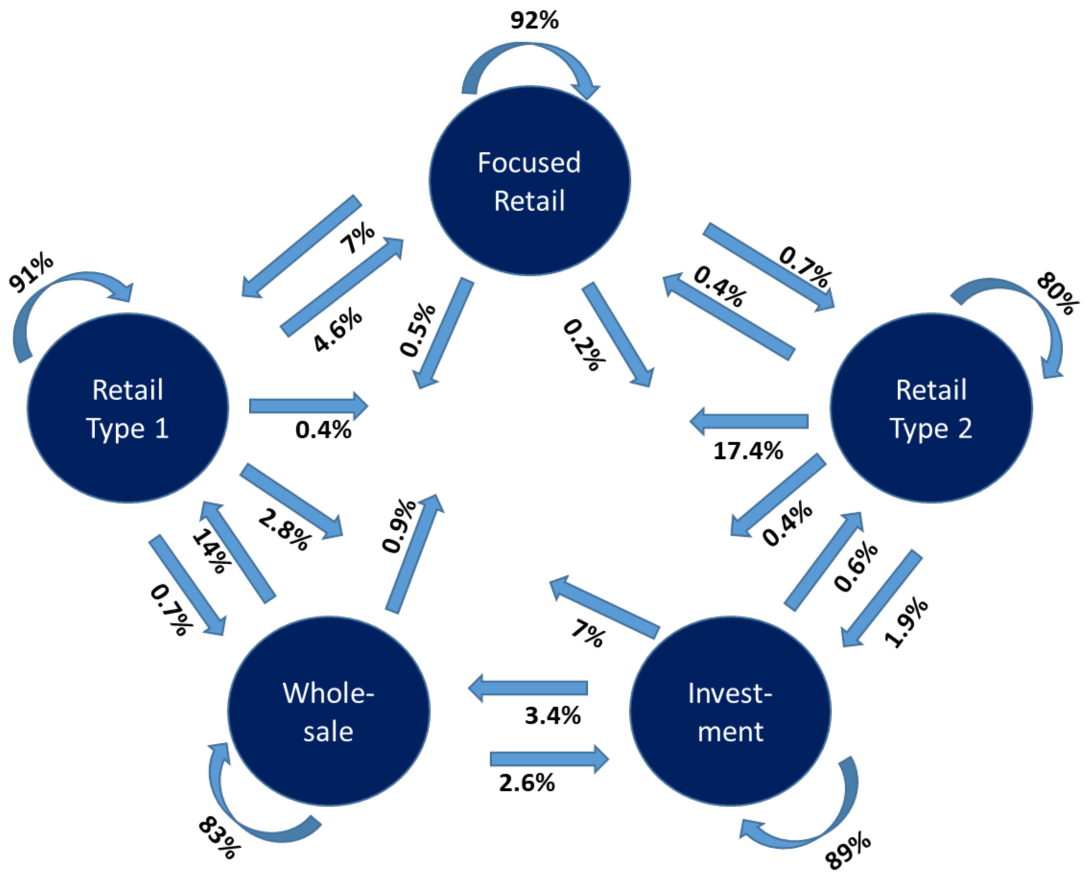

Figure 5: Transition of business models from 2013 to 2014

The weakness of Figure 4 is that it can only show status in 2005 and 2014. The transition period between these dates is not shown. As a comparison, Figure 5 illustrates the changes from 2013 to 2014. The changes are largely the same and overall it can be asserted that the variance of the business models follows a natural economic fluctuation.

A precise picture on the valuation can be achieved by considering only the banks which received state aid beginning in 2007. Ayadi et al. (2016) identify a selection of 68 banks, which are hit by the crisis and started to receive support their financial institutions from European governments to avoid disruption of the real economy and maintain a level of financial stability. The 'big shift' of nearly 20% is succeeded by diversified retail (type 2), although it is preferred to run business as diversified retail (type 1).

The other models have slight changes and they also all prefer to shift their business to diversified retail (type 1). An analysis of the year-by-year shift shows that the transition to type 1 was especially high in 2009 and in 2011 to 2014, at the midst of the crises and during its aftermath “when non-deposit funding was more difficult to attract and regulatory scrutiny more intense” (Ayadi et al., 2016, p. 33). It can be considered that financially stressed banks try to engage in more market activities or, in the majority of cases, run a defensive strategy to remain closer to their regional roots, placing increased trust in retail funding and engaging in customer loans.

Ayadi et al. (2016) concentrate also on other KPIs of their analysed business models. When the financial shock was handled there was a unique situation created in the financial industry. The evolution of return on assets (RoA) shows that after the turmoil in 2007 until 2009 the RoA has been halved and remained consistently stable on this level for the next few years. An equal picture has developed in the evolution of return on equity (RoE), it too has been halved and stayed stable. It is notable that the evolution of cost-income ratio (CIR) from 2005 and after the crisis is in a steady state. One of the main reasons is that the banks reduced their exposure by reducing their trading activities and the growth of outstanding customer loans.

2.3.2.4 Shadow banking and regulatory arbitrage

In the old banking economy the credit exposure stayed stable over the years, but the economy in Europe, and also worldwide, has developed well in recent years (Eurostat, 2018). However, the growth of the economy was not exclusively generated by the traditional banks. Altunbas et al. (2011) along with Ayadi et al. (2016) analyse the business model for the largest European banks by using cluster analysis methodology on earnings and profitability, asset and liability structure, and stability and governance aspects.

This section is very important to show that the financial system is not a closed system and due to regulatory pressure, the business models are shifted to other actors; consequently, the risk is also outsourced but not reduced. All major banks are affected by these issues, including UniCredit Bank AG (section 2.4) It is also a central point in the expert interviews (section 4.2.4) that regulation is promoting new business models outside the banking landscape, and not in a positive manner.

An initial reason was that the banks entered a period of slower growth, and became more expensive for customers, as a result of their risk appetite being penalised by the new regulation. It also supports an outsource of the former business to the shadow banking system (G. Gorton & Metrick, 2010).

The European Central Bank (ECB) and, in a subordinated role, the German banking supervision authority, BaFin, focus their regulation intension on the shadow banks (N. Doyle, Hermans, Molitor, & Weistroffer, 2016). They follow the definition of FSB (Financial Stability Board, 2017b): shadow banks are actors, whose activities perform bank-like functions in the financial markets, especially in the lending process. The gap is filled by asset managers, private loan funds and crowd funding companies.

Regulated credit institutions can outsource some trades to specialised shadow banks and thus circumvent regulatory measures. That is the reason why they are called shadow banks, because these companies take over the functions of banks. They are still not banks and therefore not subject to regulation for credit institutions. Since the financial crisis has shown that the shadow banking system can bear systemic risks, regulation is now being observed on a global and EU level.

In principle, shadow banks are not part of the semi-legal or illegal shadow economy (Liebert, Ötsch, & Troost, 2013). Dodd-Frank laws (Reform, 2010) in the US and the global Basel III (Angelini et al., 2015) guidelines oblige regular banks to have more equity and withdraw from certain risky assets. This makes the institutions safer, but it also means that they have less capital for loans. But the measures had a side effect: they suddenly offered other financial companies (the shadow banks) a competitive advantage because they are not subject to stricter regulation.

The cause of shadow banking is also located in regulatory arbitrage. In a market-oriented, global world that is increasingly interconnected, it is becoming easier for companies to organise their locations flexibly. Complex corporate structures with holdings and subsidiaries create additional opportunities to optimise a company's profits accordingly. Companies conduct business in the place in the world where they are subject to the fewest restrictions if this enables them to increase their profits (Houston et al., 2012).

Regulatory arbitrage is also of interest to FinTechs: by taking over bank-specific sub-processes, superordinate strict bank regulations no longer apply, which means they can also offer the service more cheaply and more quickly. Thus, they are also a type of shadow banking (Buchak, Matvos, Piskorski, & Seru, 2018; Karolyi & Taboada, 2015).

In 2018 the Financial Stability Board (FSB) (Financial Stability Board, 2018b, p. 1) examines the shadow banking system, which is defined as “credit intermediation involving entities and activities (fully or partly) outside of the regular banking system.” Their report includes 29 jurisdictions worldwide that covers 80% of the global GDP.

Micro-mapping of the financial system 21 jurisdictions and the euro area								
	Central banks	Banks	Financial institutions	Insurance	Pension funds	OFIs	Financial auxiliaries	Total
Size 2016 (USD trillion)	26.2	137.8	16.0	29.1	31.0	99.2	0.7	339.9
Share	7.7%	40.5%	4.7%	8.6%	9.1%	29.1%	0.2%	100%
Growth 2016	12.3%	6.9%	6.3%	5.9%	6.4%	8.0%	9.7%	7.5%
Growth 2011-15	8.3%	3.1%	3.7%	5.8%	6.3%	9.0%	5.0%	5.6%
Source: Ayadi et al. (2010), European Central Bank (2010)								

Table 7: Macro mapping for the location of the financial assets

In order to synthesize and to quantify, the shadow banks' Financial Stability Board (2018b) classifies the different financial institutions according to their overall business models. Table 7 illustrates the total global financial assets in USD, the average growth rates for 2011 – 2015, and the growth in 2016 for the business models in the year 2016. The total measured global financial assets are estimated with 333.9 trillion USD, for the years 2011 until 2015 they grew by 5.6% yearly and in 2016 by 7.5%. Central banks had a share of 7.7% of total assets and the biggest growth was 12.3% in 2016.

Banks, including all deposit taking corporations, cover the biggest share with 40.5% of total assets, but they have the lowest growth for 2011 until 2015 with 3.1%. Public financial institutions are predominantly controlled by the government and their purpose is to finance undeveloped or troubled sectors, provide initial finance and for to mobilise private investment for public projects like infrastructure as part of a government's efforts (Schmit, Denuit, Gheeraert, & Warny, 2011). The public financial institutions have a share of 4.7% of total assets and moderate growth rates. The other financial players are insurance corporations and pension funds with shares of 8.6% and 9.1% respectively of total assets and the moderate growth of approximately 6%. Financial auxiliaries, with 0.2% of total assets, can be neglected due to their limited impact on the financial market. Looking at shadow banking, the last remaining business model of 'Other financial institution' (OFI) should be considered.

The Financial Stability Board (2016b, 2018b) avoids a precise definition, as it is not easily accessible. In this case, OFIs comprise all financial institutions that are not central banks, banks, insurance corporations, pension funds, public financial institutions, or financial auxiliaries. In the first step, OFIs can be considered as a broad measure of shadow banking. In 2016 they have a size of 99.2 trillion USD that means a large 29.2% share of total assets. Above all it has to be noticed that the growth rates measured since 2011 are disproportionate, with 9.0% until 2015 and 8.0% still in 2016.

In the case of regulated banks, they also run financial entities that are created as special purpose vehicles, usually located in 'tax haven' countries. Their operations and contribution to the financial system are not covered by the domestic regulation. Usually they are not illegal and use regulation gaps to bypass certain regulations; some examples have evolved as 'government sponsored shadow banking sub systems' (Pozsar, Adrian, Ashcraft, & Boesky, 2010).

Therefore the apparently narrow shadow banking industry plays a significant role in finance and accounted for a 62% of all participating jurisdictions' GDP in 2011, rising to around 73% in 2016 (Financial Stability Board, 2018b). Compared to the financial crisis of 2007-2008, where it had a share of around 72% of the GDP, it seems that this risky component remains present at high levels.

The USA is dominating the field, with a 31% share of the shadow banking market. The so-called 'tax haven' countries, that play a subordinating role for the GDP measurements, located in locales such as the Cayman Islands and Luxembourg, representing 10% and 7% of the global shadow bank's capital respectively. Germany follows with 4% and UK (United Kingdom) with only 3% (Financial Stability Board, 2018b).

2.4 Annual, sustainability and disclosure reports of UniCredit Bank AG

Regulation requirements and their impact on the business strategy can be observed. As a practical example of the new strategy that has been derived from the regulation, the German UniCredit Bank AG (a subsidiary of the UniCredit Group), which is classified as one of 30 system- relevant financial institutions in the world (Financial Stability Board, 2020), is selected and the results can be linked to a generalised overview of other large banks in Europe. Consequently, the review concentrates on the annual, sustainability and disclosure reports.

In particular, these three types of documents describe the current financial situation and give an outlook on the banking strategy as it is possible to compare the bank business model, human capital demands and qualification and strategy over the years. The knowledge about UniCredit AG, reflects the issues and challenges of the whole sector of major banks. The key figures and facts examined later in this section are very comparable with the whole branch. Thus, the intention that this bank is a case that can be generalised. Therefore, this part has to be considered in the context of the outcomes of sections 2.1, 2.2, 2.3, 2.5 and in particular the impact on the human resources discussed in the expert interviews (section 4.2.6).

The most interesting scope is the years before the financial crisis in 2008, during the crisis itself, and in the short and long term thereafter. Ayadi et al. (2011) describe the UniCredit Group as a retail and corporate bank in Italy, Germany, Austria and Central and Eastern Europe, the financial group also offers insurance products and has high capital market activities. The financial crisis led to lower profits, higher risk costs and the need to write off the investments. But the UniCredit Group have not received any state aid and could raise money by creating new shares to stabilise its capital level. The strategy as retail and commercial bank has been retained.

The annual reports (UniCredit Bank AG, 2007, 2008a, 2009, 2010a, 2011a, 2012a, 2013a, 2014a, 2015a, 2016a, 2017a, 2018, 2019, 2020) were considered from 2006, two years before the financial crisis, to 2019. The first sustainability reports from UniCredit Bank AG were published in 2008 (UniCredit Bank AG, 2008b, 2010b, 2011b, 2012b, 2013b, 2014b, 2015b, 2016b) and in 2016 (UniCredit Bank AG, 2017b; UniCredit S.p.A, 2017, 2018, 2019, 2020) it was integrated and transferred within the UniCredit Group reporting.

2.4.1 Annual reports

The examination in the annual reports (UniCredit Bank AG, 2007, 2008a, 2009, 2010a, 2011a, 2012a, 2013a, 2014a, 2015a, 2016a, 2017a, 2018, 2019) from 2006 until 2019 concentrates on selected key capital ratios, as introduced and analysed for European banks in section 2.3.2.2, and balance sheets positions. Those are the adjusted return on assets (RoA) before tax, adjusted return on equity (RoE) before tax, cost income ratio (CIR), risk-weighted assets (RWA), total assets, net profit, Tier 1 and employees, as quantitative figures.

The annual reports have a good overview of how the segments of retail, commercial and investment perform. Additionally, other aspects are considered in terms of the market power, business model, outsourcing of the business (e.g. shadow banking) and human resource development on further learning, retraining and restructuring. In the annual reports these facts are only on available on a qualitative basis.

Starting in 2006, the annual reports are structured in four main areas. It begins with strategy, 'business model and results', then it reports about 'human resources & corporate social responsibility', 'financial statements' and boards and 'corporate governance'.

From 2007 until 2015 the 'business model and results' and discussions of 'human resources & corporate social responsibility' were combined into one chapter discussing 'strategy results', the 'financial statements' were kept but have been expanded over time and there remains a chapter about corporate governance.

Additionally, a new segment was deployed, the 'UniCredit Profile', which describes in case studies how the UniCredit Bank AG transforms new strategies and business models. From 2016 the chapter 'strategy and results' is included in the 'financial statement', but the single point e.g. human resources are not shown uniquely, but only help to explain the business ratios.

Indicators/Ratios	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
adj. RoA	0.46%	0.49%	-0.15%	0.24%	0.46%	0.25%	0.37%	0.37%	0.26%	0.25%	0.05%	0.45%	0.17%	0.27%
adj. RoE/ RoAC (>2016)	15.0%	17.9%	-9.5%	5.5%	8.5%	7.2%	9.2%	7.1%	5.4%	3.9%	1.7%	13.9%	4.9%	7.5%
CIR	62.1%	54.1%	88.5%	50.0%	52.3%	62.1%	58.1%	63.6%	77.3%	76.3%	70.7%	65.6%	60.8%	65.4%
Net profit/loss (m EUR)	1,640	2,050	-671	884	1,728	971	1,287	1,074	785	750	157	1,336	483	810
RWA (m EUR)	137,400	131,600	148,200	115,100	124,500	127,400	109,800	85,500	85,700	78,057	81,575	78,711	82,592	85,454
Total assets (m EUR)	358,300	422,100	458,600	363,400	371,900	385,500	348,300	290,000	300,300	298,745	302,090	299,060	286,668	303,598
RWA in % (of total assets)	38.3%	31.2%	32.3%	31.7%	33.5%	33.0%	31.5%	29.5%	28.5%	26.1%	27.0%	26.3%	28.8%	28.1%
Tier I	11.0%	17.9%	14.3%	17.8%	16.6%	16.2%	17.8%	21.6%	22.2%	25.1%	20.4%	21.1%	18.3%	17.7%
Employees	25,738	24,784	24,638	20,459	19,146	19,442	19,274	19,092	17,980	16,310	14,748	13,405	12,252	12,194
Regulatory Standards	Basel I		Basel II						Basel III					

Table 8: Selected ratios from the annual report of UniCredit Bank AG (2006 – 2019)

The examination of the ratio is presented in Table 8, based on the annual reports. Until 2007 Basel I was the reporting standard, from 2008 until 2013 it was Basel II and after 2014 the UniCredit Bank AG uses Basel III. According to the adjusted standards, also from single year to single year, the ratios are also calculated in a different way. By considering the reconciliation statements, which are made on equal regulation standards and make it possible to compare them between the years, the changes are not significant and can be considered for superordinate trends.

In the following, the analysed ratios show that UniCredit Bank AG's profitability ratios deteriorate as loan loss provisions increase. Therefore, the bank has to deal with all the post-crisis problems described in section 2.3.2.

It can be observed that in 2008 the global financial crisis clearly left its mark, all profits ratios dropped. The adj. RoA and adj. RoE best performed in 2007 and in 2008 and afterwards suffered a hard landing. Over the subsequent years, it stabilised and only in 2016 did it see a strong decrease. The CIR ratio was stabilised in 2009 with the best value of 50.0%, but it increased in the years that followed. An equal picture is displayed for the net profit or loss, as there is a loss in 2008 and later a dip in 2016. The total assets grow up to their highs in 2008 and in 2018 it drops about 37%. It can be clearly seen that the risk weighted assets have continuously been reduced in the year after the crisis.

A better ratio for it is RWA measured to total assets - it dropped from 38.8% to a range of 26% till 27%. The core capital measured in Tier 1 increased and stabilised the capital buffer. It is worth recognising that the number of employees steadily reduced over the years from

25,738 in 2006, to 19,092 in 2013 and to 12,194 in 2019. These ratios show that the financial crisis changed the bank’s profitability, risk appetite, employee numbers and perhaps also their strategy for an earning structure and business model.

Economic capital share	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Retail	17.0%	15.7%	8.7%	7.8%	7.8%	12.9%	24.8%	19.6%	22.9%	23.1%	21.9%	23.6%	24.9%	23.6%
Commercial/Corporate	16.5%	18.3%	19.0%	80.0%	82.1%	72.5%	61.3%	60.6%	61.1%	67.4%	68.0%	67.7%	63.1%	68.7%
Investment Banking	37.1%	46.5%	47.2%											
Others/consolidations	29.4%	19.5%	25.1%	12.2%	10.1%	14.6%	13.9%	19.8%	16.0%	9.5%	10.1%	8.7%	12.0%	7.7%
Total (m EUR)	4,166	4,678	6,817	9,724	8,477	9,839	13,847	11,155	9,543	7,971	7,257	6,938	7,332	6,265
Confidence interval	99.95%	99.95%	99.97%	99.97%	99.97%	99.97%	99.97%	99.93%	99.93%	99.93%	99.90%	99.90%	99.90%	99.90%

Table 9: Economic capital share of UniCredit Bank AG (2006 – 2019)

The concentration of UniCredit Bank AG's business model can be determined by the change in economic capital. Economic capital measures the amount of capital required to cover unexpected losses beyond the expected loss, which will not be exceeded within the next twelve months with a probability of 99.90%. This risk measure makes the risk content of the various sub-portfolios comparable, taking into account concentration risks in the portfolio. Table 9 shows the changes from 2006 to 2019.

Two main trends can be seen: even though the confidence interval under consideration changes over the years, the capital requirement for the capital held increases from 2008 onwards despite the fact that RWAs and total assets have almost halved since then (see Table 8). An excellent capital buffer is a very important factor for operating a bank, which is why the allocation has shifted from high-risk investment banking to more of a retail business focus since 2008.

2.4.2 Sustainability reports

After the financial crisis, banks suffered a loss of confidence among their customers and citizens around the world (G. B. Gorton & Metrick, 2009). Legal requirements for a sustainable economy that is socially acceptable are based on laws that influence the business model from the outside. In order to increase trust and acceptance in society, many banks have switched to publishing voluntary sustainability reports in addition to regulatory reporting (Adams & Frost, 2008; Adams & McNicholas, 2007). These reports accurately reflect the desire of stakeholders and shareholders to understand long-term actions and their possible impact on the business model, economic, environmental and social performance (Epstein, 2018).

Shabana, Buchholtz, and Carroll (2017) make the conclusion that the suitability reporting subjects to an evolving process in three stages. Applied to the banking industry it starts with a 'defence reporting'. There is a gap between the performance and expectations and the reporting was designed to help rehabilitate their reputation. When it is successfully accepted by the market the second stage, a 'proactive reporting', is created. It offers further opportunities to improve the reputation and can explain the business strategy. This stage can be also helpful as it is still proactive, but it can be understood more as a marketing placement and less as a business achievement.

At this stage the 'imitative diffusion' should be established where defensive and proactive reporting creates a critical mass of reports, where the net benefits and costs are balanced. These three stages can be observed in the sustainability reports of the UniCredit Bank AG. The first incentive documents from 2008 until 2010 (UniCredit Bank AG, 2008b, 2010b, 2011b) are at a defence stage. Later on the bank recognises the positive impact and moved to proactive stage two (UniCredit Bank AG, 2012b, 2013b, 2014b, 2015b, 2016b). Finally, in 2016, the reports (UniCredit Bank AG, 2017b; UniCredit S.p.A, 2017, 2018, 2019) are transferred in central reporting within the UniCredit Group and it transitions to the third stage.

The first common report for 2007 and 2008 (UniCredit Bank AG, 2008b) has three main topics: 'trust is the bases', 'business sustainability' and 'responsibility for others'. For the UniCredit Bank AG, customer confidence is a vital prerequisite for future viability. The values of the given integrity charter have the highest priority. Trust is served if the values are not only written down, but also lived: UniCredit Bank AG's business model, corporate management and human resources management are therefore orientated towards the guiding principle of sustainable business success. There is a clear strategy to try to convince, so that the bank will do only good and sustainable business.

The bank is trying to pursue a transformation in its mindset, but it is only partially succeeding, as the expert interviews (sections 4.2.5 and 4.2.6) confirm. A lot of key words are dropped: managing risks; exploiting opportunities; securing future viability; long-term value creation; customer loyalty; values, identity and personnel management; introducing and enforcing rules; developing of green energy. So far, it is idealistically propagated as to why this bank is doing the right thing. The projects are only hinted at and at the end it is shown how much energy, water and CO_2 (carbon dioxide) the bank and its employees have saved. The statement of the sustainable new products of approx. 500 million EUR is only a tiny fraction of the total balance. Overall, it is rich on commendable possible acts, but poor on evidence of said acts. One year later, the second report for 2009 (UniCredit Bank AG, 2010b) has identified four main top issues: 'responsible leadership; long-term value creation; long-term customer loyalty; values and identity.

Some idealistic key words are still used, but now the report also contains several examples of how the aims could be achieved. A 'Compensation Committee' in accordance with the new regulations on 'Minimum Requirements for Risk Management' is introduced. The committee is to accompany the design and further development of the Bank's remuneration systems. An 'Integrity Charter Day' in 2009 places customer orientation at the centre of discussions for all employees and managers. Together with 'Kreditanstalt für Wiederaufbau' (KfW), a German government-owned development bank, they help corporate customers identify their energy-saving potential, plan measures and finance their implementation. The number of pages in the report is not increased, but the quality of supporting acts is now visible.

Beginning in 2010 (UniCredit Bank AG, 2011b), the structure for this and future reports are subdivided into five main topics: strategy, customers, 'our employees', society and environment. From 2011 (UniCredit Bank AG, 2011b, 2012b, 2013b, 2014b, 2015b) onwards, it can be seen that the sustainability report provides detailed information that is of interest not only to investors and the regulator, but also to employee development programmes. In this stage of 'proactive reporting' detailed measurements are listed for the human resource about systematic personnel development, fair and open corporate culture, health management, listening to be better, systematic personnel development, networked parental leave, balanced living and working.

Other topics are detailed and described in equal manner. The bank is focused on a loss of trust in society, fierce business competition and, as a result, employees are also affected. In order to compete with other companies, UniCredit Bank AG is forced to show that it is important for society and must take social problems seriously. Employees are an important part of this renewal process and are expected to carry the positive messages. This can only be achieved if there is a perspective that is considerate of the workforce. Overall, the goal is a fair level of development that reconciles economic success with environmental and social requirements. Negative aspects are not described, it only considers challenges and how the bank wants to not be affected by them.

In 2016 the UniCredit Bank AG, which is a German subsidiary, integrates their sustainability report into the UniCredit Group reporting. Now all worldwide subsidiaries are mentioned in one report (UniCredit S.p.A, 2017, 2018, 2019). From now on, it can be observed that the reporting level reaches the 'imitative diffusion' level. Now the KPIs from the balance sheets are qualitatively explained on sustainability aspects. For example, in 2016 the reduction of bad loans is decreased by 36% to EUR 31,799 m those that are listed as unlikely to pay decreased by 9% to EUR 23,165 m., while past due loans decreased by 47% to EUR 1,378 m. The authors of the report try to explain how they address their legacy issues and de-risk the portfolios by reinforcing the risk discipline for the origination, underwriting and monitoring of new loans.

Now the message of sustainability is measured by the business model and the impact on the bank balance. The development of human resources is no longer treated centrally, but is subordinated to the future business model. This means that everyone must adapt to the future plan and not vice versa, where a proactive change management and participitaion from the employees was desired.

2.4.3 Disclosure reports

Disclosure reports are based on Pillar 3 of Basel II (Basel Committee on Banking Supervision, 2015, 2018a) and aim to strengthen the market discipline and Basel II Capital Accord as an important part of prudential banking regulation (Basel Committee on Banking Supervision, 2005). The structure and aims of Pillar 3 are described in section 2.2.2.2. With the publication of the disclosure report, UniCredit Bank AG meets the legal requirements for banks. The first disclosure report (UniCredit Bank AG, 2014c) of UniCredit Bank AG explains in detail the legal base for the report. For Europe and their countries, Basel III was implemented at EU level by means of two European legal acts for CRD IV.

The package consists of Regulation (EU) No. 575/2013 (European Parliament, 2013b) on Capital Requirements Regulation (CRR) and Directive 2013/36/EU (European Parliament, 2013a) on access to the business of credit institutions and the supervision of credit institutions and investment firms (Capital Requirements Directive, CRD IV). The directive has been approved by the national states of the EU and the European Union into national laws.

UniCredit Bank AG is a significant subsidiary within the UniCredit Group pursuant to Article 13 (1) CRR (European Parliament, 2013b) and the report complies with the aforementioned disclosure obligations. The UniCredit Bank AG disclosure report is published, in accordance with the regulatory requirements, for the first time for the full year of 2014 (UniCredit Bank AG, 2014c).

The core of the disclosure reports is a detailed breakdown of capital and reserves. In banking, the term capital refers to the equity capital of credit institutions. The aim of the financial institutions is an adequate capital structure so that they can meet their obligations to their creditors and investors at all times (Miles, Yang, & Marcheggiano, 2013). The reporting structure refers strictly to regulatory reporting. Capital resources are listed in 85 detailed positions and they cover information relating to internal capital (Article 437 CRR), internal capital requirements (Article 438 CRR), cross-portfolio documentation of counterparty default risk, capital buffers (Article 440 CRR), credit risk adjustments (Article 442 CRR), use of credit risk mitigation techniques (Article 453 CRR), remuneration policy (Article 450 CRR) and leverage ratio (Article 451 CRR).

The risk profiles are analysed on standard and advanced approaches and full information is given about the most important guarantors of guarantees and credit derivatives and their creditworthiness. Overall, the disclosure reports show detailed positions about the bank balance and therefore the bank has no possibilities to hide some critical points in aggregated view, which is allowed to be used for annual financial statements.

On the basis of these reports, the expert interviews (section 4.2.3) also complain that the bank only discloses as much as it has to, and explicitly avoids a deep insight, even towards its own employees.

2.5 Human behaviours in an organisation or workplace

The financial crisis of 2007-2008 caused a process of change in the banking sector. Regulatory requirements are being massively expanded and the business model is changing. In the middle of all this are the affected employees who find themselves in a new environment. Therefore, three main points are identified for this thesis.

In the next sections, the literature review is focused on change management, the job satisfaction factors of the employees and, to better understand their wishes and desires, their personal motivations and aspects of self-reflection. The personal motivation can be job satisfaction but can also be linked to ideas outside of it. Based on these models, the interview questionnaire is refined, and, for better interpretability, this knowledge is subsequently used to answer the relevant research questions, aims and objectives.

The insight into the chosen methods also reflects UniCredit Bank's (section 2.4) attempt to shape a transformation. But it also becomes apparent later in the expert interviews (sections 4.2.5 and 4.2.6) that the methods are only applied in a half-hearted and generalist way. Out of a desire for transformation, only change management is practised. But there are too few empirical data (section 2.5.2.4) in this research field. However, the expert interviews (section 4.2) fill part of the gap, at least for the major banks in the EU.

2.5.1 Change management and business transformation

The terms change management and business transformation are often used synonymously, but there are relevant differences (Ashkenas, 2015; Janes, Prammer, & Schulte-Derne, 2001; Schallmo, 2016): change is reserved for the current improvement of problems from the past; transformation stands for perspective action for shaping the future of the company, which often forces enterprises to act due to exogenous factors.

The distinction between transformation and change is very important. Only through this understanding it can be recognised that financial institutions are only willing to make changes in a risk-averse manner, but the employees demand a true transformation of the banks in order to be successful in the future. Section 2.3 shows that change and transformation is taking place in the banks. Therefore, a central point in the expert interviews (sections 4.2.5 and 4.2.6) is that it is not only about change management but about a real transformation of the banking landscape.

2.5.1.1 Change Management

Change management means the planning and implementation of concrete and limited actions, which often only affect parts of an entire company (By, 2005; Doppler & Lauterburg, 2019). The cause is often a reaction to certain grievances in the company. Factors such as loss of sales, excessive costs or even employee turnover are initiated by change projects. In order for the new structures to work, the behaviour of those involved must be adjusted. Therefore, the implementation framework and goals are known and clear to all.

There are numerous models that have reached agreement in science. The ‘Lewin's change management model' (Lewin, 1947, 2016) is the starting point for modern theories. The further theories can be divided into those that analyse the change process of the company and those that consider the individual in the change process. The theories of ‘McKinsey 7-S model’ (McDonald, 2013; Waterman Jr, Peters, & Phillips, 1980), ‘Nudge theory’ (Thaler & Sunstein, 2008), ‘Bridges' transition model’ (Bridges & Bridges, 2019; Bridges & Mitchell, 2000) are suitable for the change process of the company.

For this thesis the individual behaviour behind the change and the emotional impact stay in focus. Therefore, in accordance with the Lewin's change management model (Lewin, 1947, 2016), the following theories and their applicability are examined in more detail: ‘Kotter's theory’ (Kotter, 2012), ‘Prosci ADKAR model’ (Hiatt, 2006) and 'Kübler-Ross curve model' (Kübler-Ross, Wessler, & Avioli, 1972).

Lewin (1947, 2016) recognises early on that a successful change process requires a certain degree of preparation, and he emphasises that only when everyone is convinced that change can take place will it remain successful. He focuses on three phases, which he calls 'unfreezing', 'moving' and 'freezing'. With ' unfreezing' he understands the preparation for change. Here the changes of the status quo are prepared for by communicating the change to all parties involved. The fears of those affected are to be taken away by overcoming resistance and building willingness for change through talks, discussions and support.

In the next phase of 'moving', a transition to the new situation is made and a new balance is created by creating binding standards. To ensure the success of the change, the last phase is the ‘freezing’. The focus lies on the consecration of new behaviours and the maintenance of the new balance. The process must be lived, and new process solution strategies must be implemented in the company's procedures. Lewin's model is simple and can be quickly applied when dramatically rapid changes are required. But the individuals usually need time and a lot of support, as the old way of working is normally lost and the new one seems foreign and unfamiliar.

Kotter's theory builds a sense of the urgency of change when bringing a company up to date (Kotter, 2012). It is a further development of Lewin's 3-phase model. Kotter (2012) has recognised that the decisive factor is the human being and the communication of change. Even if the knowledge and the technical implementation are available for the change, the change can fail due to resistance from the employees, who try to fall back into the familiar patterns.

He has developed the following 8 step plan:

(1) Identify urgency – ‘create a sense of urgency’
(2) Building a leadership coalition – ‘create a powerful coalition’
(3) Developing vision and strategy – ‘form a strategic vision and initiatives’
(4) Communicating the vision – ‘enlist a volunteer army’
(5) Removing hurdles – ‘enable action by removing barriers’
(6) Aiming for short-term success – ‘generate short-term wins’
(7) Drive change further – ‘sustain acceleration’
(8) Embedding change in culture – ‘institute change’

The first stages of picking up and taking care of and sensitizing the employees are wonderful and create a feeling of being a collective ‘we’. But this model remains a top-down approach as it does not ask for any possibility to include feedback in the decision, therefore it is rapidly seen as a top-down approach to determine what to do.

The ‘Prosci ADKAR Model' is an approach by Hiatt (2006) and it focuses on the change process of each individual employee using a bottom-up method. Every single small change is the result of a successful change.

The following phases must be taken into consideration:

(1) Awareness: creating an understanding of the need for change
(2) Desire: triggering the desire for intrinsic change
(3) Knowledge: to have and transpose knowledge about the upcoming change, with the new behaviour and working methods
(4) Ability: giving the skills to make the new working techniques or behaviour work
(5) Reinforcement: fixing the new work and behaviour patterns

The advantage of the method is that the people are the centre of attention, especially the employees, and they are seen as a key success factor. The disadvantage is that their individual wishes for change or ideas of necessities stand in the way of the collective and are therefore given little attention.

Kübler-Ross et al. (1972) has an interesting approach, also known as Kübler-Ross' change curve. Based on her research as a psychiatrist she focuses and deals with the emotional response of those affected by the change.

Their approach means that acceptance of change has to go through certain stages and each stage has to be treated separately in the change process. Her experience includes the process when people know that they will die and how they deal with it. This behaviour can also be observed in a company, even though it is not about death but about change. At the beginning of the change a 'shock and denial' is usually proclaimed, followed by the 'anger' over it. In the third stage, the low point of morale is approached, and bargaining is attempted. Only 'depression and grief' follows. Only when the change is accepted, and it is seen that it can also be good can ‘acceptance’ come into play.

The good part of this theory is that it considers the emotional reaction of the employees, which has a massive impact on productivity. But the disadvantage is that not all of these phases are experienced at a standard level of intensity or at the same time - that is the nature of a human mind.

2.5.1.2 Business transformation

Business transformation, on the other hand, has a multitude of interacting factors which are more often caused by external change (Piccinini, Hanelt, Gregory, & Kolbe, 2015). A company is increasingly forced to redefine business models or to reorganise the company. It is a long-term and often never-ending process, where the management does not always know exactly where the journey is destined to go. One finds oneself in a new, previously unknown environment that is not deterministic. Currently, digitalisation is one of the triggers for transformation, where old business models are being overtaken and new ones are emerging. A successful business transformation ensures success for the company in the future, while change only fixes the mistakes of the past. However, any change also causes a loss of old settings and habits, where the associated suffering of employees must be addressed and managed adequately.

In contrast to change, there are no specific theories for business transformation, but, due to the similarity to change management, these theories and models are also suitable for transformation. A transformation causes a massive change in the economy and production, which does not only change single processes, companies or industries in a sustainable way. Historically, it can be assumed that the (more recent) four major business transformations are the use of steam engines from 1830, the use of electricity from 1870, automation through programmable control from 1970 and, since the end of the 20th century, digitalisation (Schmeisser & Stoeff, 2018).

But it has been proven that the 'Enterprise Transformation Cycle' (ETC) can be used to better design a business transformation (Rode-Schubert & Müller, 2018; Rouse, 2005, 2006; Venkatraman, 2017). The cycle stands for a recurring cycle when the general conditions of the company change from the outside. The process is divided into six phases and the reason for a company to initiate the process is that a revolutionary change affects the current business model. Therefore, in the first phase the company has to think through its business strategy and define its strategic positioning, this is a fundamental orientation of the company. The second step is to work out the new procedures and processes of the value chain to achieve these goals. In the third stage, these considerations lead to changes in the organisational structure where the individual activities of the employees are also integrated into an overall context.

The next step requires the specific qualification and new recruitment of the employees who have the profile and knowledge to implement and improve the new process - a clear personnel strategy is crucial. The fifth stage, which also takes place in parallel, is the support of the achievement of objectives through technical systems, methods and tools (choosing the right tool for the processes). Here the new technology provides the appearance of the new process and not vice versa. The final stage deals with corporate governance, since acceptance of the product at the end of the value chain also depends on factors such as sustainability and social responsibility.

Throughout history there have been many successful examples of how companies have reinvented themselves with constant change. International Business Machines Corporation (IBM) changed from a manufacturing company to a service company (Spohrer, 2017). The automotive industry is on the verge of a change, away from fossil fuels to sustainable and, above all, clean energy, such as electric cars, only if the regenerative share in energy production continues to grow. Banks can also use digitalisation to improve the size, density and speed of information, which can have a positive impact on the fulfilment of regulatory requirements administration and business development.

2.5.2 Job satisfaction

Job satisfaction describes the emotional positives but also the negative attitude of a person towards their work. Which attitude someone has depends in the end on their experiences at work, but also on one's own expectations. Job satisfaction should be understood here as the individual attitude of a single person. Positive experiences mean that these expectations could be sufficiently realised according to the subjective assessment (Judge, Thoresen, Bono, & Patton, 2001; Lund, 2003; Saari & Judge, 2004). The definition of the term job satisfaction is not homogeneous and is considered from different perspectives.

Job satisfaction is difficult to determine and varies considerably, but certain methods chosen here can be used to capture it. The empirical studies show that it is analysed very poorly, partly outdated or too generally and therefore the analyses of the expert interviews in this thesis make a significant contribution to the current field of knowledge. Therefore, for a successful change culture and transformation of the business model, job satisfaction is a central point, which the experts explain in more detail in the interviews (section 4.2.5).

For this thesis the following three central theories of job satisfaction, which are based on qualitative aspects, are identified above all: the starting point is hierarchy of needs of Maslow (1954), the two-factor theory of Herzberg (Herzberg, 2017; Herzberg et al., 1959), the Bruggemann model (Bruggemann, 1974; Bruggemann, Groskurth, & Ulich, 1975) and Büssing's adjustments (Büssing, 1991). Following this, empiric measurements on meta-analyses are reviewed on job satisfaction and performance.

2.5.2.1 Maslow's hierarchy of needs

Maslow's theory (Maslow, 1954) was a major advance for work satisfaction research at that time, as it is based on theories of need and comparison (McLeod, 2007). It still serves as a basis for the two research areas of motivation and satisfaction (Van Dick, 1999). Maslow (1954) found that some motives are more important than others. The need for food and drink is greater than the need to own fancy clothes or an expensive car. Therefore, his concept deals with the effect, content and type of motives and is based on factors of a five-step pyramid. This structure is intended to reflect human needs, which are strictly hierarchical and represent a 'bottom-up' strategy. The structure is based on the ‘basic needs’, starting from the basic physiological demand to the desire for self-realisation. Transferred to the working environment, he believes that employees are satisfied when they are able to realise the needs of the respective level in their work.

It is important to understand that these needs are hierarchical and can also be transferred to the world of work, as they can help to categorise the desire for self-fulfilment of individual employees.

Therefore, the following five classes of motivation exist according to (Maslow, 1954):

1) The first and lowest level is the 'basic physiological needs', such as eating, sleeping and drinking; this is more or less a simple case of survival. In the working world, the physiological state of mind of colleagues and employees is important but can hardly be influenced.
2) At the next stage, when the 'basic physiological needs' are met, 'security needs' appear. Here it is a question of safety, such as old-age provision, protection, stability, regulation, borders, saving, livelihood security and so on. It is a search for orientation and control. However, at work it is quite possible that security needs are not fulfilled. Pressure to perform often leads to demotivation and can be frightening, but also confusing for employees.
3) The next phase is the demand for 'social belongings'. A person usually has a certain desire for social recognition and relationships. These include social contacts, friendship, appreciation, affection, group membership, communities, and partnership. It is a search for loyalty and relationship. Exclusion or mobbing leads to a loss of this desire and a working group is not intact. There is a reduction in productivity, the potential dismissals and, in the worst case, psychological damage among those affected.
4) When the group needs are met, the individual tries to fulfil the ‘I-needs’ of self-esteem. Here is the search and desire for respect, recognition and prestige. This is where the desire for power, status symbols, success, recognition, image, prestige, and

so on, comes to the fore. An easy option in the professional world is to compliment the employees, while bonuses or other rewards can also have a positive effect.

5) The last and highest level of the human needs is almost an artificial construct and where the individual seeks infinite self-realisation. The accurate definition is difficult and hugely individual, but Maslow (1954) considers it to be best defined as the realisation of one's potential. However, through skilful motivation and support in a group, a person can reach this stage.

Maslow (1954) has constructed an image of the human being from his own imagination, which gradually satisfies needs. The great strength is the intuitive simplicity of understanding, which can be made even clearer graphically. The major criticism is the need to fulfil the hierarchical model to reach the next level (Tay & Diener, 2011). The role model is also not universal and can be applied primarily in our Western world, where material success can be equated with self-realisation; in other cultures it can be different (Heckhausen & Heckhausen, 2006). In a globalised world, the hierarchy of employees' needs can deviate quite significantly from this norm.

2.5.2.2 Herzberg's two-factor theory

Herzberg (Herzberg, 2017; Herzberg et al., 1959) adopted the theory of Maslow (1954) and changed it significantly, in that the next higher valued needs can no longer be met only by fulfilling the lower level. For him the existing needs of Maslow (1954) are still there, but there is no longer a hierarchy of constraints with a bridging mechanism. Hence, his model is based on two different factors, known as two-factor theory (Bruggemann et al., 1975; Herzberg, 2017).

The first factor is the ‘motivation factor’ and relates centrally to the job and its contents. Here it is about where the employees are intrinsically motivated by content and seek self-realisation. The second factor is the ‘hygiene factor’, which is determined by the environmental factors and is not central to the work contents, but is influenced externally by the conditions of the work environment.

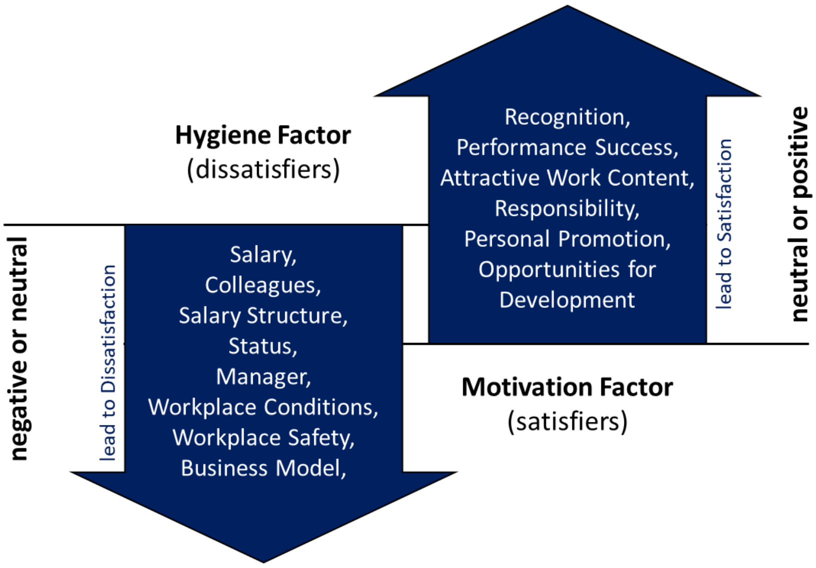

Figure 6: Hygiene factors versus motivation factors by Herzberg (2017)

An interesting conclusion of Herzberg (Herzberg, 2017; Herzberg et al., 1959) is that not fulfilling the ‘hygiene factors’ can only lead to dissatisfaction, but that fulfilment does not necessarily lead to satisfaction, rather it is seen neutrally. The assigned needs are called 'dissatisfiers'. Examples are salary, colleagues, salary structure, status, manager, workplace conditions and safety, and the business model of the company.

The exact opposite is the case with the motivational factors, where the fulfilment of needs leads to satisfaction: if these do not exist, then it is seen as neutral by those involved and usually does not lead to dissatisfaction. These needs are called 'satisfiers'. Examples are recognition, performance success, attractive work content, responsibility, personal promotion and opportunities for development. It is also shown in the Figure 6 for a visual description.

This insight is important in steering job satisfaction. An incorrect or incompetent manager can therefore contribute to dissatisfaction, but a competent manager does not increase satisfaction. Only motivational factors are essential for this, such as the opportunity for recognition and development of one's own potential. From this approach it can be derived that satisfaction no longer arises generally from the satisfaction of basic human needs, but that only motivating aspects lead people to a condition of satisfaction. Therefore, it is of interest to know with which intrinsic and extrinsic needs an effect can be caused.

2.5.2.3 Bruggemann model and Büssing's adjustments

Another interesting approach to job satisfaction is described by the Bruggemann model (Bruggemann, 1974; Bruggemann et al., 1975), which helps to distinguish between different forms of job satisfaction. Here the experience is discussed that measuring satisfaction often results in a high proportion of satisfied employees. This is caused by the fact that there are individual biases resulting from actual satisfaction and the level of demands that occur for each individual employee. How big the difference is depends on an individual comparison between one's own needs and expectations on the one hand ('target state') and the possibilities of their realisation in the general work situation on the other hand ('actual state').

As a result, it is now possible to qualitatively differentiate the general concept of satisfaction, which does not do full justice to reality. The model has six characteristics (Bruggemann, 1974; Bruggemann et al., 1975):

(1) Progressive job satisfaction: the target/actual comparison is positive and the level of expectations is rising.
(2) Stabilised job satisfaction: the target/actual comparison is positive and the level of expectations remains the same.
(3) Resigned job satisfaction: the target/actual comparison is negative and as compensation the level of expectations is reduced
(4) Pseudo job satisfaction: the target/actual comparison is negative; the level of expectations remains unchanged. However, the situation is distorted and therefore perceived in a more positive light.
(5) Fixed job dissatisfaction: the target/actual comparison is negative. The level of expectations remains unchanged and attempts at solutions are rejected.
(6) Constructive job dissatisfaction: the target/actual comparison is negative. The level of expectations is being kept up, but now solution attempts are carried out.

If the target-performance comparison turns out positive, it is assumed that the employee is at least satisfied. Therefore, he has two options: either he has tried to raise his level of expectation (1) or it remains the same level (2). In the first situation (1) a person is progressively satisfied, but there is a 'satisfaction deficit'. This means that the previous achievement of goals is retained as a positive attitude to work, but by raising the level of expectations people are still ‘creatively dissatisfied’ (Bruggemann et al., 1975).

In the second situation (2) it is called ‘stabilised job satisfaction’ and the status quo is accepted without any change requests. On the other hand, if the ‘actual-target’ comparison is negative, then the employee's situation does not correspond to what is expected (Bruggemann et al., 1975).

Hence, in the third situation (3) these 'diffusely dissatisfied' employees lower their level of expectations. The reason can be frustration, believing that there is nothing you can do about it, the situation could be much worse and you prefer to be satisfied by the concept that you should just to be content with what you have. It is a resigned job satisfaction (Baumgartner & Udris, 2006).

The fourth situation (4) is about pseudo-satisfaction, at some point the condition of dissatisfaction is unbearable in the long run. A defensive mechanism is created, whereby a person fools themselves and just pretends that they are happy. Therefore, the level of expectation remains unchanged.

A variation of the fourth situation (4) is the fifth situation (5), the fixed job dissatisfaction. Here the level of expectations also remains unchanged, but due to a relatively high tolerance of frustration, dissatisfied people suffer fixed dissatisfaction. They do not have the strength to solve their problems and instead live in frustration.

The last situation (6) is about constructive dissatisfaction at work. The people are motivated to change the situation and attempts will be made to solve the problems for an improved situation.

Bruggemann outlines that job satisfaction is interpreted as a process and no longer as a static construct. It is considered an influential model for job satisfaction (Baumgartner & Udris, 2006). The weaknesses of the model are that the target and actual values are not sufficiently explained nor is it even mentioned how to compare them exactly.

Therefore Büssing (1991) suggests that in addition to a target/actual value comparison and the level of expectation, a perceived level of controllability should also be considered. The reason for this is that the lack of control perception leads to a cause of dissatisfaction at work, but the controllability can also be a resource for dealing with dissatisfaction. However, incompleteness continues to be criticised, even though the model has been extended by Büssing. Ferreira and Otley (2009) find out that a target/actual value comparison does not necessarily have to be associated with a perceived level controllability.

2.5.2.4 Empirical Evidence

In addition to the theoretical models, there are studies and empirical analysis on the relationship between job satisfaction and work performance, absenteeism and fluctuation. The studies confirm how difficult it is to capture human behaviour statistically, since only a small correlation can be measured from the expected and logical causalities, as satisfaction is something relative and subjective.

The relationship between job satisfaction and job performance has already been researched by Brayfield and Crockett (1955) and they find that there is only a 'minimal or no relationship' between the two factors. There are other estimates based on meta-analyses and rarely the correlation is greater than 30% (Brown & Peterson, 1993; Iaffaldano & Muchinsky, 1985; Judge et al., 2001). Job satisfaction and job performance have less than 1% common variance. Summarized from the studies, the following reasons can be manifested. Job satisfaction is reduced by different working conditions, as strictly regulated work is less dependent on satisfaction than an activity that has more personal responsibility and autonomy.

An interesting aspect is that the satisfaction of an individual employee hardly correlates with performance, but on the other hand the overall satisfaction in the company has a strong correlation with performance. In many aspects it is rather the other way round, a good performance causes high self-esteem and self-confidence, which has a positive effect on job satisfaction.

The relationship between job satisfaction and absenteeism is also being explored. Six and Kleinbeck (1989) find out a negative correlation of - 9%. More recent figures, according to Iverson and Lynch (2008) and Iverson and Krause (2007), using German and international data, come to the following conclusions: 65% of productivity losses are caused by presenteeism, but also 35% are due to absenteeism. These could lead to positive correlation, but this is not being estimated exactly. Robbins (2001) notes that dissatisfied employees exploit a variety of methods of staying away from work.

The correlation between job satisfaction and fluctuation is higher and lies between 20% and 40% correlation. Vitt (2013) shows that although there is an overall moderate fluctuation of employees after a takeover, there is sometimes a considerable drop in performance. The extent of fluctuation is particularly dependent on the diversity of corporate cultures. In the case of top management, managers leave when the company has been relatively unsuccessful, thus protecting companies from incompetent managers (Martin & McConnell, 1991). However, this finding is rejected by Gerpott (1994). The whole analysis brings another key message that dissatisfied employees stay in the company when there is a lack of alternatives. It mainly relates to specialists and those with above-average salaries.

Hence, there is insufficient and also outdated empirical evidence for the banking environment, but this will be closed by the expert interviews (section 4.3) in this thesis.

2.6 Summary

Five relevant areas are identified for a systematic literature review, which can complement the existing knowledge in identifying gaps:

(1) Influence of market regulation for the business (section 2.1)
(2) Laws and directives of the European supervision authorities for banking industries (section 2.2)
(3) Banking business model for system-relevant banks (section 2.3)
(4) Annual, sustainability and disclosure reports of UniCredit Bank AG (section 2.4)
(5) Human behaviours in an organisation or workplace (section 2.5)

These five areas (1) – (5) from the literature review are deliberately chosen in the displayed order.

The review starts from the general view of a market regulation. That means in particular that most modern economies are subject to regulation from governments, and some markets have traditionally been subject to more regulation than others. Market regulation is a necessary but artificial construct to manage and limit modern economies, but also to regulate competition (Botero et al., 2004; Simmons, 2001). Basically, every company, person and even a governmental institution is subject to these regulations and is obliged to participate in those if they want to coexist in a community (Gundlach, 1965; Jasper, 1986).

To participate in a business branch requires regulatory compliance (Haidar, 2012; Michalczyk, 2010). Highly regulated areas such as food technology, pharmaceuticals, and now also banks, overcome this hurdle to do business (Al-Ubaydli & McLaughlin, 2015). A new potential competitor must therefore balance whether there is enough time and money to be willing and able to overcome the hurdle. However, companies should not underestimate that new technologies do not have to comply with regulations that are not tangible or necessary to be a competitor, e.g. internet commerce can displace retail without considering local regulations. The situation is the same for banks, where the same products can be offered in a technologically different way via new competitors. Thus, competition has to be considered from both sides, one directly intervening and the other through new technologies such as digitalisation.

But regulation also has a positive effect (Robert Baldwin et al., 2012). This aspect is important for the banks, as clear and fair rules can be planned and the banks can align or adapt their business model to the future in the long run. Uncertainty is more harmful to a company than strict-but-clear rules.

Additionally, globalisation means that it is easier for a company to leave its home market and act in a global manner (Farhi et al., 2011). The same applies to banks, which can not only provide financing of all kinds to support these expansions, but are also allowed and able to offer their services worldwide. Modern communication and information systems, which make global operations possible in the first place, also served as an accelerator (Deutsche Bundesbank, 2014b; Moritz, 2012). Historically, too, the aspect that banks have rapidly increased their credit volumes through deregulation since the 1970s plays a role. New business models with securitization have been sold as innovations. Even after the financial crisis, the mindset of the managers has not changed (Crowther, 2018), as risk transformation takes place at the costs of society when the state has to help out financially (too big to fail) and only the losses are shifted to society (lemon socialism) (Coelho & McClure, 2005). Also, the banks have no interest in innovating for society, if only to make their own profit.

Hence, banks have naturally grown with globalisation to provide capital to companies worldwide, supported by the initial deregulation in the US and then other countries followed to enable banks to do even more business through new financial products that could be offered worldwide. The initial financial disruptions (Fahlenbrach et al., 2012; Fidrmuc & Korhonen, 2010; Grugel & Riggirozzi, 2012; Sánchez, 2010), as local financial crises in Mexico (1994/95), Asia / Russia (1997/98), Brazil (1998/99), Turkey (2000-2002) and Argentina (2003/04), have been seen as isolated problems of underdeveloped economies.

But they were the precursors of a financial crisis in 2007-2008 that brought not only the capital market but also entire companies, states and private individuals worldwide to their knees (Ivashina & Scharfstein, 2010). The misconception that the supposedly developed countries are resistant to financial crises was thus disproved. The regulation of banks became necessary because it is the only way to influence the business model not to become a social problem in the future (Farhi et al., 2011). The essence of regulation is that the unsystematic risk must be turned into a systematic one.

In the EU, from 2008 onwards, a large set of rules on the implementation of bank governance mechanisms has emerged with the aim of to set out well-thought granular standards for nearly every banking process, from external lending to internal steering policies through a strict process of monitoring (Deutsche Bundesbank, 2011).

In order to protect banks from regulatory disadvantages from other markets such as the US or Japan in the European Union (Chortareas et al., 2012), independent and consultative institutions such as the Basel Committee on Banking Supervision (BCBS), but it is also worth mentioning a few other notable institutions such as the Bank for International Settlements (BIS), International Association of Insurance Supervisors (IAIS), International Organization of Securities Commissions (IOSCO), International Accounting Standards Board (IASB) and the European Union Agency for Network and Information Security (ENISA) who have taken a central role in trying to harmonise global banking regulation to establish a fair but regulated global banking landscape.

One of the core responsibilities of EU-wide banking regulation is also the transformation of competences from the individual states to the EU level (Busch & Ferrarini, 2015). Therefore, the European Banking Union was established in 2014, allowing the largest banks in Europe to be centrally controlled. There are currently 115 banks listed to the end of 2020 (European Central Bank, 2020), which represented in 2014 almost 85% of the balance sheet total of all European banks (Deutsche Bundesbank, 2014a).

In addition, there are extra provisions for a higher capital buffer for the current largest 30 banks in the world (Financial Stability Board, 2020), in the lowest case an add-on of 1.0% or in the highest 3.5%. This is due to their sustainable influence on the market and because they are considered to be absolutely relevant to the system and must be adequately capitalised, even in a crisis. A failure of one of these banks individually could lead to a new financial crisis.

The UniCredit Group with its subsidiaries is one of these banks, hence it serves as a case study here with its German subsidiary UniCredit Bank AG.

In order to stabilise the banks, but also to make them prepared for the future, the financial regulatory reform aims to cover several areas, where benefits outweigh the associated costs and force the banks to change or redesign their business models (Carmassi & Micossi, 2012; Greenwood et al., 2017). A central point of the regulatory efforts are the Basel I to IV recommendations and then worldwide implementations through the Basel Committee on Banking Supervision (BCBS) and the Bank for International Settlements (BIS) as representative members (Schenk & Mourlon-Druol, 2016).

The first regulatory framework, Basel I, was developed in 1988 (Brunnermeier et al., 2009). The core elements of Basel I are rules for minimal capital requirements for core capital and supplementary capital. In the final version from 2006, Basel II was introduced (Balthazar, 2006). Obvious weaknesses have been corrected, where the creditworthiness of the customer in particular was given more attention, as there was an incentive to grant loans to customers with worse creditworthiness in order to claim higher interest rates from them. But the financial crisis of 2007-2008 showed that the regulations were not sufficient.

In 2009 it was concluded that more comprehensive and uniform regulation of banks and other systemically important financial market players is necessary. They focus especially on the capital, risk coverage and the liquidity requirements. Two key points are crucial: banks must have enough and adequate capital in their business model and the liquidity of capital between all players must be available at all times. These are identified as the main factors that caused the financial crisis. With these key points, Basel III was initiated in 2013 (Daniels, 2017) and should be completed by 2023. In the meantime, work is already underway on Basel IV, where the capital requirements are to be strengthened once again (Basel Committee on Banking Supervision, 2017). The supervision of banking regulations is the responsibility of both the European and the national level (Benston, 1994; Canals, 1997) (Deutsche Bundesbank, 2017). These regulations, unless they are only applied at the European level, should also be included in national law. This ensures that individual European states also harmonise banking regulation among themselves.

In the first instance, systemically important banks, such as UniCredit Group, are considered (Financial Stability Board, 2011; Gerster et al., 2007). In order to be considered systemically important, factors on financial global cross-border activities, size of the banks, interdependence, lack of substitutable financial institutions or financial infrastructures for their services and their complexity are relevant.

Complexity can be a decisive factor. In the case of UniCredit Group, the bank itself is too small to be considered one of the 30 systemically important banks. But, as with other large European banks, the business model covers wholesale banking activities consisting of investment, commercial and retail. There is a risk of infection in the event of economic problems, which can spread to all the bank's assets and cause full disruption to the economy. In comparison, American banks traditionally do not have a wholesale model and concentrate on one line of business and are therefore only considered systemically important when they reach a larger size (Neal & White, 2012).

The focus of the investigations in this thesis is the change in the business model of banks from and after the financial crisis. Here the banks have to consider two central points. On one hand there is the market and the provided finance products should meet the requirements of the customers, on the other hand the product placement is limited or enhanced by the governmental regulations (Altunbas et al., 2011). In particular, Ayadi et al. (2011); Ayadi et al. (2020); Ayadi et al. (2016) collect huge amounts of data on 1859 banks within Europe and their transformation before, during and after the financial crisis of 2007-2008. They focus on how the relevant financial ratios have changed and whether banks are ready to transform their business model between retail, wholesale or trading.

In order to measure and compare a bank's profitability and stability over time, following three metrics, among others, are useful (Brealey et al., 2012; Copeland et al., 2005; Schierenbeck & Moser, 2013). The return-on-equity (RoE) measures the profitability of a business in relation to the book value of shareholder equity. Cost-income-ratio (CIR) measures the costs to the income. The price-to-book (P/B) ratio has the function of comparing a stock's market value to its book value. These ratios deteriorated massively during the crisis and have never returned to their pre-2008 levels.

European banks also have a problem increasing their margins through higher leverage after the crisis since attempting to raise more capital is a costly option in bad times. This is mainly due to the regulatory increase in the minimum capital ratio of the hard capital, Tier 1, for new and existing business. Banks simply do not have enough of their own funds to operate their business models in sufficient volume, and even have to shrink their assets.

The research also shows that banks are not ready to give up their business models, the transformation of banks between retail, wholesale and trading has not changed significantly before, during and after the crisis (Ayadi et al., 2011; Ayadi et al., 2016).

Therefore in the old banking economy the credit exposure stayed stable over the years, but the economy in Europe and also worldwide has developed well in recent years (Eurostat, 2018). Capital is looking for new paths, and this is where the shadow banks come into play; they are subject to no or lighter regulation and can operate globally. As banks cannot build up their assets, shadow banking is steadily increasing to almost 72% of global GDP (Financial Stability Board, 2018b). The risk here is that this capital is not regulated but becomes very systemically important.

The cause of shadow banking is also to be located in regulatory arbitrage. In a market-oriented, global world that is increasingly interconnected, it is becoming easier for companies to organise their locations flexibly. Complex corporate structures with holdings and subsidiaries create additional opportunities to optimise a company's profits accordingly. Companies conduct business in the place in the world where they are subject to the fewest restrictions if this enables them to increase their profits. This problem is has not missed the regulators and the Basel III amendment deals with how to regulate it (Houston et al., 2012).

UniCredit Bank AG is also struggling with the financial crisis and the lack of profitability. The annual, sustainability and disclosure reports examined from 2006 onwards follow the general trend of major European banks; margins have collapsed, total assets have shrunk by 1/3 since 2008 until 2019 and the workforce has been halved. The bank is trying to stabilise itself by reducing costs. But the measures have hardly had any effect so far and the bank is still sticking to its business model. UniCredit Bank AG is trying to stabilise itself through a wave of digitalisation and the hiring of new specialists, but these efforts are causing high initial costs.

As behind every company there are people who keep it alive and develop it, this thesis focuses on the experiences and opinions of experts from different areas and hierarchical levels who work or have worked in UniCredit Bank AG and the banking regulator. This knowledge gained through literature enables the researcher to identify and analyse the behaviour and attitude in semi-structured expert interviews for the selected participants: managers, experts and juniors as young professionals from bank and regulatory institution. The interviews look at human behaviour from the perspective of the change, but also transformation process. Change is reserved for the current improvement of problems from the past. Transformation stands for perspective action for shaping the future of the company.

For this thesis the individual behaviour behind the change and the related emotion stay in focus. In accordance with Lewin's change management model (Lewin, 1947, 2016), the following theories and their applicability are examined in more detail: ‘Kotter's theory’ (Kotter, 2012), ‘Prosci ADKAR model’ (Hiatt, 2006) and 'Kübler-Ross curve model' (Kübler-Ross et al., 1972).

All these models use this interaction, how the change can be brought about and how it is received by the people concerned. Important aspects are that people are informed, fears are taken away and a positive mood is created to go along with the change and to shape it proactively. The banks are precisely in this process of change. Another aspect is transformation, triggered by exogenous factors such as digitalisation, where companies have to change or adapt their business model in a completely new environment (Piccinini et al., 2015).

Change and transformation are exogenously driven from the employee's perspective. In contrast, job satisfaction describes the emotional, positive but also negative attitude of a person towards their work. It targets the intrinsic values, why you act the way you do and how you motivate yourself. For this thesis, the following three central theories of job satisfaction, which are based on qualitative aspects, are identified above all: the starting point is hierarchy of needs of Maslow (1954), the two-factor theory of Herzberg (Herzberg, 2017; Herzberg et al., 1959), the Bruggemann model (Bruggemann, 1974; Bruggemann et al., 1975) and Büssing’s adjustments (Büssing, 1991).

It is important to realise that all people are individual in the end and their external actions do not always reflect what motivates them to act. There are factors, as described by Herzberg (Herzberg, 2017; Herzberg et al., 1959), such as salary, colleagues or salary structure (and others), which have a negative impact on employees if they are dissatisfied, but are seen as neutral if they are improved, so-called 'dissatisfiers'. Conversely, there are so-called 'satisfiers' such as recognition, performance success, attractive work content (and others), which have a positive effect on the attitude, but if they are not fulfilled by the company, they are mostly seen as neutral.

The empirical studies on this are very rare, not complete and, in some cases, very outdated. There are no complete studies on the banking sector. However, these few studies show how important job satisfaction is for motivation, which also increases productivity and can thus be considered a win-win situation for both the company and the employee.

The gap analysis in the next section highlights where the existing literature ends and where it can be extended by this thesis.

2.7 Research gaps

The review of the literature identifies several gaps in the current research, as the aim is to show the influence of the regulation on the internal banking process and the human behaviour at work in a system-relevant bank.

In the review of market regulation and banking regulation, the authors of the existing literature try to capture the markets as broadly as possible and analyse them by forming clusters. The aim is to reflect on the big picture and to make general statements. On the basis of banking regulation, the requirements and the effects are very law-laden and clustered according to requirements and a degree of fulfilment. The problems in the process-related and technical implementation are left to a bank by the regulator alone, only what and when is to be fulfilled is specified, but not how and by which persons.

Even the consideration of UniCredit Bank AG, here as a case study, and the associated official reports give at most only an idea of how the processes within the bank will be implemented. Exactly at this granular level, there is no further information and the circle is closed where no further insight can be gained, as the available literature is mainly based on the bank's reports. But within a bank, but also within any other company, there are individuals at all levels of the hierarchy who can observe how banking regulation influences their way of thinking, their past, present and future actions. This gap can be closed by comparing the measured indicators from the literature review with the perception of the people involved within the bank and, at the same time, identifying their personal influence that arises from the challenge of banking regulation within the bank.

The literature review also focuses on the change in the business model of major European banks. There are detailed analyses, Ayadi et al. (2011); Ayadi et al. (2020); Ayadi et al. (2016); Roengpitya et al. (2014) that are worth mentioning, but the authors work with clustering and segmentation of individual topics. They look at different European countries, the migration of business models between investment, retail and wholesale banks, the change in financing ratios before and after the financial crisis, outsourcing to shadow banks and so on. But here too, the focus is not on the most important factors within the bank, namely the employees.

As in the case of bank regulation, the figures of UniCredit Bank AG are analysed and then compared with the opinions of the interviewees. Here, too, personal opinions are also asked about how the changes are perceived and how they affect their personal attitude to work.

In the final step, the review focuses on work motivation and job satisfaction, with the question of why and how work is done within a bank. The review shows that there are many respected models for measuring, but they could generally be applied to all professions, there is no difference between a steelworker and a banker. The empirical evidence is very thin and sometimes not intended for a specific industry. Therefore, the interviews serve to look behind the facades of the interviewees, accompanying them through the different stages of their lives and hierarchies, motivations, ingrained actions, expectations and the professional handling of successes and failures, to name but a few examples. After all, in the end, these human factors determine the actions within the bank, which, in turn, are reflected in the financial figures in many process steps.

The selection of interview partners is limited to current and former employees of UniCredit Bank AG, but in order to improve the internal perspective, also includes the "originator" and "supervisor" of the regulatory authority, the employees of the German regulatory authority.

3 Methodology

The appropriate choice of methodology and methods is important for the fulfilment of the defined aims, objectives and questions. This chapter explains how to achieve this goal as a critical realist by using a mixed methods approach and which factors to pay attention to.

Therefore, in scientific studies an understanding of paradigm, epistemology, ontology and axiology with an adequate choice of philosophical stances and the application of research approaches, design and methods can be most helpful in developing a proper research strategy for resolving a research problem. Midway through the process, the researcher gets the opportunity to respond to questions on quality, reliability, validity and practicality of the material from the point of view of his own research topic.

The deeper understanding of scientific research depends also on a “hierarchy of research needs” (Knox, 2004, p. 119). That means that the researcher has to ask the question, “what is expected in terms of understanding, analysis, synthesis and criticality at various levels of the research process?” (Knox, 2004, p. 127). A direct answer is also given by Knox (2004, p. 119) to the researcher: “A critical analysis of these philosophies in line with the research” is an absolute precondition; It is a ‘(conditio) sine qua non’.

The following sections unveil the research aims, questions and objectives which guide this doctoral study. This chapter explains why this research leads to the chosen philosophy, research approach, design and methods. There is a process to consider, relating to the identified issues, in terms of how to collect, analyse and interpret any further data, and what kind of techniques are to be used. At the end, this procedure provides answers in relation to the identified objectives.

The considerations in this thesis are based on descriptions from several authors. For example, M. Saunders, Lewis, and Thornhill (2009) illustrate a ‘research onion’ and compare each layer of the onion as a stage that must be considered by the researcher when developing his effective progression through the research methodology. By considering the provided literature for business research methodology and methods there are numerous relevant authors (Bell, Bryman, & Harley, 2018; Creswell, 2013; Creswell & Clark, 2007; Kothari, 2004) identified. The chosen authors are specialists in business research studies and the chosen methodology of this thesis will be explained on the basis of their explanations and findings.

Therefore, the author's axiological role and definition of values, ontological assumptions about the nature of reality and epistemological positions about the nature of reality are concretized. Hereafter, the author examined the research paradigm and grounded their values in key principles and beliefs and explored research philosophy in general with research design identified as the purpose of the research. Next to the general aspects of ethics, finally, the last focus lies on the research method for data and collection techniques.

3.1 Overview of the chosen methodology and methods

In the following sections the researcher explains the chosen methodologies and methods/approaches which are used in resolving the research objectives. As a reminder, this research focuses on the regulatory influence of business model and individual behaviour in a European multinational bank. On one hand, this thesis is concerned with the regulation of the financial industry by the state supervisory authorities and the required improvements of the banking sector on their business strategy, with sustainable orientation on the global economy. On the other hand, it is concerned with the humans and their behaviour at the workplace in the banking industry.

Term	Short Definition	Characteristics	Choice of the Researcher
Axiology	understand and recognise the role and definition of values	value free, value laden (biased)	researcher's biased opinion with possible generalisations
Epistemology	concerned with addressing the facts by asking what the acceptable knowledge is	facts (positivist), thinking (interpretivist)	both, with main focus on thinking
Ontology	concerned with the nature of reality	subjectivism, objectivism	both, with main focus on subjectivism
Research Paradigm	philosophical way of thinking and how problems should be understood and addressed	Interpretivist, radical humanist, functionalist, radical structuralist.	interpretivist
Research Philosophy	refers to the set of beliefs concerning the nature of the reality being investigated	positivism, interpretivism, (critical-) realism, pragmatism	critical realist
Research Approach	the way how to get the answers of the posed problem	quantitative (e.g. experiments), qualitative (e.g. ethnographies), mixed-methods (e.g. explanatory sequential)	mixed-methods: sequential explanatory design
Research Design	selection of samples, defined based on the problem	(descriptive, correlation, semi-experimental, experimental, review, meta-analytic) and sub-type (e.g., descriptive-longitudinal case study), research problem, hypotheses, independent and dependent variables, experimental design	case study
Research Method	techniques for data collection	observation, surveys, interviews, focus groups, experiments, secondary data analysis/ archival study	mixed-methods: secondary data analysis and semi-structured expert interviews

Table 10: Results of the research procedure and the choice for this research thesis

For the purpose of a summary and to provide an overview, the single considerations of this procedure are summarized in Table 10. This overview anticipates the detailed guidance and delimitations in the next sections and provides a brief overview of the researcher's approach.

Starting with the research paradigm, which is the philosophical way of thinking and how problems should be understood and addressed (M. Saunders et al., 2009), the interpretivist approach is chosen. For the research philosophy the critical realist bridges the existing and independent reality with reference to social science. The position of a critical realist assumes there is an independently existing world, but he works from the premise that it can only be accessed incompletely, and research will inevitably be shaped by the researcher. In the position of a critical realist there can be a bridge between both extreme positions: positivism (objectivism) and interpretivism (subjectivism). The human knowledge is socially produced (Bhaskar, 2013; A. Collier, 1994). Guba (1990) argues that the research paradigm can be characterized through ontology and epistemology. Hence, the researcher's ontology is both objectivism and subjectivism, but a focus lies on subjectivism.

The researcher's epistemology concentrates on facts (positivist) and thinking (interpretivist), but with a focus on thinking. The researcher's axiology is not value free and it has biased opinions with possible generalisations. As this research is concentrating on the opinions and attitudes of involved participants, the mixed method approach is chosen (Creswell, 2013; Creswell & Clark, 2007). The chosen perception is a complex combination of both roles: structural factors of the world and human behaviour. In a sequential explanatory design and participant selection model there is the possibility to combine each to provide the quantitative and qualitative view.

For the research methods, secondary data is collected for the quantitative part and semi-structured expert interviews are used for the qualitative part. As the participants are chosen, next to the regulator, from one company, the UniCredit Bank AG. The choice of the research design is a case study. Additionally, the participants are high qualified experts and insider of the bank and the financial industry, an expert-led semi-structured interview is applied as the best way to resolve all objectives.

For resolving the first research objective the action is to collect quantitative facts that are associated with the regulations. In the analysis the relationship is examined between the perception of the new regulations by the banking industry incorporating all relevant information about the general market and business regulation, European financial regulation framework, bank business management and model, and the financial statement of the UniCredit Bank AG (case study). At the end the author compares the outcomes from the case study with the interviewer's outcomes and highlights the personal perceptions and personal roles.

In the second objective the impact of regulation on the business model is in focus. As the case study concentrates on the UniCredit Bank AG the interview partners challenge the outcomes from the literature review and their personal influence on it.

The third objective considers the personal aspects of human behaviour and observes the human beings and their manner of acting in the workplace. The literature review provides only models of how it can be done, but using this knowledge helps to develop relevant questions for the questionnaires and also enables for accurate selection of candidates for a 'deep dive' interview. Towards the conclusion of the interview the interviewees provide their personal views, motivation and desires in terms of working within a bank, where a process of change is being undertaken.

Therefore, for the qualitative data collection and outcomes, the strategy is to get in contact with the selected participants. A personal face-to-face interview can ask follow-up questions, unlike mail surveys. The respondent has the advantage to talk about their opinions and impressions and not simply answer the questions. This provides the opportunity to react to the response and derive new questions for a substantial discussion, but before starting the qualitative data collection the right participants must be identified.

Questioning the elites, experts and juniors on their view of the research objective derives qualitative answers on this issue beyond the objective facts. The social interaction has an important impact on the knowledge and influence on its content. The final interpretation will combine the outcomes from perception of the new regulations in the banking industry and the qualitative interview, where the involved persons respond on the changing work environment and their attitude to it.

The quantitative research is based mostly on facts, which will be stored, rated on importance and noted with personal comments in EndNote. The derived quantitative figures, like financial statements, will be stored, illustrated and analysed in Microsoft Excel. The qualitative interviews will be completed in a review.

The ethical principles are concerned with the treatment of others. Especially for the interviews, there will be protection given in terms of the privacy of the study participants and their responses. Participants and mentioned persons should only be named after request to ensure the anonymity in the research. Overall, the university's Research Ethics Sub-Committee (RESC) can be referred to in terms of questions relating to privacy.

Overall, the considered terms and the choice of the researcher is only one way to resolve the objectives. Another combination could also be a sufficient procedure to resolve it, but for the researcher the chosen terms’ characteristics in Table 10 are identified as the best way to achieve the expedient and desirable results and outcomes. The final goal of the author is that the impact of the regulation will not be considered alone, but that the resulting quantitative answers will flow into the findings for the qualitative expert interviews. Therefore, the following sections in this chapter explain why these characteristics are used and breaks down the overall picture of the applied axiology, epistemology, ontology, paradigm, philosophy, approach, design, and method and ethic aspects.

3.2 Research paradigm and philosophy

There is no strict 'cookbook' of how philosophies can be clearly defined, delimited from each other and used for the research study. Patton (1990, p. 37) defines "paradigm as a world view, a general perspective, a way of breaking down the complexity of the real world." A more comprehensive definition is provided by Lincoln and Guba (1985, p. 33), where paradigms are axiomatic systems and a "set of undemonstrated and indemonstrable basic beliefs accepted by convention or established by practice as the building blocks of some conceptual or theoretical structure or system." Hence, paradigms are our mutual reorganisation of the basic knowledge, belief system or theory that guides the way we carry out things, or establish a set of practices.

3.2.1 Research paradigm

The terms of research paradigm and philosophy vary in different literature sources, there is no clear definition available. For Cavana, Delahaye, and Sekaran (2001) and Easterby-Smith, Thorpe, and Jackson (2008), who are concentrating on business and management research, the paradigm and philosophy is a synonym. The concept of paradigm in research philosophies can be attributed to Thomas Kuhn, who has changed the way of thinking about our attempt to understand the world (Brad Wray, 2011). Kuhn (1962, 2012) concentrates on the progress of the scientific research and how the discoveries in practice are achieved.

The paradigm is defined as "universally recognised scientific achievements that for a time provide model problems and solutions to a community of practitioners" (Kuhn, 1962, p. 8). Burrell and Morgan (1979, 2017) analyse the paradigm in relation to the social sciences and describe, for example, the functionalist perspective, which is "firmly rooted in the sociology of regulation and approaches its subject matter from an objectivist point of view" (Burrell & Morgan, 1979, p. 25). However, an interpretivist sees the world through different eyes, considering a subjective situation where the actors are doing their acting. For Bryman (1988, p. 4; 2003) a paradigm is "a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how research should be done, how results should be interpreted, and so on."

A research philosophy for Bell et al. (2018) is the set of beliefs concerning the nature of the reality being investigated. Gummesson (1991, p. 15; 2000, p. 18) makes a central point that "people's value judgments, norms, standards, frames of reference, perspectives, ideologies, myths, theories, and approved procedures govern their thinking and action."

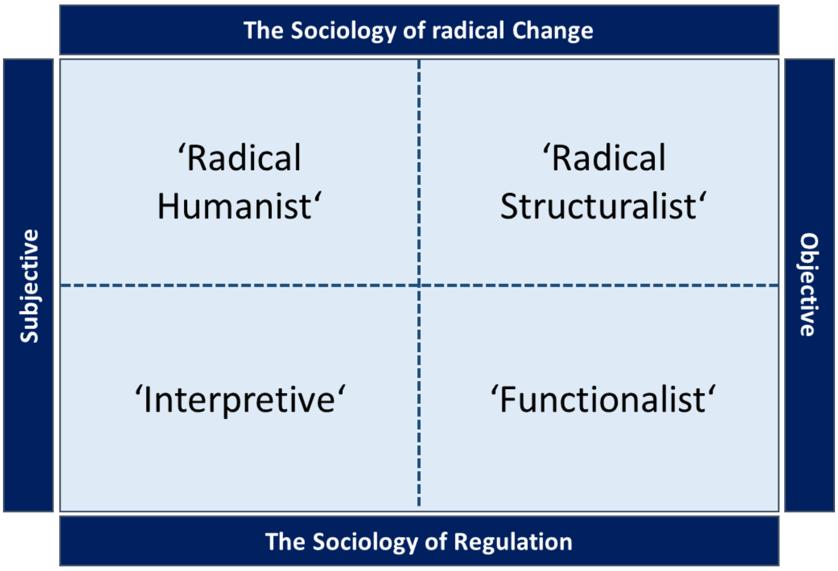

Figure 7: Four research paradigms in the social theory by Burrell and Morgan (1979)

Following Burrell and Morgan (1979, 2017), they identify four paradigms in the analysis of the social theory and they label them as 'radical humanist', 'radical structuralist', 'interpretive' and 'functionalist', illustrated in Figure 7. They explicitly point out that "each paradigm shares a common set of features with its neighbours on the horizontal and vertical axes in terms of one of the two dimensions but is differentiated on the other dimension" (Burrell & Morgan, 1979, p. 23). These dimensions are 'the sociology of radical change' and the 'the sociology of regulation' on the vertical side; on the horizontal side these are 'subjective' and 'objective'.

Using this scheme, the interpretive approach fits best in this thesis. This paradigm is rooted in the sociology of regulation with a subjective perspective. Its main concern is to understand the world as it is, to understand the fundamental nature of the social world from subjective experience. Also, in the real world this paradigm attempts to explain the consciousness and subjectivity of a person in the frame of reference of those directly involved, and not as an observer. This also applies to this thesis, in that the expert interviews allow this subjective, view-changing perspective.

The interpretive tends to be a “nominalist, anti-positivist, voluntarist and ideographic" (Burrell & Morgan, 1979, p. 28) and it tends to be more rooted in the subjective view.

In case of functionalist, it is not so easy to differentiate for this thesis. The underlying basis is that banking regulations are given from the external and limit subjective action and thinking. As a functionalist, this paradigm is rooted in the sociology of regulation using objective perspectives. Its main characteristic is the attention paid to explanations of “status quo, social order, consensus, social integration, solidarity, need satisfaction and actuality” (Burrell & Morgan, 1979, p. 26) and tends to be a “realist, positivist, determinist and nomothetic.” These aspects are also part of this thesis, but it contradicts the subjective point of origin in this thesis.

Therefore, it is comparatively easy to distinguish the two paradigms from radical change. The radical humanist is characterized by its main concern “to develop the sociology of radical change from a subjective point of view” (Burrell & Morgan, 1979, p. 32). This paradigm states that in a society it is important to eliminate or violate the boundaries of social arrangements. The radical structuralist deviates from the standpoint of sociology of radical change from an objective perspective. The radical structuralist persistently discusses issues such as “radical change, emancipation and potentiality, in an analysis which emphasizes structural conflict, modes of domination, contradiction and deprivation" (Burrell & Morgan, 1979, p. 34). This radical change is not strongly pronounced in this thesis and does not examine social changes at its core.

3.2.2 Research philosophy

The extension of the research paradigms leads to the research philosophies according to M. Saunders et al. (2009). This thesis takes a closer look at five important positions that are often used in business research, although there are many more philosophies and their associated sub-types available (Bell et al., 2018; Kothari, 2004; Quinlan, Babin, Carr, & Griffin, 2019; Sekaran & Bougie, 2016; Zikmund, Babin, Carr, & Griffin, 2013). The chosen five are: positivism, interpretivism, constructivism, pragmatism and, for the purpose of this thesis, (critical) realism. Critical realism is a sub-type of realism, but it is chosen for this thesis and also serves as a basis for why the other approaches are not used.

Philosophies	Ontology *nature of reality*	Epistemology *nature of knowledge*	Axiology *nature of values*
Positivism	reality is objective and perceived; posit, observe and derive logical truths; hidden rules teaching and learning process; reality is tangible, exists outside us is objective, and can be broken into parts; truth exists and can be apprehended and measured	focus on reliable and valid tools to undercover rules; the knower and the known are independent of each other; the influence of the researcher can be controlled; replicable findings are true.	unbiased: acquisition of knowledge is not related to values and moral content; Inquiry is objective and thus value-free; values and biases can be eliminated through the use of rigorous procedures
Interpretivism	reality and researcher are inseparable linked; multiple realities, which are socially constructed through culture and language	knowledge is based on the abstract descriptions of meanings, formed of human experience; new understanding and worldviews as contribution	biased; researchers is part of what is researched, subjective; interpretations are a key to contribution.
Constructivism	reality is experimentally or socially based; meaning created from interplay between the subject and object; subject constructs reality of objects; states plus intersubjective meanings; reality is constructed, subjective, multiple and relative. Constructions are nor more or less true, only mire	knowledge exists from mental structures and is surrounded by relative agreements; empiricist explanation; knower and the known are interactively linked; findings are created as research proceeds.	biased: Inquiry is value-bound; values are inherent in the context of the study; the researcher's values affects the study
Pragmatism	reality is ambiguous, but based on the language, history, and culture respect; reality is the practical effects of ideas; truth is what is useful	knowledge is derived from experience. The researcher restores subjectively assigned and objective meaning of other actions; Any way of thinking or doing that leads to pragmatic solutions is useful; the best method is one that solves	goal oriented; researcher himself creates values by modifying environment.
Critical Realism	reality is captured by broad critical examination and reality is imperfectly apprehend able. Reality is objective and exists, but is interpreted through social conditioning	Replicated findings are probably true. Impossible to fully explain reality. Phenomena create sensations, which are open to misinterpretation.	biased by world views; value laden research; impact from cultural experiences in the research

Source: Bell et al. (2018), Kothari (2004), Quinlan, Babin, Carr, & Griffin (2019), Sekaran & Bougie (2016), Zikmund, Babin, Carr, & Griffin (2013)

Table 11: Selected research philosophies on ontology, epistemology and axiology

In Table 11 the considered four and the chosen one, the critical realist, research philosophies are shown for their characteristics; methodology and methods will be separately examined in the next section. Before explaining the delimitation and justification of the selection, it is explained why the critical realist is chosen and what the characteristics of a critical realist are.

The choice for the critical realist in this thesis is mainly driven to adequately achieving all three objectives. Especially the human behaviour at workplace depends sufficiently on individual stratified realities. The critical realist builds a bridge between why a person might act in this manner and how it is accomplished in the real world. Especially in large organisations, there are initially many human actors who develop a common valid opinion from individual points of view, which is subsequently applied to all. In review, it is possible to see in this thesis how the regulatory system is structured and how the business models are changing. But it is still not over, the practical implementations and applications influence human behaviour again and there is a loop through these phases. It is a race between action and reaction.

Therefore, critical realism represents a new and independent approach to the theory of science. The philosopher and economist Roy Bhaskar can be regarded as the founder of critical realism (A. Collier, 1994). Bhaskar and Hartwig (1975) are some of the first persons to systematically develop and formulate a critical-realist theory for science research. The 'realism' part of the critical realist is similar to the positivist view of theory that there exists a reality which can be tested and can be reproduced. But realism recognises the imperfect and seeks or accepts ways of dealing with it. For the critical realist, the external world can be objectively researched and results presented in positivist way; a critical realist assumes this independently existing world but works from the premise that it can only be accessed incompletely and research will inevitably be shaped by the researcher (Guba & Lincoln, 1994). Critical realism bridges the extreme positions of positivism and constructionism (Gioia, Corley, & Hamilton, 2013).

The main strength of the critical realists is that they compares the positivist's outcomes, usually in a quantitative way, with quality based research (Cruickshank, 2011). Hence, he tests the measured reality with the social opinion. The latter assumes the possibilities of multiple realities as represented through the actors and their behaviour (Groff, 2004).

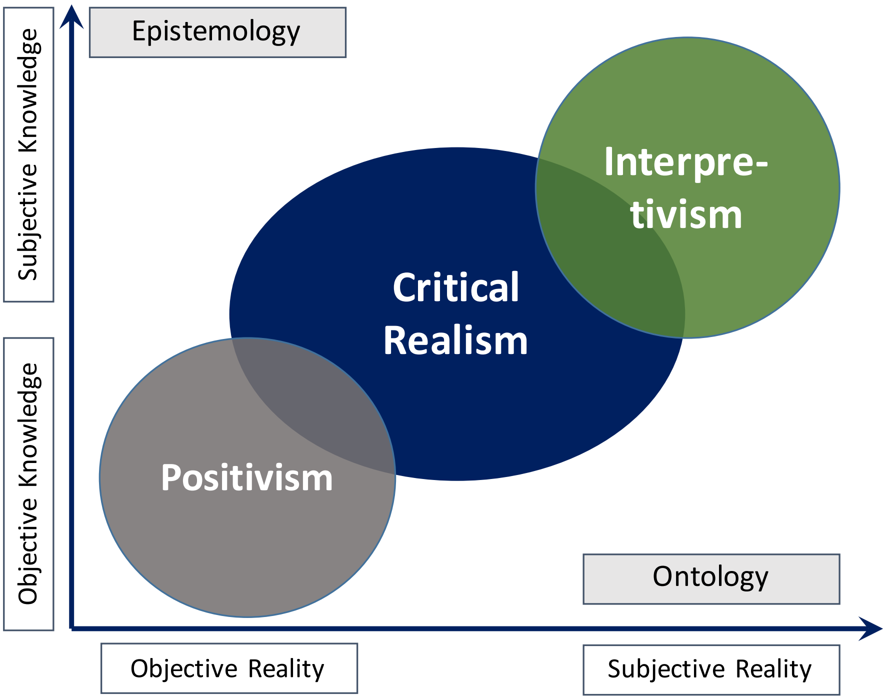

Figure 8: Critical realism in a bridge function to positivism and interpretivism

The reason for the choice of the research philosophy, critical realist, can be explained by using ontology, epistemology and also axiology, next to methodology and methods, for a holistic view and description of our knowledge of the research (Guba, 1990).

Overall, ontology answers the question of 'what is reality' and 'what do we believe about reality' and is concerned with the nature of reality. The core of the understanding is how the world operates, how society is constructed and also how these influence everything around us (M. Saunders et al., 2009).

The objectives in this thesis consider the given banking regulation and the impact on it, but it also considers the opinions and motivational reasons of human behaviours acting within and upon this regulatory environment. In essence, this means that reality is captured by broad critical examination and reality is imperfectly apprehendable. But reality is objective and exists and it is interpreted through social conditioning. The illustration in Figure 8 shows the conciliatory position of critical realists, which makes it clear that it is the critical realist who tries to bridge the two characteristics of positivism and interpretivism.

Because the ontological position of a positivist (Easterby-Smith et al., 2008; Guba & Lincoln, 2005; M. Saunders et al., 2009) is that there is a single reality and the real sciences are to be limited to research into observable facts, it restricts the research to the positive, the real, the actual and the doubtless. It relies solely on experience and rejects all metaphysics as theoretically impossible and practically useless. The reality is objective and perceived; the researcher observes and derives logical truths. Also, as the nature of reality is tangible, reality exists objectively outside and can be broken into parts. A truth exists and can be apprehended and measured. These points are true for this thesis as the banking regulation and the impact on the business model can be objectively measured and interpreted.

For interpretivism the ontological nature of reality is that subject and object is dependent (Bell et al., 2018; Eldridge, 1971; Weber, 2013). The real essence of the object cannot be known, as reality and researcher are inseparable linked. There are multiple realities, which are socially constructed through culture and language. An interpretivist sees the world from a subjective situation, where individuals are mainly the actors. This is exactly the point where the human opinions count for this thesis and these individuals can deviate from the official objectively-stated point of view of the impact on the banking regulation. In addition, they can also explain the reasons why a person acts the way he or she does and pursues certain personal strategies.

The other two strategies, pragmatism and constructivism, have the following characteristics, which are not considered appropriate for this thesis. Patton (2005) argues that the pragmatist has a flexible view of the philosophy, which he calls a ’paradigm of choice’, it is not important to have a specific research position, only one that meets your overall project goals should be chosen.

The ontological position of the pragmatist is that reality is ambiguous, but based on the language, history, and culture. Also, the reality is the practical effect of ideas and truth is what is useful for the researcher (Bell et al., 2018; Burrell & Morgan, 1979). Not following one point of view makes it harder for the researcher of this thesis to apply his arguments and approaches. Constructivism is similar to the interpretivism, and it extends the opinion of how the involved persons construct their beliefs in a social setting (Guba, 1990). From the ontological position it is nearby equal to an interpretivist view. The reality is experimentally or socially based. At this point, constructivism would theoretically be applicable for the thesis but the main differences occur in relation to the epistemology (Walsham, 1997), which is described in the following paragraph.

By considering the epistemology, the aims are to explain 'how you know something' and to consider 'what we do believe is true' (Patton, 2005). Epistemology includes questions about the conditions for recognising the occurrence of knowledge by addressing the facts by asking what the acceptable 'wisdom' is (Goldman, 1993). Summarized, it is a relationship between the inquirer and the known. And it describes our beliefs about how someone discovers the knowledge about the world.

For the critical realist it means that the replicated findings are probably true. It is impossible for the researcher to fully explain reality. Phenomena create sensations, which are open to misinterpretation. Here, too, the two approaches, positivist and interpretivist, serve the critical realist's choice, where the impact of the banking regulation can be measured with financial key figures, but employees in a bank construct this key figure and try to interpret individually it from their point of view and understanding. They also have the opportunity to influence the given knowledge in providing the information they consider relevant or useful to others. There may be a way of manipulation in which relevant information is not presented or is deliberately misrepresented.

Therefore the epistemological position of the positivist (Caldwell, 2010; Easterby-Smith et al., 2008; Guba & Lincoln, 2005; M. Saunders et al., 2009) is focus on reliable and valid tools to undercover rules, where the knower and the known are independent of each other. The influence of the researcher can be controlled and replicable findings are true (Heisenberg, 1971). The epistemological view (Goldkuhl, 2012; Schwandt, 1994) of the interpretivist is that the knowledge is based on the abstract descriptions of meanings, formed of human experience. It provides new understanding and worldviews as a contribution to the research. Individuals intricate and analyse a complex understanding of different people's experiences; they do not only react on the reality but also construct knowledge.

The epistemology in case of constructivism, according to Walsham (1997), examines the field of information system, where the interpretation of the acting is important. A constructionist considers also the world before the interpretation starts, he tries to construct his research environment where findings are created as research proceeds (Bryman, 2003).

At first glance, it can be applied to this thesis, but it does not provide adequate interpretation of information and the hidden motives and motivations of the acting persons. This is the intention of this thesis. For pragmatism it means for the epistemology that the knowledge is derived from experience. The researcher restores subjectively assigned and objective meaning of other actions. Hence, any way of thinking or doing that leads to pragmatic solutions is useful. The best method is one that solves problems for the researcher (Kirsh & Maglio, 1994; M. Saunders et al., 2009). This free approach is not applied here in this thesis.

Axiology is a theory of ethics and values (Collis & Hussey, 2013). It refers to a possible bias for the research study and it allows to recognise the values and opinions are used to collect data and how the analysis are interpreted in the research (Hartman, 2011; Rescher, 2013).

In the axiological position the researcher tries to act as a critical realist, though positivism explicitly claims to be value free, there is distortion of values with bias from the constructionists (Walsh & Evans, 2014). Research under this influence is often premised on the moral attitude of the researcher but biased by world views. The researcher is value laden, where the impact from cultural experiences in the research exists, which derives from the interpretivist. Despite the objective view, the researcher of this thesis has had his own personal experience with banking regulation. Therefore, he consciously tries to use his bias to get a deeper insight into the chosen topic.

On the other hand, acting in the role of the pragmatist is goal oriented and in the view of axiology the researcher himself creates values by modifying environment. His research approach is not classified as good or bad, but if the consequences are worthwhile then the action is proven to be good (M. Saunders et al., 2009). For a constructionist the research is still biased from the axiological point of view. His inquiry is value-bound, where values are inherent in the context of the study. At the end the researcher's values affects the study (Bell et al., 2018; Bryman & Bell, 2015). Constructions are not more or less true, only more or less informed. These are precisely the points that should not be present in this thesis, especially in terms of the strong bias.

3.3 Research methods and techniques

In order to complete the research philosophies or paradigms it is necessary for the researcher to know what kind of data they want to collect and various survey methods can then be used to measure the impact. Basically, a distinction can be made between qualitative and quantitative survey methods. In addition to choosing the survey method it is also important to critically examine the quality of the data collected. It is also possible to combine qualitative and quantitative methods and thus benefit from the advantages of both methods. As a result, it is called a mixed methods approach and this is used for this thesis. The advantage of the combination of qualitative and quantitative methods can be used for meaningful impact measurements. Depending on the survey method chosen, the data collected have a certain form and must therefore be analysed using suitable evaluation procedures, techniques and programmes.

The next section describes the choice of the research methods, survey methods and techniques and programmes to analyse them.

3.3.1 Research approach

By choosing the approach of a critical realist, the choice of the research methodology and paradigms means also a choice between the methods. The critical realist tries to bridge the quantitative methods, that are about describing and recording behaviour or changes in the form of numerical values as accurately as possible, with the qualitative methods, that is about describing, interpreting and understanding contexts. Applied to the research objective in this thesis, it means that the objective facts (impact of the banking regulation on the business model) are combined with the subjective opinions from the expert interviews. Therefore, the critical realist bridges the positivism quantitative with the interpretivism qualitative approach by using the mixed methods.

In quantitative research, social reality is regarded as objective and can be understood using controlled methods. A standardised form of observation is suitable for the investigation of large samples, where statistical evaluation methods are used for the objective measurement and quantification of facts (Bell et al., 2018; Creswell, 2013). The number of investigation units is numerous; the assumptions have a clear idea of relevant relationships. The aim is to describe observations in the form of models, correlations and numerical data as accurately as possible and to make them predictable. The data obtained can be analysed and compared using evaluation techniques with statistical methods (Creswell & Creswell, 2017). According to Creswell and Clark (2017) and Röbken and Wetzel (2017) the advantages of quantitative methods are that the results are precisely quantifiable. It is possible to show the determination of statistical correlations and to examine a large sample in order to obtain representative results. Further advantages include high external validity due to a large sample and greater objectivity and comparability of the results.

Qualitative research is characterized by a stronger level of subject-relatedness, as instead of a large number of cases (Gummesson, 1991) the human subject is a main object of investigation. In order to avoid distortions of the results by overly rigid theoretical assumptions and standardized research instruments, qualitative research prefers direct access to the subjects concerned e.g. in the form of face-to-face interviews. For Gummesson (2000), qualitative data collection methods make it possible to examine a specific object of investigation in detail and in depth. New and unexpected information can also be generated. This can lead to a deep understanding of the object under investigation, but makes it difficult to generalise beyond the concrete object that is under consideration (Patton, 1990, 2005).

According to Creswell and Clark (2017) and Röbken and Wetzel (2017) the advantages of a qualitative approach include a flexible application of the method. The openness of the procedure makes it possible to discover new, previously unknown facts. Through the personal interaction there is the possibility to ask about background information and to eliminate ambiguities and thereby reach a high content validity due to a non-predetermined approach. Usually there is deeper level of information content achieved through open questioning.

By considering the quantiative and qualitative approach there is the possibility to unite their characteristics into a mixed methods approach. The purpose of the mixed method approach is to benefit from both advantages (Creswell, 2013; Creswell & Creswell, 2017). Creswell and Clark (2017); Creswell and Creswell (2017); Johnson, Onwuegbuzie, and Turner (2007) describe the combinations of the mixed method approach where many different methods are combined differently from the quantitative and qualitative point of view, leading to a different focus within the investigation. Depending on the proportion of each method's content, the quantitative and qualitative components may be equivalent or different from mixed designs where either the quantitative or qualitative aspects play a more dominant role.

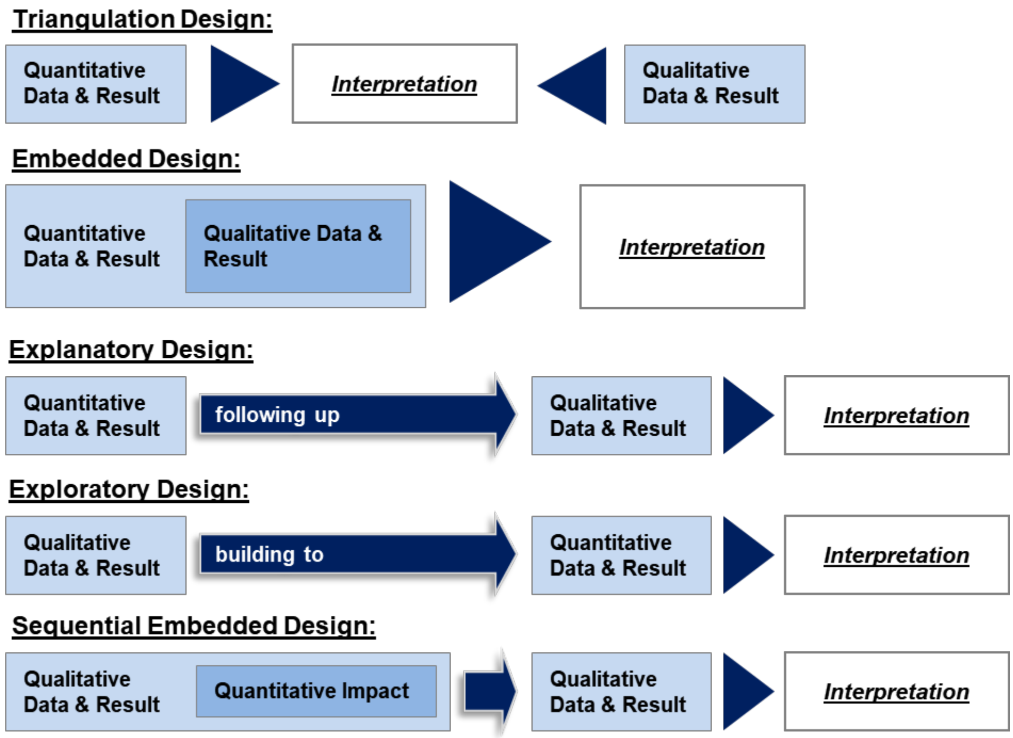

Figure 9: Examples of selected mixed methods approaches

Therefore there are a lot of different combinations that are possible. The researcher displays in Figure 9 five selective mixed method approaches. The focus stays on quantitative and qualitative research of data research and results. The combination of at least two of them follows a possibility of interpretation. A combination of quantiative and qualitative order has an effect on the interpretation.

For this research the focus is on the explanation of its design, the researcher of this thesis uses first a quantitative data collection and analysis but these results lead to a need for further clarification by a qualitative approach. The qualitative data and analysis emphasise, explain and elaborate on the quantitative results (Ivankova, Creswell, & Stick, 2006). This means that the results from the quantitative evaluations in the thesis serve not only for the analysis, but also as a follow up for the qualitative expert interviews. These objective findings serve as a basis for focused questions and are compared to determine whether perceptions and facts are drifting apart.

3.3.2 Research design

The research design, named by M. Saunders et al. (2009) as 'strategy', is the chosen research style to collect and analyse data. Therefore, a research design is a plan that defines how the research project is to be carried out and, in particular, how the projected evidence is to be used to obtain answers to the research questions. The design depends on the chosen research paradigm, philosophy and approach. Mainly it can be categorized into qualitative and quantitative designs.

In section 3.3.1 several research philosophies are examined: Constructivism and Interpretivism are subjective; pragmatism can use both; critical realism is a mixed approach with a main focus on qualitative view; positivism is absolutely objective. A research design can be descriptive and, by using a case study, allows the researcher to survey naturalistic observation. When it is looking for correlation causes it can be used a case-control study or observational study. Experimental and semi-experimental research designs are experiments, field experiment and quasi-experiment. Also, it is possible to have meta-analysis and reviews in the format of literature or systematic review (De Vaus, 2001).

The focus of this thesis lies on a case study. Within the framework of the research, starting from a concrete case, alternative solutions for complex economic, technical and social decisions can be found and rationally justified by the researcher. The case study design can have four different dimensions according to Merriam (1998); Ridder (2017); Welch, Piekkari, Plakoyiannaki, and Paavilainen-Mäntymäki (2011).

Yin (2017) represents the opinion that the case study can be used to fill gaps in existing theories. In this case, the research will be planned accurately by applying different units of analysis to the same case. For Eisenhardt (1989) a case study does not need a theory first. The advantage is that the recording of observations is not limited by theory and the research question is of relevance. There are no relationship assumptions about such constructs and variables. Stake (1995), on the other hand, proposes to apply a less structured and much more inductive research design using a thematic conceptual structure that will be done in four phases of a common design helping to concretize problems, guiding data collection and proposing solutions. Initially, an estimated ten themes are identified that can take the form of statements, questions, cause-and-effect relationships or simply possible problems.

Another case study research design is based on appearing anomalies and it is founded above all on the work of Burawoy (2009) and is named as an 'extended case study design'. (Ridder, 2017) summarizes this design, as a situation where the research questions are derived from curiosity. The researcher can observe only the interesting and surprising social situations, where the existing theory cannot explain.

The focus of this thesis is based on the principle of the opinion of Yin (2017) in filling gaps in existing theories. The chosen practical case is to show for one of the largest German banks, the UniCredit Bank AG, a subsidiary of the global system-relevant UniCredit Group, that the impacts of the regulatory actions are challenging for the employees and to explore why it enhances a deviation between the governmental regulatory requirements and the internal banking processes. Therefore, it makes it possible to define what the case is and the unit of analysis is very clear because it is the object that is under investigation itself. The further points that are under investigation consider whether it is possible to define the limits of the case in order to differentiate them from their context and guide the elaboration of the results by establishing the limits of the argument.

Consequently, the function of this case study design is to direct research in the right direction by showing what is necessary to observe in order to obtain only relevant evidence and avoid collecting everything.

3.3.3 Research method

After choosing the design, the researcher has to choose a research method to realise his research goal. In this decision-making process, numerous methods and procedures are available that are suitable for the mixed methods approach. For this reason, the choice of one or the other direction always goes hand-in-hand with a specific methodological approach to the research object (Cooper, Schindler, & Sun, 2006). The chosen mixed methods approach in this thesis combines the quantitative and qualitative methods. Therefore, the following types of methods are considered.

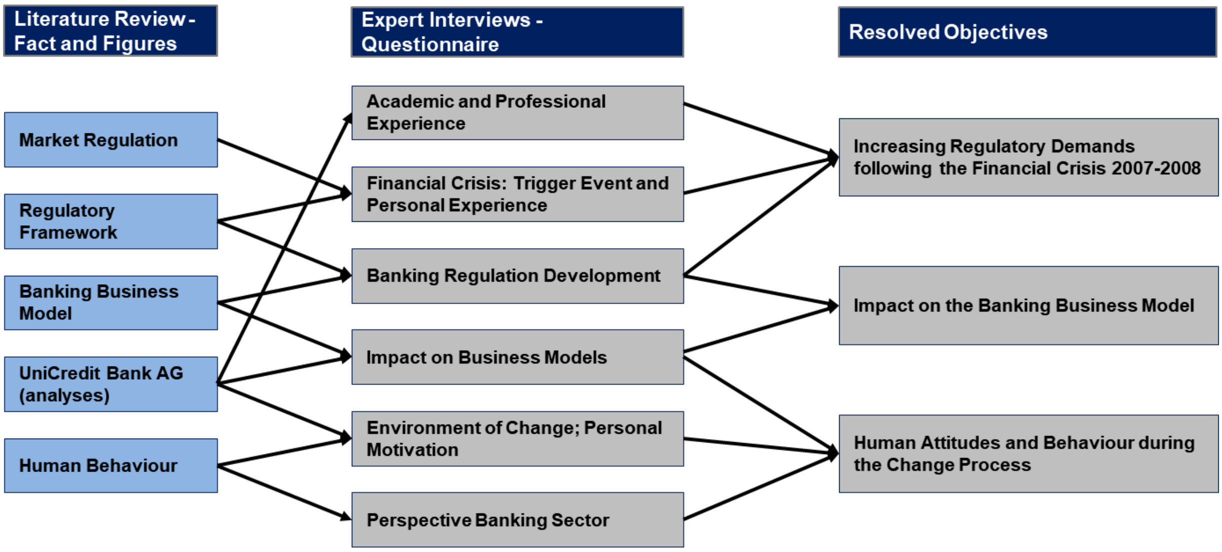

Figure 10: Integration of descriptive information into semi-structured interview data for resolving the objectives

Figure 10 illustrates the mixed methods approach on how the descriptive data, facts and figures are used to utilise the semi-structured expert interviews to finally solve the objectives. The arrows show how purposefully the given information enriches and flows into the opinions for the expert interviews. For a better overview, only the main arrows are drawn; further connectivity is given but not displayed here, but it is also considered. In the final analysis, by using the relevant information from the literature review and also the expert interviews, the objectives can be now resolved in a goal-oriented way by using this mixed methods approach. In the following, the individual details for the realisation of this approach are explained.

The quantitative research process ideally follows a predefined model compared to qualitative research (Bell et al., 2018). This requires the existence of theories and models about the object of research at the beginning of the research process. This involves implementation and the formation of measurable indicators. Quantitative data collection tools and evaluation procedures are surveys or questionnaires (De Vaus & de Vaus, 2013), quantitative observation (Bryman, 2006), document screening (Bell et al., 2018) and experiments (Campbell & Stanley, 2015). On the basis of a research design the dependent or independent variable and the measurement operations are determined in advance.

Within the framework of the subsequent data collection, measurements are carried out on test persons in order to be able to record the pre-defined indicators. The evaluation of the data is based on statistical procedures and the use of control groups is maintained in order to be able to control possible interferences. The degree of knowledge gained is verified by means of significance tests and the findings are then related to the theoretical model again and interpreted (Brace, 2018).

The quantitative method's choice falls on the document screening or secondary data analysis is based on extraction of information on the use of secondary data. Secondary data is the interpretation of the original or primary data as originally collected by another researcher. In this thesis are the measurements of general market regulation, the impact of the regulation on the banking business model, the annual sustainability and disclosure reports and the model analysis on the human behaviour at workplace and their relevance.

Therefore secondary data sources are more valid and reliable as they have already been re-examined and many of them have confirmed their credibility through publication (Bell et al., 2018). In the field of qualitative research, as a second part of the mixed method approach, there are numerous data collection tools and evaluation procedures available, e.g. interviews, focus groups (Collis & Hussey, 2013), qualitative observation (Kawulich, 2005), document analysis or qualitative content analysis (Bowen, 2009). The qualitative methods do not represent a homogeneous group, although they have numerous similarities (Gubrium & Holstein, 2001). The basic principle for all of them is a more open approach to the research object compared to quantitative methods.

The qualitative research process focuses on the intention to let the target group of interest express their views themselves in order to be able to understand the subjective point of view. The basic assumption here is that people are self-reflective; individuals who act as experts of themselves and should be understood as such.

The choice made for this thesis takes the form of the interviews (Gubrium & Holstein, 2001). First of all, the structured interviews are considered, which have a clear order and predefined questions. Questions are read verbatim and with considered word choices for a clear question to avoid possible inquires or confusion. Questions tend to be towards a closed-end structure, where all participants are asked the questions in the same order. A precise and careful approach in the interviews is essential, so the researcher is limited in his freedom and questioning errors are difficult to correct. This approach is seen as too strict as there is no opportunity to ask further questions, which can be derived during interview.

In order to be able to ask more specific questions and to get to the inside core of the message, the choice of this thesis is been made on the semi-structured interviews where the researcher prepares an order of specific, formulated questions in advance, which can be addressed to the participants. However, this requires a flexible approach that is adequate to the interview dynamics. It should also allow the interviewee to be more mentally present and mean less times is spent writing up responses between the interviewees. The researcher has prepared closed end questions and in the case of follow-up questioning he can use an open-ended interview structure.

The planned questions probe for more information during the interview. Follow up questions aim to get more depth, as they can compare and contrast questions. They are used to request further examples, meaning some evidence and more details. They can be directly reflected by the researcher and this derives new questions. The specific form of interviews is the experts' interview. It is not a new form of interview technique, but it aims to focus on the opinion of experts. The participants are selected experts for the topic. Hence, it is mostly useful to have them partake in structured and semi-structured interviews.

Expert interviews are used in particular to ask for specific and concentrated knowledge of selected persons on a limited subject area. The guidelines have a structuring function with regard to the content and sequence of conversations. Experts are competent persons who, as actors in the field of study, have specific knowledge of action and experience. They represent certain organisations or institutions and have internal operational knowledge, in this case that are current or former experts from the UniCredit Bank AG.

The selection of experts therefore depends on the selection of certain organisations, on reputation and position, on possibilities of influence or participation of persons in relevant decisions or actions. The questioning of different experts of an organisation is intended to contrast alternative perceptions, positions of interest and points of view in an organisation. A full description of the selection of the interview partner and the intended question are described in the next chapter.

Therefore, possible unstructured interviews are rejected, as there is no 'master plan' in terms of the interview. As there is no 'set' of questions, the researcher instead has a choice of topic areas and approaches the interview as more of a conversation. Generally, open-ended questions are used to obtain in-depth answers.

3.3.4 Research ethic

A researcher is obliged to address ethical aspects and to follow them during his scientific activity in a proactive manner. One of the major aims is to avoid inappropriate behaviour during this research process and contradictions for ethical reasons, where acting and statements must be true (Bell et al., 2018; M. Saunders et al., 2009).

For this research the research participant and his interests are part of the research and are always protected. It is considered that the participants should provide full consent to the research and are not harmed in any way. The interview participants are voluntary and are able to withdraw from the study any time. Their dignity is respected and the protection of privacy is ensured. Anonymity of individuals, human groups and organizations is ensured, if required. Any deceptions or exaggerations about the objectives of the research are avoided. Belongings in any form, sources of funding and possible conflicts of interest are indicated.

Any kind of misleading information and distorted presentation of primary data results are avoided. Any communication related to the research is carried out with honesty and transparency. Participants participate only with their consent and the researcher supplies sufficient information and assurances of participation. Individuals understand the implications of participation and agree as informed as voluntary persons. When formulating questionnaires/interviews, the use of offensive, discriminatory or other unacceptable languages is avoided. Data protection in UK is regulated by the 'Data Protection Act 2018' (Carey, 2018) and anonymity is considered and strictly respected. A good orientation, and also applied here, is provided by University of Gloucestershire (University Research Degrees Committee, 2020), where the guidelines for ethics in research are described.

All the mentioned points are met in this thesis and are discussed before and after the interviews with the participants, with special consideration given to the guaranteed anonymity of the participants. This is a key success factor for confidence-building in interviews as open and honest comments do not always reflect official opinion.

3.4 Conclusion

The choice of the critical realist is the central choice for the research philosophy to complete the research aims, questions and objectives of this thesis. In terms of axiology, it is possible use researcher's biased opinion with possible generalisations. Through the bridging function of the critical realist both factors of positivist for given facts of the changing regulatory demands and business models and interpretivist for thinking/opinion of the involved persons in these processes are combined, but still with main focus on thinking. Also, for ontology, it is considered the objective facts, but also subjective opinions and desires of the involved interview participants. In the way of thinking as interpretivist, as a research paradigm, it used for the research approach the mixed methods in a sequential explanatory design. The advantage is that the given information and the opinions can be embedded and depends on each other. The case study for the UniCredit Bank AG is used as selected sample for the research design. Finally the research method using the facts and figures from the literature review and the opinions from the expert interviews.

4 Interview

The survey of interviews results from the gap analysis of the literature review in chapter 2 and explained how they are applied through the methodology chapter 3. Through the heterogeneous selection of experts, it was not only possible to draw new insights both in breadth and depth but also to better understand human behaviour at workplace of major European banks for further conclusions.

4.1 Interview structure

Before an interview can be started it is essential to think about the range and number of participants that will be carefully chosen for the expert interviews to reach the research aims and meet the requirements of the defined objectives. The chosen methodical limitation states that it is a case study in the view of a critic realist, that it is applied mixed method approach as explanatory design to create a semi-structured expert interview.

For the qualitative data collection and outcomes the strategy is to get in contact with the selected participants. Unlike mail surveys, face-to-face interviews, provide the opportunity to ask follow-up questions. The respondent has the advantage to talk about their opinions and impressions and not only answer the questions. This provides the opportunity for the researcher to react to the response and derive new questions for a substantial discussion.

4.1.1 Aim of the expert interviews

The main aim is a consideration of how and why the individuals in a bank (manager, expert and young professional as juniors) complete and assess the claims of the regulations on their personal behaviour at workplace. Their personal attitude and behaviour are decisive on the effectiveness and efficiency to implement regulatory processes and complete transformation of the business model of a bank.

An effort is made to produce an exploratory insight. The interviews are designed to record subjective assessments, patterns of interpretation and action orientations, considering the situation-specific contextual conditions. In addition, the identification of individual perspectives and courses of action that are lost in the variances of quantitative group studies are clarified. A reviewing objective is achieved by comparing theory-based research theses from the literature review with the results of the analysis of the interview responses.

Hence, the key issue is to analyse the involved persons, from employees to the regulators, on their personal attitude and performance and how their motivation and personal behaviour can be transferred to processes on steering effectiveness and efficiency a bank.

4.1.2 Case study

As a practical example for the new strategy derived from the regulation, the German UniCredit Bank AG (a subsidiary of the UniCredit Group), which is classified as one of 30 system-relevant financial institutions in the world (Financial Stability Board, 2020), is selected and the results can be linked to a generalized overview of other large banks in Europe.

In this case the researcher interviews heterogeneous selected participants who work or have worked for UniCredit Bank AG. As the researcher also worked in this company for a number of years, his intention is to be considered as an insider to extract personal, profound, honest and clear information from his former colleagues and employees. The choice for the critical realist is intended on the fact that the researcher wants to compare the quantitative facts with the subjective feelings and opinions of the interview partners.

The literature review examines the financial situation of the UniCredit Bank AG and provides an outlook on the banking strategy as it is possible to compare the bank business model, human capital demands and qualification and strategy over the years. In the analysis the gap is bridged between facts and opinions by using an explanatory design of a mixed methods approach. As described above, this makes it possible to supplement the hard facts with subjective perceptions.

4.1.3 Participant selection

The participant selection underlies the decision relating to which sampling techniques are employed (Patton, 2005) and which interview structure and content (Guest, Bunce, & Johnson, 2006) is chosen. The more it is unstructured and variable in the content, the more interviews are required.

Experts, as insiders, form a direct target group of survey, have experience and operational knowledge directly from acting in their roles. In a company the analysis of operational and management processes, programmes or action structures is based on expert insider knowledge. In this case, related questions, hypotheses and theoretical explanations can be explored, answered and clarified from the experts' point of view.

For this thesis, it is important that the expert is not only understood as a person who has specific practical or experiential knowledge that relates to a clearly definable problem area. It should also be possible for them to use their interpretations to make the concrete field of action meaningful and provide advice or suggestions for others to understand. Nor are the experts interviewed solely because they have a certain knowledge. Rather, this knowledge is of interest insofar as it has a particular influence on practice.

The interviewed experts reveal their orientations for action, their knowledge and their assessments of being able to help structure the conditions for action of other actors in a key way. Expert knowledge acquires its significance through its social effectiveness. The further description of the expert selection procedure in this section precisely aims to filter out such relevant experts, even with heterogeneous opinions, in order to get the broadest possible, but nevertheless in-depth, view (Bogner, Littig, & Menz, 2009, 2014).

For the selection of experts, it is important to select interview partners from certain internal organisations, according to reputation and position of relevant actors and the influence of involvement or participation of persons in relevant decisions or actions. The interviewed experts should be persons from management level and also staff divisions. An aim of the questioning of different experts of an organization is to create alternative perceptions, positions of interest and perspectives in an organization in order to offer the contrast of a multi-perspective view. The number of partners required for a qualitative interview cannot be easily answered (Baker & Edwards, 2012; Dworkin, 2012). It depends on different factors, which topic, how are the questions structured (structured vs. unstructured), what range of variations and to what extent answers are given. Adler and Adler (1987) advise to have between 12 and 60 interviews as an ideal.

In this thesis, a certain number of interview partners are not artificially fixed, but rather expert interviews are conducted until no new findings are added. Since there is a limit of good interviewees who are willing to give their answers openly, it was important to achieve a highly divergent opinion through different levels of expertise and fields of work.

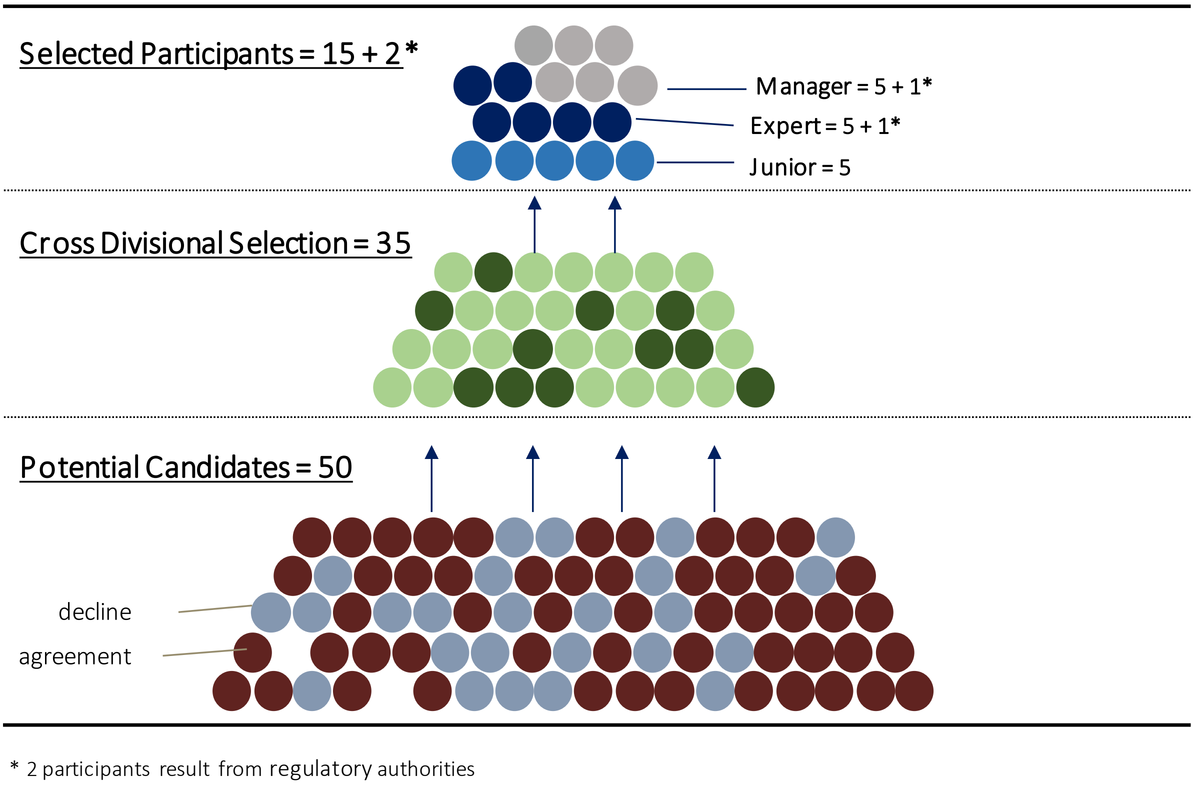

Figure 11: Selection procedure of the interview candidates

Starting with the selection of the interview partner as experts, the first status for the selection of participants is that over 50 potential candidates are asked if they would be involved in an interview within the UniCredit Bank AG. There were 15 declines. Out of the remaining 35 persons, a selection of 17 participants is chosen, see Figure 11. A wide effective coverage on their job profile and experience level could be ensured. From the UniCredit Bank AG, five participants will be interviewed from elite, five from expert and five from junior level. From the regulatory institution there is one expert and one manager available.

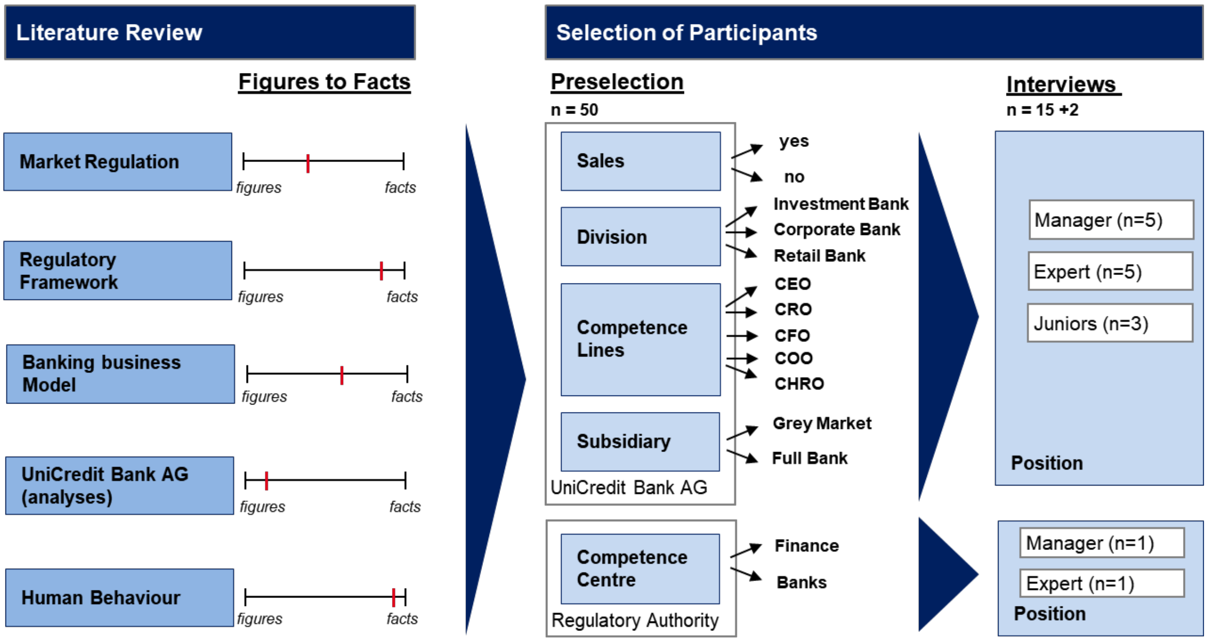

Figure 12: Selection procedure on the cross divisional selection

The first classification for the cross divisional selection, see Figure 11, is concentrated to classify the potential participants according to the examined literature review and their working institution, that is the multinational bank UniCredit Bank AG and the European regulatory authorities, see Figure 12.

Additionally, the UniCredit Bank AG is classified in terms of working organization and job experience. The classification in sales, division, competence lines and subsidiary are important to know, as the potential participants have different influence from the regulations. The regulatory authorities have only classification in finance and banks. UniCredit Bank AG, as wholesale bank, has three divisions, which are involved in the investment, corporate and retail business. Next to it, the competence lines shows if the participants work for the CEO (Chief Executive Officer), CFO (Chief Financial Officer), CRO (Chief Risk Officer), CDO (Chief Data Officer) and CHRO (Chief Human Resources Officer).

The subsidiary classification shows if the participants have experience in the full bank, also full regulated or in the grey market as shadow bank. The selection of the participants within the matrix selection it not limited to one choice, an experienced employee have usually passed several departments in his career, e.g. in the competence lines of CRO, CFO and CEO.

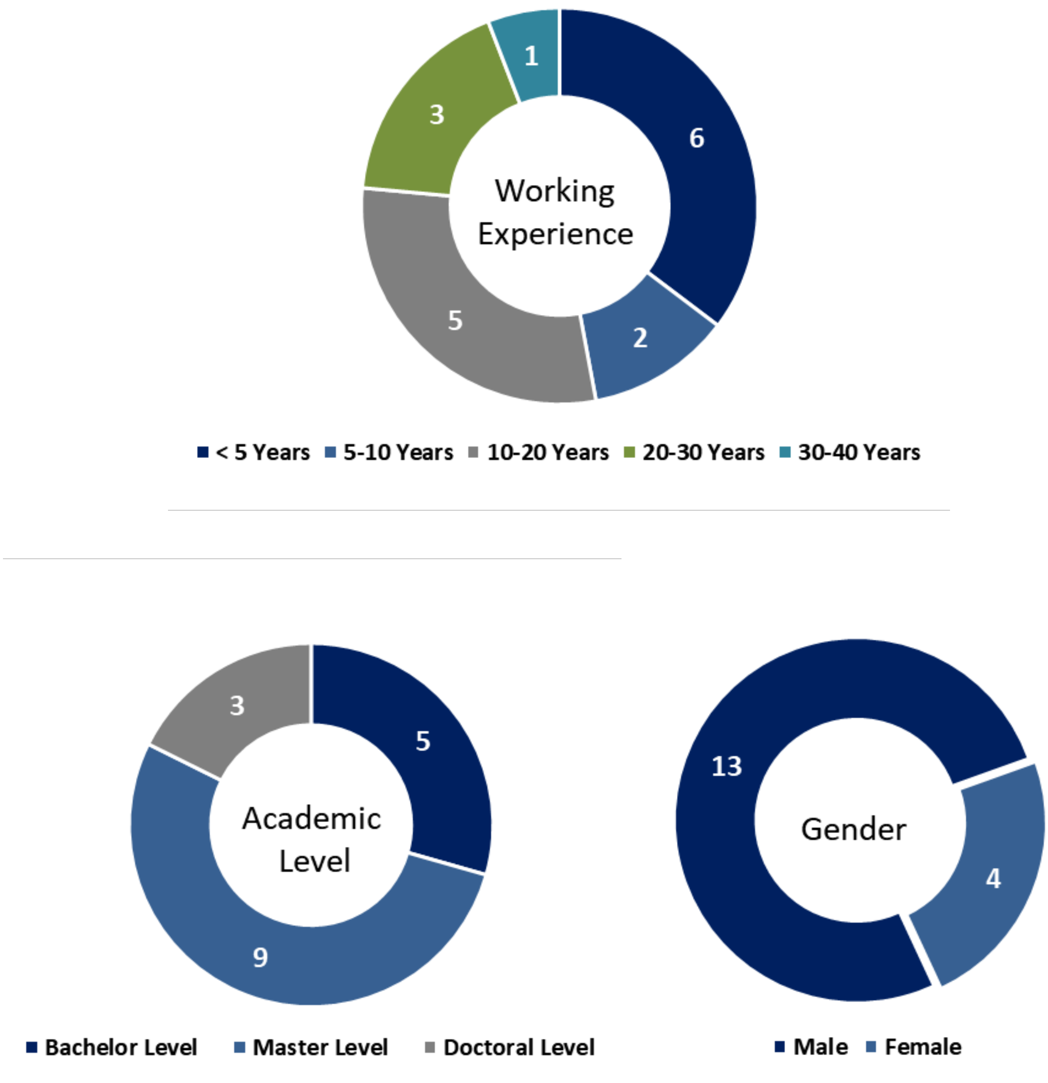

Figure 13: Interview partners’ working experience, academic level and gender

In the second classification the remaining participants are finally relatively heterogeneously selected by working experience and academic level, but limited for gender, see Figure 13. The range for working experience of the chosen interview partner starts with juniors and ends with high experienced with between ten and forty years of work in this area. The academic level is dominated by master’s degrees, as is usual in this specific working area.

Male participants dominate the study, but there are no anomalies in the answers that are gender specific. In this research case it is not a relevant overweight.

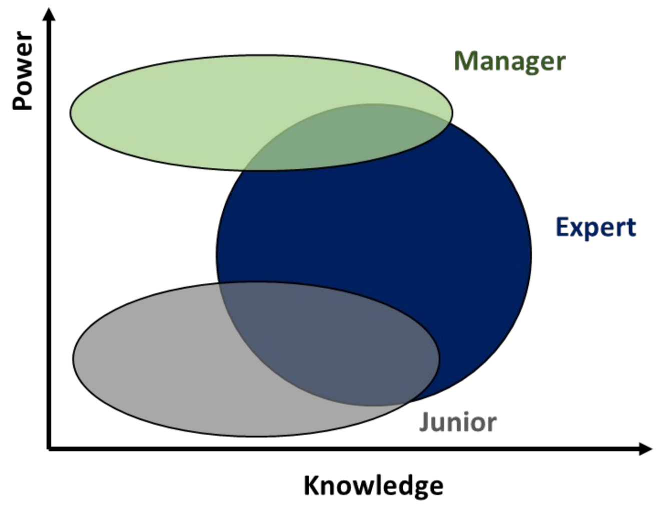

Figure 14: Final selection procedure on the expert level and power

The third classification of the participants, see Figure 11, Figure 12 and Figure 14, labels the selected participants relative to their level of expertise. Three types of characters are identified:

1) Elites - powerful managers and decision makers, but they have only a bride specialist knowledge.

2) Experts - established deep expertise, but they are less involved in the decisions processes of a manager.

3) Juniors - started their career after graduation and have only a general theatrical knowledge.

Questioning the elites, experts and juniors on their view of the research objective derives different facts and opinions as every group has a different position and each individual within the group may possess unique knowledge and perspectives. This is especially true for juniors who perhaps will sense the expectations of this job. The classification stopped at this level, as further selection does not lead to a better choice of the interview partners and personal identification of a participant can be avoided.

Participants	Organisation	Expert/Power Level	Division	Subsidiary
Participant 1	Bank	Manager	Corporate, Investment	full bank
Participant 2	Bank	Manager	Corporate	full bank
Participant 3	Bank	Manager	Corporate, Investment, Retail	full bank, grey market
Participant 4	Bank	Manager	Corporate, Retail	full bank
Participant 5	Bank	Manager	Corporate	full bank
Participant 6	Bank	Expert	Corporate, Retail, Investment	full bank
Participant 7	Bank	Expert	Corporate, Retail	full bank
Participant 8	Bank	Expert	Investment, Retail	full bank, grey market
Participant 9	Bank	Expert	Corporate, Retail	full bank
Participant 10	Bank	Expert	Corporate	full bank
Participant 11	Bank	Junior	Investment	grey market
Participant 12	Bank	Junior	Corporate	full bank
Participant 13	Bank	Junior	Corporate	full bank
Participant 14	Bank	Junior	Investment, Retail	full bank, grey market
Participant 15	Bank	Junior	Corporate	full bank
Participant 16	Regulator	Expert	Bank Authority	not applicable
Participant 17	Regulator	Manager	Financial and Bank Authority	not applicable

Table 12: Selected participants for the expert interview

Therefore, the following 17 persons, see Table 12, are selected to achieve the highest degree of coverage. The identity of the participants remains anonymous for ethical reasons and according to this list the quotation in this thesis is conducted.

4.1.4 Interview analyses design and procedure

In this thesis the multi-method approach is consciously chosen to compare the quantitative outcomes from the literature review with the qualitative findings from the interviews. In this approach it is very important to be able to find a way to compare it convincingly. Beach (2020, p. 1) recommends a case-based (bottom-up) or variance-based (top-down) approach, because "case-based approaches aim to learn how a causal process works within a case, whereas variance-based approaches assess mean causal effects across a set of cases.”

This study follows a case-based approach, as the quantitative outcomes are used sequentially to analyse the interview results. A further aspect of a multi-method approach is the ability to recognise and present the effects of bias (trueness) and uncertainty in the analyses (D. A. Collier, 1995). The discriminatory power between bias and uncertainty can be better explained in the following graph.

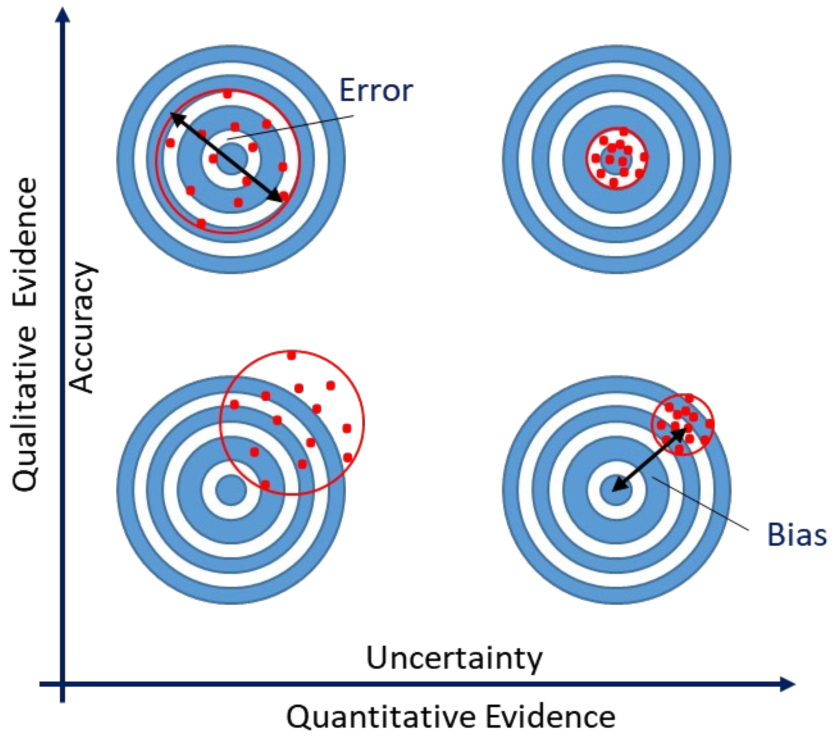

Figure 15: Error and bias illustration for accuracy and uncertainty

In the Figure 15 four targets are shown. In the lower left target the shooter has placed his shots within the red circle. The shots are equally distributed within the red circle and show a deviation called an error. In the next step the shooter can improve his spread and reduce the error, the result is the target in the bottom right corner. The deviation has been improved significantly, but the distance to the centre is still present.

This distance is the bias of the shooter. Alternatively the shooter can also improve his accuracy. In the target in the upper left corner the error within the red circle remains the same, but the scattering is now exactly around the centre. In the end, shown by the target in the upper right corner, the shooter can improve both the error (uncertainty) and the bias (accuracy). The multi-method approach has equal issues. The researcher can improve the error of quantitative outcomes with a better precision, but the bias can be only improved from the qualitative part.

The analyses from the literature review and the expert interviews are subject to both the error and the bias problem. In this thesis, new insights will be generated from the interviews that are not currently covered by the literature review. Thereby, an error can arise where response error causes the individual opinions or facts of the participating interviewees to deviate. But this deviation and error does not result from different opinions, where the participants actually think the identical way, but the respondents give inaccurate answers or the answers are recorded falsely and analysed incorrectly. In order to minimise this error, pilot interviews are first conducted and analysed in order to meaningfully correct potential deviations in subsequent interviews while due care was taken to ensure a level of similarity in terms of how questions are worded uniformly.

In addition, it is important to question whether there is also a bias between the facts and the opinions from the interviews. If it is recognised that this is the case, the interview partners can be directly confronted with the conclusions from the literature review. It has the advantage that the participants can immediately justify their perspective explicitly or it is can be deemed as a problem with accuracy. Here it is important that the interview partners can explain their opinion in detail and plausibly distinguish it from the facts from the literature review. The biggest challenge is not only to talk about this opinion but to identify the cause and source of this thinking.

In research on global warming (IPCC & Team, 2014; Pachauri et al., 2014) the obvious problem is that only with a lot of effort can the quantitative results be compared and verified with subjective opinions, in a similar manner to the way that the researcher of this thesis is challenged. Based on the facts and discussions of global warming Mastrandrea et al. (2011) develops a method, where he verifies the relationship between the evidence and the confidence of society in a matrix. In the next step Ryan (2019) refined this matrix, which can be applied also for this research.

Qualitative Evidence	Evidence Matrix			Trust Scale
Agreement	- High agreement - Limited evidence	- **High agreement** - **Medium evidence**	- **High agreement** - **Robust evidence**	**High**
Partial Agreement	- Partial level of agreement - Limited evidence	- **Partial level of agreement** - **Medium evidence**	- **Partial level of agreement** - **Robust evidence**	**Strong**
Silence	- No interesting signals of agreement - Limited evidence	- No interesting signals of agreement - Medium evidence	- **No interesting signals of agreement** - **Robust evidence**	**Modest**
Dissonance	- Conflicting signals of agreement - Limited evidence	- Conflicting signals of agreement - Medium evidence	- Conflicting signals of agreement - Robust evidence	Weak/ Low
Quantitative Evidence	**$R^2 <= 0.5$**	**$0.5 < R^2 <= 0.7$**	**$0.7 < R^2 <= 1$**	

Figure 16: Relationship between the evidence and the confidence of communication in a multi-method research (adapted from Mastrandrea et al. (2011) and Ryan (2019))

The matrix above, see Figure 16, shows all combinations of qualitative and quantitative measurements and the resulting acceptance, called a 'trust scale'. The qualitative evidence can be structured in agreement, partial agreement, silence and dissonance. The quantitative measurement is achieved using the r-squared (R^2) method. In statistics, r-squared (R^2) is a measure used to assess the goodness-of-fit of a regression to evaluate how closely measured values fit a model (Bamberg & Baur, 2002; Opitz, 2004); if the R^2 value is lower than 0.5 this value is generally considered a weak, low effect or none size, if the R-squared value is $0.5 < R^2 <= 0.7$ this value is generally considered a moderate or modest effect size, if R^2 is bigger than 0.7 this value is generally considered strong effect size.

The combination of both effects from quantitative and qualitative comparison can be measured in a trust scale, this scale shows if the outcomes are identical or differ in terms of their message but they are also measured according to their common reliability. Generally, evidence is most robust (high) when it is multiple. Hence, using this matrix, the researcher validates his quantitative and qualitative outcomes. Overall, the researcher has the aim to consider the effects from the bias and error under the view of the 'trust scale'.

The only limitation for this is that the literature review outcomes in this thesis are not measured in a regression analysis by r-square, but they can be approximately classified according the quantitative evidence scale and this is dependent on the objectiveness of the researcher.

4.1.5 Interview set-up, structure, questions and analyse techniques

In the previous sections it is clarified that the interview is based on expert opinions and the analysis follows a sequential explanatory design. This set-up leads to specific interview structure and implementation. The maximum number of participants depends on whether a further participant can contribute relevant information. Since the individual participants are selected in advance according to various criteria, the relevant information could be achieved with 17 participants.

Above all, the division into expert groups was worthwhile, as it has the greatest heterogeneity in terms of the view of the topics. Managers have a high contribution to process and knowledge transfer, the experts' main focus lies on knowledge generation and specific company knowledge retention. Juniors are especially driven by future expectations in their acting.

For a successful expert interview, and to avoid too many follow up interviews, Doyle (2017) suggests to get familiar with the interview partners before starting with the interview. In this thesis the researcher examines common social network platforms, which the members use primarily to display their professional careers and outlines personal contacts and in the company. The questions are related to the company and their position, which open possibilities to communicate meaningfully and to place follow-up questions (Longhurst, 2003). The researcher uses clear language and fitting terms, where the participants can understand the questions based on their professional knowledge and language skills, but also their cultural background, age and gender.

Open-ended questions are employed to get extensive and descriptive answers. Close-ended questions are often answered with 'yes' or 'no', they do not indicate how the answers are achieved and there is no place for spontaneously devised follow-up questions. Leading questions tend to lead the interview partner towards biased answers. The answers are therefore structured so that there are no strong positive or negative associations with the specific phrasing of questions.

The structure of the interview is chosen in such a way that the questions deal with the relevant topics and the follow-up questions are either used to get more information or to not guide the conversation back to relevant points so that it doesn't deviate too far from the core interests of the participants (Bogner, Littig, & Menz, 2005; Bogner et al., 2009; Flick, 2010). An important step was to gain the trust of the interviewed respondents prior to the interview, where it is essential that the participants could be assured of anonymity to enable them to express their personal opinions without fearing any consequences of their statements from their employer.

In most cases the answers are not sensitive, but the guaranteed anonymity gives the interview partners the chance to make detailed, thoughtful and trusting responses. In some cases, however, they have also requested that part of the interview be taken off the record, especially when specific incidents were reported in detail, which are also known in the media. In order to get enough information but also to keep the suspense high, a length of a single interview of about 45 minutes is proven to be useful. There are upward time variations, which are mainly favoured by the participants themselves, but which also depend on the daily performance of the participants.

The structure and order of the questions is chosen in such a way that the participants can easily answer them at the beginning and thus feel quickly comfortable. This fact can be used to encourage the participants to give personal and detailed answers during the interview. Due to the constructive character of the questions, interviewees are able to reflect on their answers during the interview and in some cases to complete them retrospectively. The last part of the questions is chosen in a way that creates a good feeling among the participants and helps to end the interview with a positive impression.

The structure of the questions is initially based on the literature review. In the second step six main questions are developed. The aim here is that, in addition to the coverage level, the first question should be easy to answer, and the interviewer should feel comfortable in continuing the discussion. The questions become more and more personal and complex and slide from the objective to the objective perception.

Consequently, the third until fifth questions, which aim to focus on personal viewpoints, motivation, criticism and praise, are the most exciting aspect. The last question is conceived as a philosophical exit question. In principle, the main questions can be answered by all participants, but the duration of the answers and the thematic focus of the questions vary between the peer groups: managers, experts and juniors. Sub-questions, resulting mainly from the interview, allow to reflect a deep personal view of the interviewers.

Generally, for the research analysis exists computer-assisted qualitative data analysis software (CAQDAS) that helps the researcher to analyse his qualitative outcomes. Woods, Macklin, and Lewis (2016) consider popular software such as NVivo, ATLAS.ti, HyperRESEARCH, MAXqda, Transana and QDA Miner. The advantages of the CAQDAS consist mainly in the fact that it can easily and comprehensibly organize qualitative data, which can be coded and clearly visualized. Coding here means that individual text passages are assigned to a thematic category either manually or automatically.

Coding forms the basis for later searches, which makes it possible to have targeted and topic-centred access to the data material in seconds and the results are immediately available for a written report or a presentation. This makes it possible to make targeted, topic-centred accesses to the data material within seconds and the results are immediately available. The disadvantage of CAQDAS is the analysis work itself. Researchers must continue to reflect, compare and interpret themselves. CAQDAS can thus be referred to as a functional facts and figures management system that can significantly simplify work with large amounts of data in particular. Nevertheless, qualitative data analysis must still be performed manually.

For this research it was considered to use computer-assisted qualitative data analysis software, but, according to the semi-structured interviews with 17 participants where the heterogeneous social interaction is considered, there were no advantages identified to use such software. An interview contains about 7,000 to 15,000 words and is equivalent to a common research paper, hence the individual interviews are examined and checked for findings in the same way as in the systemic literature review before. In this research case there is not used any CAQDAS software for specific analysis.

The transcription of the interviews was done by the researcher himself, allowing the feelings, pauses and even emotions to be captured and recorded in text form. It was also useful to prepare the first analyses and classification of the answers. Especially helpful was the method of transcription, as the pronunciation of the informants at times deviated clearly from the uniform sentence structure, because many trains of thought and approaches for the explanations arise, which one can classify only by listening. In this phase of data processing, an interpretation is already made here, but it is rarely used and only if it is incomprehensible when reading the interviews.

Therefore, the recording and analysis of the interviews followed a defined scheme for better comparability and analysis. The interviews were recorded on a voice recorder. Afterwards, the interviews were transcribed and the individual passages were assigned to the six superordinate questions, see section 4.1.6 ‘Interview questions’, and particularly interesting and relevant parts of the text were highlighted and commented on.

Once all the interviews had been completed, the relevant passages were merged according to the individual questions. This resulted in six documents, each covering one question. A challenge was when an answer could be assigned to several questions. In this case, a reference was made to the other question. Subsequently, the superordinate question was contrasted with the answers and meaningfully quoted and interpreted in section 4.2 ‘Interview analysis’.

Particularly for the Conclusion, in chapter 6, certain audio passages of the interviews were listened to over again in order to correctly capture not only the wording but also the relevance and the emotions that arose and to interpret which core message was to be conveyed.

The individual interviews and the transfer into the six question categories have only been quoted and interpreted, but are not presented in full in the thesis due to the non-disclosure agreement with the interview participants. The openness of the participants to express their personal opinion, which does not always correspond to the opinion of the employer, is only given if no direct conclusions can be drawn about the individual persons. This can only be achieved if the original interviews are not publicly accessible.

4.1.6 Interview questions

As already mentioned in the previous sections, the structure aims at a high degree of coverage with personal and honest opinions of the interviewers on the topics. The interview is structured into six main question/topics. These six main questions can be answered by all participants, but the sub-questions can vary and result from the dialogue.

The following six main questions/topics are used in each interview:

1) A brief summary of academic and professional experience.

The first topic is for both parties, the interviewer and the participant, to get comfortable and create a harmonious atmosphere. The respondent describes just his or her academic and professional life steps, which are useful to compare the degree of coverage of the chosen peer group.

2) The financial crisis of 2007-2008 as a trigger event and personal experience of it.

The second topic focuses on the trigger event, chosen for the thesis, where the financial market collapsed in 2007, causing a rapid transformation process in the regulation of the banking landscape. The aim of this question is to evaluate how the participants were affected at that time and how they felt during their experience of that time, sometimes associated with fears and desires.

3) How did banking regulation develop and how did it grow?

The third question deals with the opinion that banking regulation has significantly changed the banking industry, especially from 2008 onwards. Participants have the opportunity to share about the impact of banking regulation on the bank's processes, but also the impact on their workplace.

4) What impact does banking regulation have on the system-relevant banks and their business model?

The fourth question addresses the influence of regulation on the banking business model and the competition with the FinTechs and grey capital markets, such as the shadow banks. Here, too, the interest of the participants is in understanding this change.

5) In an environment of change, personal motivation to perform the work, and to question what one likes and what challenges one faces.

The fifth topic is aimed at the participants' own behaviour, where they should judge their actions, explain their motivations and present their contribution to the bank. Managers are also asked how they motivate their employees, and the experts assess themselves and the management. The juniors will be evaluated according to their expectations and actual achievements.

6) Perspective banking sector in the future

The sixth topic requests participants to look to the future and to see what lies ahead for banks and their activities. But also their decisions in relation to their willingness to participate in the change process and to reflect retrospectively whether the banking profession was, and still is, the right choice. Additionally, the question is asked of whether the systematic relevant bank will play a role in the future in 10, 15 and 20 years.

All the above mentioned six questions and topics are ideally addressed chronologically with the interview participants. It is also mostly kept because it fits the sub questions better thematically but an overlap of answers can occur.

4.2 Interview analysis

By carefully selecting the participants, a heterogeneous peer group of experts within the bank could be questioned. The chosen semi-structured interview has the advantage that the main questions are standardized, but the sub-questions can be customized for the participant to create an overall picture and understanding at the end. This selection approach in section 4.1 has shown that 17 participants are sufficient for the analysis and that each further additional interview partner contributes less and less new knowledge and insights. The next sections analyse the results of the interviews sequentially in relation to the main questions and the resulting sub-questions.

4.2.1 Participants' professional and academic experience

The survey of professional and academic background information is important to determine the heterogeneity of the participants and to target possible requests. Here it is checked once again whether the pre-selection of the interview partner is made correctly. It is also validated that in this case the number of participants is considered as a sufficient sample. The descriptive classification of the participants is also analytically evaluated in the section 4.1.3 Participant selection.

It is noticeable that the increasing number of years in a profession also increases the probability that the participants not only deepened their knowledge in their field of expertise but also moved on to other positions. The work changing interval also shows that especially in the younger years, "i.e. after only 2 to 3 years of professional experience" (Participant 11, Junior), persons reorient themselves and also like to "try out new positions in new areas" (Participant 13, Junior). Although the time slot for a change increases with the years, the willingness to change does not decrease per se. It is mainly due to this that "the next position is supposed to be an improvement on the previous one" (Participant 1, Manager), and this is exactly where the participants see the lack of willingness to take risks and the shortfall for a perfect position, which covers the personal requirements of many years of experience.

However, this point will be described in detail in the next sections. It can also be observed that "the changes of employment do not only take place within one company, but also preferably to comparable competitors" (Participant 3, Manager); here, however, the juniors are a good exception, for them even "a new change and challenge outside our branch is no barrier to our actions" (Participant 12, Junior). Experts and managers prefer to have a change of employment in a similar environment, which is also the "desire to use [their] acquired qualifications" (Participant 2, Manager).

However, even here a slight difference can be seen as for the manager "the change to a senior position is more important than preferred professional environment" (Participant 5, Manager). Through this dynamic of changing jobs, the participants cover an even wider field and various perspectives on the influences on their work and motivation can be drawn together.

By breaking down the participants' level of experience and coverage of the work areas by division, it can be observed that this includes the whole bank including risk, finance, corporate development, human resources, IT architecture and IT services, private and corporate banking, investment banking, subsidiaries, sales and back office units. Additionally, there are the regulators that cover the two pillars needed for this thesis, financial services and banking. One of the main observations is that all areas, without exception, have to deal with regulatory issues and requirements. In common back office areas, such as risk management or financial planning, the regulatory requirements of banks have heavily increased since the financial crisis of 2007-2008, which is confirmed by all participants without exception.

In the beginning, slowly and from about 2013 on, sales units, new product conception and corporate management are also massively affected. One of the participants formulated it in such a way that "the procedure for future bank development has turned around" (Participant 4, Manager), first the regulatory measures are examined, because that is where the risks lie dormant, and, in the end, the economic aspects, which are now rather secondary for a bank, are considered. Across the board, the participants are also proactively affected by regulation in their activities. Sometimes simple processes, which were completed by some persons at the beginning of their banking training, "are subject to strict regulatory requirements for consumer protection, with drastic consequences for employees as well" (Participant 8, Expert).

The increasing complexity of working as a banker also changes the educational path followed. Senior employees, with over 20 years of professional experience, still have a general banking education, which was later supplemented in part by subject-specific studies. Employees with 10 to 20 years of professional experience usually completed first a general study before joining the bank. Juniors, in turn, are thoroughly academic in nature.

Particularly in the highly regulated areas in the back office, the quotas with the highest degree, the doctorate, are also increasing. One reason mentioned above all by participants is "that the regulatory requirements are becoming more and more quantitative and require the skills of a full university degree" (Participant 1, Manager). Here, one can see that a generational change is taking place and that the old acquired skills of a banker, such as personal key account management, are increasingly being pushed into the background. In order to anticipate further changes, wide-ranging education through generalist studies, as mentioned especially by the juniors, "makes it easy for us in particular to change branches and not just to deepen our knowledge in one area" (Participant 14, Junior).

4.2.2 Financial crisis of 2007-2008 as trigger event and personal experience

For the interview participants the financial crisis of 2007-2008 is a trigger event for regulation growth. In this time it was obvious to all participants that “the financial crisis and the resulting rise of regulation will also change banking practice and working conditions” (Participant 10, Expert). Uncertainty about how the global economy and the banks will continue was a concern for everyone. The financial crisis was an event that all interviewees were aware of, but its supposed relevance varied. However, it can also be observed that this uncertainty has also led to a curiosity among the participants as to how this will continue.

Hence, this section examines the situation of the participants, what they were doing at the time, how it affected their personalities and why this crisis occurred. There may also be a responsible party for this crisis. The financial crisis was a “big disaster” (Participant 1, Manager) in the financial sector, where nobody really knew how to react, where there was a constant back and forth between all the involved parties because “nobody had a guideline for dealing with it” (Participant 12, Junior). The main point is that the situation was mixed up due to political motivations. Participant 1 (Manager) assumes that “it was a crisis that came out of the financial system, but it expanded into a political crisis also in the EU.”

Due to the financial crisis it has been noticed that “the banks have rested on their old functioning business models for a relatively long time, hardly innovated and simply did what they did reasonably well in the last years” (Participant 13, Junior) and then simply got into big problems due to the financial crisis and low interest rate environment. Of course, efforts were made to respond through innovation, but it was also not a fortunate situation due to the regulatory environment, which was further strengthened by the financial crisis.

A major event was that when Lehman Brothers declared bankruptcy in September 2008, Participant 10 (Expert) notices how everything came to a head, when “the financing between the banks came to a standstill and that the state did not want to support Lehman Brother.” That then collapsed and caused relatively large shock waves around the globe and in all financial markets. Participants were also critical of the fact that “so much state aid has been provided, and they did not understand why it is called a market economy and still everyone is again classified as systemically relevant and still rescued in the end" (Participant 9, Expert), it is a contradiction for the participants. They are astonished and find it critical.

An example of the triggering of the crisis and the escalation of the granting of loans is made by a participant that "a bank provides a loan to a 16-year-old so that he can buy a motorcycle and secure it with a credit guarantee and then there is zero risk calculated. Even if the same 16-year-old comes two years later and wants a car now and then the bank simply gives him a higher loan with which he can pay back the first loan and buy a car in addition. There are still no risk costs because of a credit risk insurance; that is a political and systemic decision catastrophe" (Participant 1, Manager).

An essential element for the participants is also real estate financing, since it stopped being self-sustaining when house prices slumped even a little bit and then the value of the assets behind the loans does not exist anymore; now the borrower can't repay his loan as the repayment capacity and the collateral value were not available and at the end it collapsed. Of course, "at the beginning it looked like a great business to stimulate the economy through private credit" (Participant 7, Expert). Also, the deregulation under Bill Clinton (William Jefferson Clinton, 42nd president of the United States from 1993 to 2001) is seen as critical. "Fannie Mae and Freddy Mac, the two largest public mortgage lenders in the US, could lower the requirements [to the point] where every American household could and would like to afford and own a private home" (Participant 6, Expert). Another point that is critically reviewed is the topic of securitization and the securitization process with the rating models.

It is described as follows by Participant 2 (Manager): "Of course, incentives were created to expand lending and basically to no longer check creditworthiness and to massively promote the home ownership ratio. This was politically triggered and more or less neglected in regulatory terms, with the result that the banks began to extend loans on a massive scale without critically assessing creditworthiness." After all, there are artificially created assets that do not meet the required quality. It is not possible to control the credit risk with these instruments, where the return is the only decisive factor, as one bank does the credit business, the next securitizes it, and the third distributes it. Everyone sees the risk as incoherent. As a result, bad loans were granted, followed by all the packaging and securitization, where Europe was again involved in buying these products, which were, of course, completely new in terms of regulation.

For Participant 16 (Expert), “it was, above all, a time when the downsizing of the supervision met with a market dynamic where Basel II was also a compromise in the end.” The US sees some points differently than the Europeans or the Japanese; “but, in retrospect, many shortcomings were found, which the banks took advantage of” (Participant 17, Manager).

One of the regulators, Participant 17 (Manager), paraphrases it as at “the banks, the big banks, they go to the limit, they test it out. The small bank takes it rather well, but the big banks also have the manpower; that means practically each communication with the regulator is always a fundamental question, since they have already worked through all the comments and solutions. The bank usually discusses through their lawyers as well. A large number of these persons were sent to the regulator and met only one decision-maker there who could no longer adequately comprehend this excessive quantity of information.” Here it was simply not possible for the regulator to see the fragile risks behind the facades, and that was the situation worldwide. As already mentioned, the reason was that all over the world a wave of deregulation was taking place and job positions were reduced at the regulator.

Suggestions made by supervisors “to expand the reporting for the banks on the outgrowths in the business model were rejected. Deregulation was the order of the government, it was believed that the banks could not be expected to come up with anything new that would slow them down in their efforts to compete in the market” (Participant 17, Manager).

Mainly due to a lack of existing supervision and reporting obligations, the banks did not have sufficient key figures for measuring their performance and have become more mistrustful of other institutions during the financial crisis. Nobody wants to do business with other institutions anymore, fearing to be drawn into the maelstrom, and so the capital market has collapsed. At that time, the interviewees were in different situations, with one exception being those who were still in school or studying during the financial crisis, or who joined a bank later.

An interesting aspect is that the financial crisis has awakened an interest in the banking profession among those who wanted to start their professional career. Here, however, it can be observed that it was not only that this extraordinary event was important, but also that one simply stepped into this direction, as, by chance, the academic thesis was written about banking regulation topics and it meets a high demand for this knowledge in the banks. One reason mentioned for choosing to start work in a bank is that “the labour market was stressed from 2009 onwards and the choice of vacancies was limited, therefore this job opportunity was often the only choice” (Participant 5, Manager).

The professionals at that time saw the crisis immediately in their field of work; for the most part they had not been afraid, but those current topics such as interest rate derivatives, which had been rather uncritical until the financial crisis, saw their present values collapse completely. Here the participants were immediately challenged to explore new approaches for reporting and risk identification. Ironically, there was “a spirit of optimism in the back-office units. In the front office, the standstill of the business is rather seen as oppressive and frightening and that this set-up has no future.” (Participant 3, Manager)

The regulator would have liked to have acted as well, but “we were forced to wait for the political decision, which was more likely to come later and slowly” (Participant 17, Manager). In order to show a reaction in advance, a considerable number of supervisory discussions were initiated, a lot of details had to be clarified on a local basis and a more qualitative opinion was drawn up.

None of the interview partners can identify a direct guilty party of the financial crisis; “it was an interaction between politics, banks, regulators and the entire society” (Participant 10, Expert). It was well-intentioned, everyone wanted to achieve something positive and they indeed did, many could afford a property but the side effect was that they underestimated how it could affect the whole banking system, then also the overall economic system. There is not the only guilty party, there are several, because the search for a guilty party leads ad absurdum. In summary, it was noted that “if everybody is guilty, then nobody is guilty” (Participant 4, Manager).

The influence of the money flows on the individual person has been underestimated, and all those involved have underestimated it. Politicians underestimated the interaction with the protection of people with people's satisfaction and the social impact. The banks underestimated it because they were certainly aware of the ‘herd mentality’ and the link between the various payment flows, but they did not underestimate the impact on the economy as a whole (nor did they see it as their responsibility).

The private households underestimated that return means risk and risk means that money can be lost, and all of this had been a very explosive mixture from my point of view, which brought the system almost to the stage of collapse. The effects have now been seen in the risk environment in all areas. That's why every participant agrees that “nobody sees the risk in full until the house of cards collapsed” (Participant 1, Manager). Fortunately, the interviewees who had just worked in a bank were not directly afraid of losing their jobs, as the problem was global but not as critical at UniCredit Bank AG. Consequently, UniCredit Bank AG was not affected by the financial crisis to such an excessive degree; only occasionally, there were individual funds that suffered, but they did not have toxic securities in their portfolios. The bank was affected by the consequences of the financial crisis, but mostly from the global liquidity crisis. There are really good bonds that have fallen in price because they were no longer liquid. One interview partner from sales says that “the UniCredit Bank AG's advantage here was that it had structured its own product and had diverse products made and distributed in-house. They didn't have certificates for private customers, they only had structured bonds, which were just common bond baskets” (Participant 8, Expert). Of course, they have suffered in the financial crisis, per se, but not from toxic products as the money has always returned. The issuer structure was never at risk, like Bear Stearns or Lehmann, where the certificates became worthless due to the bankruptcy of the issuer. UniCredit Bank AG's own product mix was also their ‘luck’.

For all participants it was “a big crisis coming from banks” and it is clear to them that “it will happen again.” Because, above all, Participant 16 (Expert) states that “regulation takes place worldwide and therefore compromises are always necessary for a uniform approach, otherwise no regulation is applied at all.” The challenge is to make banking regulation sufficiently flexible to ensure that it does not become systemically relevant in critical situations and infect the real economy.

In general, it can be seen that the interviewees are very well-prepared about what is happening and are also very critical of the banking system. Here it is clear that the trust scale here is high or at least strong; the interviewees know and accept the facts and are willing to talk about the causes.

Therefore, it was clear to everyone that the return of bank regulation after the financial crisis was not only a matter of course, but also that it influenced their personal actions and decisions of how they should carry on.

4.2.3 Development of the banking regulation

Following the financial crisis of 2007-2008, there were increasing indicators that the deregulation of financial markets, starting in the 1980s, was one of the core drivers of the financial crisis. Without the state's withdrawal from the banking sector, excessive lending in the USA, the real estate bubble and the near collapse of the entire financial sector probably would never have happened. The pressure towards a certain form of deregulation was a driving factor behind the financial crisis. Empirical evidence of this is provided by the economists Favara and Imbs (2015), who demonstrate a correlation between financial market deregulation and economic crisis. Giannone, Lenza, and Reichlin (2011) also demonstrate that the more loosely state banking supervision is applied in a country, the more it is affected by the financial crisis. The resulting consequences, the interviewees note, is the return of regulation, which introduces more and more control mechanisms in the bank, but which also influences the way the respondents work.

For everyone in the interview it makes sense “to regulate the banks more” and only by acting quickly can an improvement be achieved. The participants recognise not only many areas that have been initiated by the regulatory authorities who steer the bank, but have also directly influenced their work. One opinion is that “the banks should not be given a free hand on how they spread risks, how they take risks, because of their function they influence and steer the general economy and the world market" (Participant 10, Expert). In their opinion the regulations must be "stricter and improved where the density of information and the bank's information responsibilities towards its stakeholders are concerned" (Participant 4, Manager); here the demand becomes greater to intervene and to regulate them more.

The banks have shown that they are a systemic risk for society. It has been recognised that they "bear social risk as they have a central role in supplying money and liquidity to the economy and if the function is no longer guaranteed" (Participant 1, Manager), then there is a potential threat in the real economy. For this reason, there is a state concern in functioning banks. Surprisingly, even before the financial crisis, some of the interviewees have the opinion that "the banks were already heavily governed and regulated, but the degree of regulation afterwards exceeded all their predictions" (Participant 7, Expert).

The most important topic which came to mind from Participant 7 (Expert) is that "the strict separation of front and back office and separation of financial risk and non-financial risk" was necessary in order to achieve better monitoring of the banking business. This is immediately linked to the fact that a personnel reduction programme was implemented and at the same time the new structures with the reduced personnel capacities were put in place.

The range of topics covered the entire spectrum of human resources, credit, market, reputation, sales and management. The acutely affected areas in the back office are the topics relating to MaRisk, which is particularly relevant for Pillar II. The regulatory papers are aimed at CAR (capital adequacy ratio) and IFRS9 for accounting standards, with special regulatory requirements on LCR (liquidity adequacy ratio), ICAAP, pricing, refinancing, equity ratio and leverage ratios. The valuation of assets (e.g. ships, real estate etc.) has been completely revised and BCBS239 puts risk controlling and risk reporting on a more stable footing. In the front office, the following topics in particular are considered as important: MiFID (Markets in Financial Instruments Directive 2014/65/EU) and investment tax law. The strict sales process and the advisory protocols are mainly mentioned here, which should improve transparency for clients through mandatory disclosure requirements.

This overview is only a snapshot of where the interviewees are currently affected, but further sub-questions to the participants are answered with detailed and specific details of other requirements, which only confirm how wide-ranging the regulation is. The consideration of the range of the regulated single topics are mostly full described in the literature review and it serves in the interview as a sample above all to find out how the intensity of regulation affects the work processes for the participants.

It is clear to all participants that “the level of regulation is also very high compared to other industries, such as pharmaceuticals and food industry, but not necessarily the highest intensity” (Participant 2, Manager). It is rather the fact that “it comes into being so quickly in such a short time. In the banking sector it has been dynamic and very massive only in the last 10-15 years” (Participant 2, Manager), “that beats all other industries.” The reason why it seems to be the case is due to the dynamics of the last 10 years. An example is made that “the pharmaceutical industry has grown so far in the last 30 to 40 years, while it only takes 10 years for the bank” (Participant 4, Manager). After all, the learning curve in the pharmaceutical industry is long, due to many deaths or deformities, such as the thalidomide scandal, and a lot has changed since that time. “Today it would lead a pharmaceutical company into insolvency in case of such a scandal, especially because of the penalties” (Participant 2, Manager). It is still new territory for the bank, mainly as a result of the dynamics.

Participants note that the EU banking regulatory framework is complex and has been changed frequently since the beginning of the financial crisis. Differences have been identified in the transposition of EU regulations into national law. This additional complexity has an effect on the work processes and control mechanisms, but also on the relevance of regulation with positive and negative influences, which are also considered from the perspective of efficiency and effectiveness.

The participants have observed that and Participant 13 (Junior) states as “in the beginning there is a bank, which is a very important company and which in the past has never had to make any effort to change or adapt anything, to learn or adopt anything from other industries and develop consequently. They did what they always did, but they were bad at adapting and initiating changes."

But now there is a need for greater regulation, which is changing people's mind sets and where processes and related systems need to be adjusted or further developed immediately. Now, of course, there is "a need to proof the bank's current systems and define new requirements, but the implementation cannot be done in the shortest possible time just by writing them down on a piece of paper" (Participant 4, Manager).

A radical and trustworthy change must take place in terms of system availability, certain processes in the bank and the transparency of processes in the bank. It also has something to do with acceptance, and such acceptance must grow and cannot be implemented immediately. The front and back offices were affected in equal parts, but a sense of acceptance and the recognition of pressure generally occurred first in the back office. It was not until 2013, as perceived from made statements, that the regulator took radical action in the front office as well.

Due to the introduction of regulation and the rolling out of processes, the participants have seen a "massive shift in the requirements for their job profile" (Participant 7, Expert). The bank has now "become formalistic, quantitative has become much more regulatory and qualitative has become much more superficial" (Participant 1, Manager). The main focus now lies on the "collection and reporting of key figures at the shortest possible intervals, but the content is becoming secondary" (Participant 1, Manager). As an example, it is mentioned that "for the regulator and auditor it is more important to have 100 guidelines that can be checked off than to understand the meaning" (Participant 4, Manager). Of course, this also requires other qualified personnel with quantitative experience. For the regulator, however, it is also "an issue to handle the increase in reporting by shortening the intervals and the additional key figures in an adequate period of time; here, the data collection lags behind the necessary extensive analysis" (Participant 17, Manager).

The next challenge is that instead of long-term planned projects, the implementation had to take place in a fast way and through work-around, which is also seen as 'actionism'. This way of working “creates stress not only in the initial stages but also in the recurrent reproduction.” One of the reasons are that the “IT systems have to be set up first, but the regulation wants the results right away” (Participant 6, Expert).

The participants are also confronted with the fact that “each process and the results have to be fully documented” (Participant 14, Junior). Here there is a shift between active work and more and more subsequent documentation, with the estimation that “currently 20% of the time is spent on work and 80% of the follow-up recording” (Participant 15, Junior). Also in Basel II, a meaningful separation between internal and external models was still possible. The consensus here is that “the bank could also use internal models for bank steering, as long as they know their customers better and could not be treated in the same way” (Participant 4, Manager). Now it is important to move away from internal models, as the spread in risk measurement is too large and the ECB cannot explain the inhomogeneity between the banks. Now the regulatory approach is to try to ensure that the banks all calculate the same way. The consequence for the bank employees is that “they have to implement the requirements of the regulation as closely as possible; innovations and own approaches are no longer needed” (Participant 10, Expert). Here the work profile is “shifting from individuality to rigid work specifications” (Participant 3, Manager).

It is clear to all participants that such a rapid “implementation of the regulatory requirements will certainly have problems with efficiency and effectiveness” (Participant 1, Manager), but this is paired with the knowledge that it is absolutely necessary. A distinction is made between the formalities required by the regulators, the professionalism of implementation in the bank and the perception of the customers. Particularly during the introduction of wide-ranging regulation, there is a feeling that “the regulator might be partly overburdened and could not manage every query and comment because they are simply not in a position to absorb fully this information” (Participant 4, Manager). A feeling arose that there are “a lot of theorists sitting in the regulators’ offices who are very abstract, despite the right intention, and they have no practical bank experience” (Participant 2, Manager).

Also, the impression is created that “the regulators listen purely to the institutes. Rather, they enforce it” (Participant 6, Expert). What's the failure that comes as a result? Well, “the regulator pulls the longest lever and he has an idea and then pushes it through" (Participant 4, Manager). It can certainly happen with individual issues: if the banking association gets in touch, it is listened to, but on the whole, the direction of approach remains rigid and the regulator prevails.

In the fine-tuning, especially when considering how to record the processes correctly, or how best to measure certain key figures, it fails to properly understand how to deliver practical and efficient specifications. There is a lack of knowledge and experience here, because the regulator also has to adapt to it for the first time. However, the regulator is "forced to take tough action, because they, as supervisor, could not always recognise whether it was a constructive contribution or an attempt to soften the regulations" (Participant 17, Manager). Also, the ratio between the requesting parties in the bank and the supervisors is not ideal, therefore each supervisor had to supervise and listen to several parties.

The pressure to implement the regulations hit the banking industry hard, as the institutions are no longer in the comfortable position of deciding for themselves which processes and systems to implement and when. "The strict guidelines and schedules are now set by the regulator" (Participant 9, Expert).

At the same time, "no one is willing to make a decision alone" if, for example, "the basic IT system needed to be changed and the costs are in the billions of Euros" (Participant 5, Manager). In addition, the high investment costs are a problem as after the crisis earnings collapsed every major false decision could drive the banks into insolvency. The management had no other choice and new processes and systems were quickly implemented. The employee has "to handle the actionist behaviour of the management" and "during the implementation process we had to ensure that implementation was carried out more quickly than consistently" (Participant 6, Expert).

For the junior, it was "simply chaos" that "the banks would have to redefine themselves within a few years" (Participant 11, Junior). This shift towards quantitative reporting required other professional skills that had to be learned by the workforce. "A generational conflict is heated up even more" by this, because "the knowledge carriers are no longer the old experienced bankers but the new young ones with our technological affinity" (Participant 13, Junior), as digitalisation in particular was now a key to success.

However, this process of transformation is not yet complete. "When the banks believe they have finally fulfilled all regulatory requirements, the next extension and changes by the regulator are already in the pipeline" (Participant 1, Manager). It is a revolving process, which the regulator compares to "the race between the hare and the hedgehog" (Participant 17, Manager).

Neither management, nor employees, nor the regulator believe that regulation coverage has been reached. Fortunately, however, the banks also see that, for example, through BCBS239, there is recognition that the regulator is now accepting simplifications in reporting, even at the cost of accuracy, with the aim of getting the relevant ratios faster, even if it is a reasonable estimation and no longer an exact accounting figure. This means that significant changes and risks should be detected quickly before the exact number is known – mentioned as "principle of proportionality" (Participant 16, Expert).

The sales representatives in the front office observe directly the effects on the customers. The new transparency offensive should inform the customer about all possible costs and risks. This transparency now shows the customer, among other things, all fees charged by the bank. It is joked that "nowhere else in any other industry is this the case" (Participant 8, Expert). A frequent example is the question "of whether someone buying a car knows the full fees charged by the car dealer?" (Participant 8, Expert). In order to ensure a high level of transparency, customers are "overwhelmed with page-long advice records and detailed key figures, which can only be made correct from a regulatory perspective in extended meetings" (Participant 14, Junior). The customer, who is seen as an "object worth protecting" after the financial crisis, becomes part of the regulatory process here, even "if he wishes to [keep] it simple" (Participant 8, Expert). After all, consumer protection is not the primary concern of a regulator: "the primary aim here is to stabilise the financial markets, and if the consumer is protected in the process, it is taken along as a side effect" (Participant 17, Manager).

Although the regulatory environment influences the working environment, everyone agrees that it is unfortunately necessary to fulfil these requirements; everyone believes in “the benefits of regulation, which in the end makes the banking environment and financial markets safer” (Participant 9, Expert). Of course, there are numerous suggestions for improvement, also from the bank, but everyone is sure that regulation is a compromise of many wishes and details, and, in the end, when it comes to implementation, it does not satisfy everyone and is still accepted as the best state of affairs.

4.2.4 Regulation impact on banking business model for system-relevant banks

In order to better understand the effects of banking regulation, it is crucial to consider the impact on the banks' business models as well. Banking regulation has changed internal processes and documentation requirements, but the final impact can only be seen externally in the banks' business models. After the restrictive execution of the regulations, the pressure on the banks' profits has once again been significantly intensified. Once other possibilities for increasing earnings have been exhausted, the focus is also on changes in personnel to optimise costs.

These transformations may involve workforce reductions or new hires, the involvement of consulting firms, staff training and professional development. However, the interviewees point out that the reason for the transformation must not only be searched for in the increasing regulatory requirements. The answers indicate that there is a strong correlation but it is one of many causalities.

Further aspects affecting the business model and also the workplace are the development of the interest rate level, which is historically low, along with ongoing digitalisation and the emergence of new competitors through private capital in the form of shadow banks, other competitors, such as insurance companies, and the FinTechs, which make a market environment that continuously creates challenges for banks. But it becomes obvious that the employees here are involved in change within the organization initiated by internal as well as external factors.

Firstly, the impact of regulation on the business model is discussed. Banking regulation has a major influence on how to deal with the ongoing development of existing products and the introduction of new products. In the past, “the economic aspects were considered first and then fine-tuned within the banking process” (Participant 4, Manager). Now, however, it appears that “the products must first be reviewed in accordance with regulatory requirements” (Participant 4, Manager).

Financial risks also become immediately apparent when banks incur costs that are imposed by the regulatory authorities, such as increasing equity capital. In addition, there is a further regulatory burden if another product turns out to be too risky in terms of the balance between the product mixes.

Consequently, it can be argued that after the strengthening of the regulatory framework, although some products are economically attractive and accepted by the market, the legal requirements mean that they are no longer profitable for the bank. Thus, it is more efficient for the banks to consider the economic aspects only afterwards. At the same time, this also has an influence on the work processes, where “the power of product control moves away from the sales department to the controllers” (Participant 3, Manager).

This shift of power also means that the back office now covers this core competence, which was previously the responsibility of the sales department. This loss of power, which is important for sales, is “difficult to accept, since now we are no longer allowed to contribute our profound market and customer knowledge in a direct way” (Participant 3, Manager). A quick and effective adjustment of the business model suffered, above all, from the fact that the bank first improved its own processes, the main concern being to comply with regulatory requirements. The capacities and opportunities are too rarely used to adapt the business model.

There are two principles to be considered when evaluating the business model: reputation and profitability. With the first principle, reputation, banks have to struggle with the loss of confidence during the crisis, which has an impact on the customer's buying behaviour. The general opinion in the press has created the impression that, as one participant says, “the bank always sells you ‘shit’ and lots of it” (Participant 8, Expert). Customers have a fundamental mistrust and have become very cautious when it comes to making use of banking expertise. The principle of profitability means that a deal is only profitable if the bank makes a profit. There are two points to consider: one is costs, and the other is margins. Even a business that is highly regulated and has high costs can still be profitable for the bank, because the margin is large enough.

“But regulation does not refer to the margin, it refers only to the cost of risk”, as Participant 1 (Manager) clarifies. Consequently, regulation has an impact on the business model by increasing the costs of certain types of activities. Since banks are now controlled by costs, some bank products cannot be offered. Above all, transactions that are toxic from a regulatory point of view are affected. Securitizations, liquidity reserves, pre-purchase on own books and proprietary trading are worth mentioning here. One thing that makes it difficult for bank employees, however, is that “customers can no longer find all the products they need for their business from one provider” (Participant 8, Expert).

Even in the past, the bank offered products that at first view are not profitable for the bank. But these products served for the customer relationship, therefore the loss has been scaled up to earn money with other products; it is just called cross-selling. “But now the regulator dictates to the banks what they have to account for in their price. The regulator then verifies on which product the prices are artificially lowered, as an incentive, to see if it is below market price and then wants to see that it pays off afterwards”, and, as mentioned by Participant 5 (Manager), “if it doesn't pay off, it'll be banned.”

It is argued with “amazon.com, if they have to consider this [idea of] price politics, they would never be allowed to do business” (Participant 1, Manager). Even if the bank employee has overcome all these hurdles, he still has to make sure that the sales consulting with the customer has been carried out in conformity with the law, where they are now personally liable for inconsistencies. This creates a toxic dilemma, where the bank’s sales employee is now afraid of “breaking the law and, on top of that, afraid to convince customers who do not trust a bank and no longer want to invest because they do not find all required products”

(Participant 11, Junior). But the bank's employee still has sales targets from the management which should be strictly met.

The products that a bank is allowed to offer are also limited in their total amount by the regulatory authorities. The bank only lends money to companies with a good credit rating, especially new innovative companies now have problems when it comes to borrowing money from a bank. The banks themselves would like to lend money to these companies, but since there are regulatory limits, controlled by risk costs, it is prevented. This fact, in combination with the situations discussed above, "creates the possibility that other companies may enter into the market" (Participant 13, Junior). In principle, it is welcomed by the interviewers that there are alternatives to the common lenders, as "there must be different types of financing" (Participant 13, Junior).

Generally, smaller, fast-growing companies are more likely to get equity capital instead of debt - these gaps are filled by private equity providers. However, the criticism is that these "shadow banks also offer this private equity through regulatory arbitrage. Large shadow banks can borrow money from banks on the basis of a good credit rating; this money is then passed on to the smaller companies, as equity or debt capital" (Participant 1, Manager). The explanation of regulatory arbitrage is that "when banks pass it on directly to small companies, the regulatory risk costs are higher than those of shadow banks that are not subject to regulation" (Participant 1, Manager). Therefore, the issuer risk still remains with the bank, but it is undermined by the shadow banks for regulatory purposes. The overall economic risk is therefore not regulated. In the end, the shadow banks offer identical or similar products.

Another area is the service business, certain processes that are necessary for the banking business model. Here, competition from FinTechs arises, which, according to the interviewees, are "companies that take a small part of the entire process out of the banks and offer it externally" (Participant 10, Expert). The interview partners are therefore confronted with the fact that "certain operations carried out by themselves, such as property valuations, credit card settlements, investment consulting and other services are also offered by external companies that are not regulated by the supervisory authorities" (Participant 7, Expert).

The advantage of FinTechs is that digitalisation enables them to handle banking processes more cost-effectively and efficiently. The reasons for this are manifold. The FinTechs are a result of the fact that “the banks have simply overslept the issue of digitalisation” (Participant 13, Junior). The work that a FinTech does is not different from what a bank can also do. If they had simply been better positioned in the topic of digitalisation and not simply stopped where they were, the banks could be more efficient than FinTechs because “they already have the knowledge of banking and can implement it in their IT systems and processes” (Participant 6, Expert). However, the participants agree that “although the entry barrier for the FinTechs has been lowered by bank pricing and regulatory costs, the regulatory barriers to entry have also arisen. For certain business activities, a complex banking structure must be built up in the background in order to fulfil regulatory requirements. An established major bank can therefore better handle the regulatory issues” (Participant 4, Manager).

This provides a competitive advantage for the banks, as the implementation of regulations costs money and, since the regulations have risen, it is a cost factor that has increased and therefore they set themselves apart as a large institution by concentrating on this business. If FinTechs want to be a competitor they are forced to first make many costly investments in order to meet the regulatory requirements, which would essentially make them a regulated bank. One opinion is that “without the regulation the FinTechs would be much more active now, and more business shares would be taken away. The banks have a protective shield by the regulators” (Participant 9, Expert). But the FinTechs are seen as a useful addition, which partly or fully complement the services or even take away from the banks, but “the core business will remain with the banks and will not be able to take it away because of the regulation” (Participant 6, Expert).

In order to have an adequate business model as a major bank, two factors are mentioned particularly. First, “the banks need to become even bigger through mergers in order to be able to cope with regulatory costs more efficiently” (Participant 1, Manager). Second, “they must find niches in the market where they do not have to be as big as generalist banks, but they need to be sufficiently large to be a global player in a niche worldwide” (Participant 1, Manager).

As an example of banks that are only profitable through size, the US banks are mentioned. The mergers have created highly profitable institutions that, as global market leaders, "do high-margin business, IPOs and M&A, and here the size counts" (Participant 6, Expert). Only the largest banks can handle this and almost all of them are currently based in the USA. The second point is that specialisation is currently being looked at as the ideal solution in Europe. UBS AG has cut back on investment banking and concentrated on wealth management, serving and consulting the wealthy and very wealthy. UniCredit Group now focuses on retail and corporate banking for Central and Eastern Europe, Deutsche Bank AG decided to sell equity trading and specialise in large and medium-sized companies like Commerzbank AG; building on their position to become the leading European corporate banks.

It is not without reason that the business of industrial banks, such as BMW Bank GmbH, Airbus Bank GmbH and Siemens Financial Services, which can offer special niche financing, is growing worldwide. An interesting question is why the big tech companies (e.g. Alphabet Inc., Apple Inc., Facebook Inc.), that have the necessary capital, do not want to acquire a big universal bank, or at least build a similar construct to industrial banks. Here, one reasonable opinion is that "although they want to work together with the financial services industry, they do not want to infect their original business with banking regulation" (Participant 3, Manager). Another point is that these big technology companies have or "want to achieve a much higher margin with their invested capital" (Participant 3, Manager), since banks generally have one of the lowest margins per euro (or other currency) and can only increase the margin by using high leverage effects.

This is exactly the trouble, the big technology companies have to inject a lot of capital if their bank gets into trouble. Therefore, they stay in their original business and cooperate with the banks without being accountable for their regulatory and book risks. That is also confirmed by Damodaran (2012, 2020).

The interviewees see that the banks are forced to adapt their business models, which in turn affects the employees, who have to reposition themselves again and again in the restructuring process. Personal motivation and how to deal with the change process will be discussed in the next section.

4.2.5 Personal behaviour and motivation during the change process

Personal behaviour and motivation in the workplace can be seen as the combination of the extrinsic and intrinsic, across social-communicative components within changing environments. In addition to the economic aspect, the transformation of the bank also affects the people in an organisation. All participants who have actively experienced the financial crisis at the bank (or the regulator) then recognise “a dynamic banking environment where the support of the employees in terms of an effectively practiced change culture in the company is required: to support and coach them in this change process” (Participant 12, Junior). New regulatory processes are implemented, necessary synergies generated through cost pressure, new aims and business models are developed and at the same time successful day-to-day business is ensured. Precisely here it turns out that the social-communicative component and, above all, the intrinsic motivation differ between generations and hierarchies.

The juniors, experts and managers have different ways of dealing proactively with the challenge and the will to adapt flexibly and quickly to new conditions within the organisation. Change management as individual and comprehensive support for employees on all levels generates various extrinsic and intrinsic motivations.

The motivation for juniors to start working in a bank “can be the money” (Participant 15, Junior), as the financial sector pays good salaries compared to other industries. But that is only one aspect of many. Due to their university studies or even during their school time, “the topic of finance is simply perceived as exciting. The entire economy is based on money and banks are involved everywhere: private consumption, industrial companies, real estate financing, working capital, financing or project financing” (Participant 13, Junior), to mention a few topics. Therefore, there are points of contact to all sectors of the economy. For anyone who likes numbers and likes to calculate, the financial sector is interesting for them, and this means that they only concentrate on financial aspects. It is therefore an “exciting field due to the variety of topics” (Participant 11, Junior).

A further motivation is to find out “how to invest your own money better and how to set up your own personal portfolio” (Participant 14, Junior). But, also due to the increasing quantitative controls of the banks, IT systems have simply become important and the exercise of the core competence for banking services is only possible with suitable IT systems and their evaluation. But with the career choice it would not "have had to be necessarily always a bank" (Participant 5, Manager), and most of the interviewed individuals thought their first professional station could have been somewhere else. But what unites the juniors is that they "started the job highly motivated, expected challenging tasks and are also willing to improve the world in order to act ethically through their own actions and to be sustainable" (Participant 11, Junior). Suggestions are from an ethical point of view "to enable financing for everybody e.g. for a small middle class company to provide its own business, a new warehouse, a factory by granting a loan or just to optimize its financial figures" (Participant 13, Junior).

But they also want to help to make "capital available for energy-efficient renovation in a sustainable context" (Participant 11, Junior). Just like in investment banking, where they try to make it a bit better through IPOs and financing rounds of sustainable start-ups. In the first days when they started to work, they were all over the place and in the beginning, they experienced a sort of euphoria, as superficially it looks great but then they realise that there is another reality behind the processes and figures. They quickly recognise how "it is low performed and how it is badly dealt with [in terms of] new knowledge there. The projects there simply ran as usual in large established companies. A project goal is defined laboriously, a project budget is applied for, but then it is relatively closed in itself" (Participant 13, Junior). It is determined that the predefined resources are not sufficient to achieve the project goal, either the project goal is slimmed down or the next project is applied for to cover the gaps. An overall strategy can no longer be identified.

Another disadvantage is "the continuous change of managers", also in the board of directors and then the very hierarchical structure for decision-making. It is difficult to recognise "a clear direction that follows a consistent strategy over several years" (Participant 7, Expert). Another point is the "bureaucracy in a large company", because with the "deepening of regulation, managing the tasks has a much higher priority than creating something" (Participant 9, Expert). "After the challenging work of thinking and implementing comes the boring documentation, where the impression is created that, in the end, most of the time is only needed for the administrative tasks” (Participant 12, Junior). The juniors have an understanding that “clean documentation is important, but also have the feeling that the detailed writing is rarely used as a source of information later on” (Participant 11, Junior). A feeling is created that “it is useless after all efforts” (Participant 14, Junior). A high level of frustration is generated by the fact that “recognition of the work performed is not adequately rewarded and that ideas for improvement, if accepted, are only taken up very slowly and with strong scepticism” (Participant 11, Junior).

Either hierarchies prevail or older professional colleagues try not to change anything in the processes, according to the philosophy that “what has been working for 10 years should stay that way” (Participant 13, Junior). Young people are rarely given the chance to prove themselves actively. From their point of view, “a chance is missed” (Participant 15, Junior), especially if somebody is new and not prejudiced, “looks at it critically and possibly recognises improvements” (Participant 13, Junior) - this would help the company and the young employee. But it becomes clear that “heads and not ideas prevail” (Participant 11, Junior).

The acceptance to the manager dwindles if a feeling is created that “the work done meets with disinterest” (Participant 9, Expert), especially if it is actually a lot of work, but a manager cannot estimate how much work it is. The employee, is only seen as “an employee to let you do some work, with the expectation that he/she will stay in the same position and tasks for at least the next few years” (Participant 6, Expert) - so the manager saves himself/herself “the trouble of reacting to personnel changes” (Participant 9, Expert).

Due to the high workload, there is hardly any time to reflect on one's own actions and projects professionally with the manager and colleagues. There is a feeling of “jumping from project to project, but nobody takes the time to question what can be improved or what can be learned from it” (Participant 10, Expert). However, this “motivation killer” does not lead to resignation, the juniors do not “see the bank job or a bank per se as bad, but I take it professionally as a general lesson for real professional life, just like in any other industry” (Participant 13, Junior). Here a high level of reflection takes place on how one's own abilities and wishes can be implemented. It becomes clear to them that the “company does not look at what is good for the employee but what is important for the company" (Participant 7, Expert).

This fact is however important that the loyalty may not only be demanded by the company, but the junior is very critical and questions constantly "whether the company needs are covered with the employee's own needs" (Participant 11, Junior), if this is not the case then people will look for solutions quickly, even if it means seeking employment outside of the banking industry already after only a few months because "loyalty is only rented, and the rent is charged every day" (Participant 11, Junior). This self-confidence is actually the result of a few factors, one of the juniors says "we are well educated and since the financial crisis there are more highly qualified positions available for us young people from year to year" (Participant 14, Junior).

Even the current situation with Covid-19 does not affect them as the job market is changing so fast. This attitude is seen by older colleagues as "arrogance and an escape from difficulties" (Participant 7, Expert), but the juniors are no longer "willing to stay in a bad job for 2 or 3 years as in the past in order to keep [their] CV (curriculum vitae) convincing" (Participant 11, Junior) - they no longer see the need to suffer if they can improve quickly. The juniors see the first years of their professional life as an important step towards recognising where their strengths and weaknesses lie. Although some have consciously given up the bank job after a few years in order to better realise their potential in the other area, they have not regretted the years of apprenticeship in their first job and would almost always start their professional life this way and possibly return.

The motivation of the experienced professionals, the experts, is "to work for a company in a sector that pays a high salary and usually does not create any overload and with the aim of staying with a bank forever" (Participant 9, Expert). It should be a secure employer until retirement, comparable to a job with the state. A bank offered these conditions, until the financial crisis. After the crisis, the industry was not as "crisis-proof as believed" (Participant 7, Expert) and the insolvency of banks, even the very big ones, became possible. These persons felt that "they we are not responsible for the crisis as individuals, but that we should now be liable for the problem" (Participant 7, Expert). All former stability factors are thrown overboard and the employees are forced to adapt to the new situation. It is clear to all interviewees that the banks should not continue to operate as they did before the crisis.

The motivation was there to tackle this and proactively apply all their knowledge and skills to stabilise the bank again. The challenge was that so many regulatory laws have been developed and enacted over the last 10-15 years that banks now urgently need to comply with. Here one must now consider, “do they make any sense at all, are there interdependencies between the regulatory requirements? Then you have requirements that you have to comply with, but this may have a negative effect on other key figures” (Participant 4, Manager). This is a complex issue, because it is difficult to comply with both at the same time. It requires much more skill from an employee. An extrinsic motivation has remained to continue to earn a high salary. But even now, the sector has become more exciting because you can work internationally at a large bank and you get to respond to exciting challenges, some of which can be attributed to the regulator.

The bank is currently undergoing a restructuring process and exciting projects are emerging. It is easy to identify with the bank, because besides all the disrepute during and after the financial crisis “it is exciting to see how banks support and strengthen the economic development” (Participant 10, Expert). Especially now, in this time of crisis (Covid-19), there will be situations where “it is exactly the banks that are important to support companies during a weaker phase and then to act in a cooperative context rather than in the financial crisis” (Participant 2, Manager). The goal continues to be that this picture changes and the “bank now acts more as a partner” (Participant 1, Manager). The motivation to go along with the change process also has its limits. The participants have the feeling that the major European banks have still not recovered in the years since the financial crisis. “Every year more and more cutback programs are launched with the promise that these will be the last and then the situation will improve” (Participant 1, Manager).

After 10 years, at some point it is no longer believable and one's “own efforts are not visible” (Participant 7, Expert), and then of course there is no appreciation for it. At some point the motivation to continue in this downward spiral is missing. The main ‘motivation killer’ of the participants is that “good work is not recognised, because the bank has little flexibility to adjust salaries in the presence of the high cost pressure" (Participant 9, Expert). There should also be no ambitions and therefore the management does not try to enhance over performance. "Face time is still often a major criteria for performance" (Participant 8, Expert). This creates a feeling of not caring for the individual employees, and management is struggling to maintain a balance between individuality and professionalism.

In the opinion of Participant 9 (Expert) "the management wants to focus the employees only on their work and is afraid that productivity will decrease if the employees are given time for private concerns." But unresolved private relationships are a burden on productivity. Otherwise the work can also be very exciting, but it is clear that "some key figures that are required by the regulator and the bank must implement it because it is legal, [regulations] are associated with a lot of effort, and therefore costs, and must be adhered to urgently" (Participant 4, Manager). But in the end "they bring less, even if the effort is necessary, but it does not satisfy someone that you have achieved something useful" (Participant 10, Expert).

Especially when it is a situation where the bank believes that this one indicator is (only) useful for the regulator, but the regulator just wanted to educate the bank and believes that he will help the bank when the regulator demands this indicator. Here a mismatch occurs, the bank and the regulator believe that "the other party is using it for steering" (Participant 1, Manager). The employees have effectively worked on it, but the efficiency is not given. This situation also has something to do with the "feedback culture, which suffers from the massive cost and time pressure", people "jump from project to project and there is relatively little time for reflection" (Participant 13, Junior).

The current situation is that everyone has little time to bring in their own ideas and the less time you have, the more you are pushed. The work priorities come from the top, and an employee often lacks the background of why some projects are more urgent than others, here the priority must be justified accordingly. One of the experts also sees that as "the bank has transformed, also the qualifications requirements have also changed" (Participant 7, Expert). The focus of the work is becoming more and more quantitative and digital. On the one hand, there are colleagues who would "like to continue to work as we did in the past" (Participant 4, Manager), and the younger ones try to bring in other methods. This creates competition; the idea that "younger employees should be subordinate to older ones is outdated" (Participant 14, Junior).

There is pressure to change more quickly or you can no longer make your contribution in the new work environment. The younger colleagues who joined the company shortly after the crisis have significantly lower salaries than those who worked before the financial crisis. One of the younger colleagues realises that "we earn relatively well compared to the other industries, but when we are the new knowledge holders and the older colleagues are less productive from our point of view and then earn twice as much, a sense of injustice arises" (Participant 11, Junior).

However, the high salaries of the experts are often the reason why, although the employees are "dissatisfied with their work" (Participant 7, Expert), they "do not seek change outside the bank" (Participant 9, Expert): they would like to change after a long time, but they are "rarely willing to make cuts in salary" (Participant 10, Expert). As a result they are "locked into their job" (Participant 6, Expert). But this realisation can also be a "helping factor", because knowing that you "don't risk leaving the bank or the industry also means that [you] not only accept it, but also become aware that [you] should make the best of the situation" (Participant 8, Expert).

This realisation is often perceived as a liberation to no longer chase after the potential. The paradox is that motivation on the job increases again, even though "you are dissatisfied, but the alternatives are too risky" (Participant 1, Manager). This is reflected in the morale of individuals that, despite the many 'motivation killers', want to stay in the banking industry to make the best of it. Nevertheless, if anyone does not want to go on like this, thanks to the strong trade union, they can collect opulent severance pay and retire a few years earlier or even take time out.

Managers are in a double role, as on one hand they are "supposed to motivate the employees" (Participant 2, Manager) and on the other hand they are "also employees who depend on the motivation at the workplace" (Participant 5, Manager). The dynamics of change within the bank and the banking industry has increased noticeably after the financial crisis and the demanding regulatory environment. For managers, “ethical action is currently very important” (Participant 2, Manager) and this is how they intend to shape their work in the future. Of course, the “motivation is money and status, but preferably in a clean environment where you can apply your knowledge and work in a convenient way” (Participant 1, Manager). However, if looked at very subjectively, people work for themselves, for money and their own status, and it is not something that can be taken off one’s hands.

The managers see that they are “not dependent on the banking industry and that they could work in another branch due to their good education and knowledge” (Participant 2, Manager). They are ready to leave when they have to make immoral decisions. Through their position, managers have the opportunity to acquire a broad knowledge of the bank, deal with exciting topics and meet interesting people. They have the opportunity to get a deep insight into the work culture and to see how the system works.

Of course, there are also things that ”I probably would not have wanted to see and did not need to see” (Participant 4, Manager). There is also a certain amount of disappointment and frustration behind it – “in some places I lower my standards about complaining, often I have seen other managers who were not the most competent and have caused a lot of damage. But helping him also means that he learns nothing from it and his problems become mine. It's better to ignore it and trust that higher management will sort it out. It is not a heroic attitude but it does not threaten one's position” (Participant 4, Manager).

At the same time, the financial crisis has also been an opportunity for the back office to become more important for the bank. The introduction of regulation has made it an important part of the decision-making process and has also brought power. “Thanks to the implementation of the regulatory system, you are on the front line of the regulatory process, you can be the first to see the effects of the latest changes, handle large amounts of data, analyse and assess the interrelationships and make recommendations, or even make decisions yourself” (Participant 10, Expert).

After the financial crisis, the bank was and still is in a continuous transformation, there is always something new on the agenda. There are hardly any “old objects, it is exciting and challenging at the same time" (Participant 4, Manager). But every system has its limits, and the growing complexity challenges managers and their employees at the same time. The regulatory environment is still growing, and "nobody can see the end of it" (Participant 3, Manager).

From the point of view of managers, "the banks", especially in Europe, "can only differentiate themselves through costs, and an area that leads the regulation solidly is not someone who contributes profit" (Participant 1, Manager). Personnel expenses are more likely to be incurred, and cost-cutting programs make the banking sector an area of staff reduction. The density of work is increasing and the regulatory changes are not, insofar as the opportunities for further regulatory implementation are becoming increasingly difficult. The situation is that "neither I nor my employees have much time to bring in their own ideas" and the less time you have, the more you are a "driven person" (Participant 2, Manager). Nevertheless, managers try to counteract this in their own areas. They are aware that "most employees pursue individual goals and therefore need individual motivation" (Participant 4, Manager).

Essentially, the better the employees are trained, highly specialised in their fields and are knowledge carriers, the more they are aware of their position and demand to be well led. One of the participants describes them partly as "divas, by their peculiarities and quirks, in addition, the readiness to perform as know-how carriers [allows] the bank to advance. It is a take and give [process]" (Participant 4, Manager). The managers, of course, have time, and thus cost, pressure to respond to each individual. The most important aspects are "taking the problems of the employees seriously, being free for new ideas, include dealing with mistake", and above all, "passing on the issues to the employees in an open and transparent manner" (Participant 5, Manager).

The feedback is not given according to the motto, "now it is time to have a feedback talk and now say something" (Participant 4, Manager). The feedback should be frequent, very open and transparent. The ideas of the employees are important to see what they make of it and here the 'role of a sparring partner' is needed. "You should not only give the input, but you should let their ideas and content flow and try to steer them in the right direction" (Participant 4, Manager). The goal is to get together as supervisor and employee, "no matter what the topic is, and after the conversation both sides will be smarter about each other" (Participant 4, Manager). It's all about getting emotions across, only then will everyone act together. But in a team, "just one person can be responsible for the fact that it won't work and poison the climate" (Participant 5, Manager). That's why it's important to "not only ask for professional qualifications during the job interview, but also to find out whether the person fits into the team and feel the desire to make a difference" (Participant 4, Manager).

It can happen that the Human Resources department is of a different opinion, as "they only check the factual points" (Participant 2, Manager). An important step is to make sure that employees know that "they are contributing to the big picture and where their contribution is, that this is appreciated and that their activities make sense" (Participant 1, Manager). But there is no 'patent remedy', as Participant 1 (Manager) says that "many guidebooks and courses on employee motivation make sense and help, but more often than not, they are perfect simulated case studies that one has as a reference. If the exogenous specifications are difficult, the required increase in motivation and efficiency will eventually have its limits, both human and technological, in order to keep the total costs under control."

It is difficult to transfer values authentically and motivate employees. A frequently cited example is that "even small salary increases are often co-decided by the management board" (Participant 2, Manager). It is incomprehensible for the employee concerned that "because of a few 100 Euro more per month it is inspected like an expenditure of millions" (Participant 6, Expert). The manager has to make a lot of effort and proceed in a highly strategic way, except that in the end the employee only gets a minor salary increase, which is then so small that the employee believes that "the company does not appreciate at all what [has been] achieved and what [they] can achieve in the future" (Participant 11, Junior). Despite the manager's explanation, Participant 9 (Expert) believes that the "direct supervisor is not making any effort and is not interested in him." Here both sides have lost connection and this can be a reason for not wanting to work through the change process together.

Thus, the quality in the employee leadership simply costs time, because "people are not robots where you can program one and he is happy" (Participant 4, Manager). "You need conversations, you have to explain, you have to appreciate and understand the people and this time is unfortunately getting shorter and shorter” (Participant 2, Manager). It is harder for everyone to find the time to work, but everyone is convinced that it is important to take it. It is an investment in the future motivation of the employees.

4.2.6 Perspective banking sector

The opinion on perspective in the banking sector, especially in the systemically important banks, serves as an exit question to complete the interview with a positive feeling. Here the participants have the possibility to reflect whether the decision at that time was right to work in a bank, whether they would start there again and recommend it to their family members or friends. Also of interest is which industries can currently be an interesting employer and whether the large systemically important banks will still exist in the future, in 10, 15 or 20 years?

The decision about the right career choice at that time is controversial. The decision lies between “I would do it again” (Participant 7, Expert) and that was “the biggest mistake of my life” (Participant 9, Expert). There are opinions, where “I would study the same at university and the banking industry is still exciting” (Participant 10, Expert). Some of the participants did not want to work in a bank at that time; by ‘coincidence’ they got there by chance and now feel it is a great and exciting environment. Also the opinion exists that “there is still a high salary and a certain job security in the branch” (Participant 1, Manager). People have studied what definitely has a future perspective, but still it is differentiated in terms of the perspective that it will not be boring. The more critical voices indicate that they “would not go to a large bank, but would start with a bank that is rather smaller and has a dedicated area” (Participant 11, Junior).

Especially due to the quantitative orientation of the bank after the financial crisis, many do not see themselves as typical bankers, they have learned scientific work, like to work with numbers and are interested in economic thinking. For them, it was also, to some extent, a coincidence that it “became a bank and became this specific bank” (Participant 5, Manager). But they could be in a completely different industry because of their analytical background and specialisation. For some, “family pressure was high at the time and the decision for the bank was not out of my own wishes and motivation” (Participant 9, Expert), where they regretted having gone this way, but are only ready to try something new after a number of years.

The younger participants see their entry into the bank more as an “intermediate step” and are “willing to continue their education and possibly change to another industry soon” (Participant 15, Junior). However, the more the participants work for a bank, the stronger their desire for change, they want to keep their acquired skills and possibly use them in a similar industry as insurance companies and not in a completely new area.

The senior and work-experienced interview partners see the current attractiveness of the banking industry dwindling, even if they would “go the [same] way again at that time”, they could usually “only recommend it with some reservations” (Participant 4, Manager). The neutral opinions suggest that “everyone should find out for themselves what they like, since a supposedly sexy business is not always the right path for an individual” (Participant 1, Manager). Participant 10 (Expert) wishes for everyone “to find an area where you can get inspired and that you don't get into the situation of going to work and thinking about retirement at the age of 30.” Entering the banks can be exciting, there are still many challenges to be mastered, however, the banking sector is “overbanked. There are “too many services that focus on the profit of the bank itself and are conditionally suitable for the customer” (Participant 8, Expert).

For young professionals with a quantitative profile, it “can be a very exciting field”, but there are “many other opportunities outside the financial industry. The bank is not the most dynamic branch” (Participant 13, Junior). The financial industry is “critically seen as a starting position, because there are more dynamic industries where someone might feel more growth and therefore a more pleasant working environment in terms of non-shrinking and cost management, where you really do hire new people and grow” (Participant 12, Junior).

Although someone is critical of the banking sector, he would not advise against it completely. It's not an ‘evil area’ that is no longer needed, it has an “important function for society, like connecting money supply and demand, lending, and so on" (Participant 10, Expert). The most critical comments are that the "reputation of a banker is just above that of a used car seller. He has the image of a greedy, never satisfied banker" (Participant 1, Manager); this picture was created mainly after the financial crisis. The attractiveness of the banking industry compared to the other industries is classified into two categories, firstly, other industries such as "technology companies continue to stand out" (Participant 11, Junior) and secondly, the "banking industry is becoming less and less attractive" (Participant 5, Manager). Google LLC and amazon.com, with their cloud business, but also Apple Inc., which not only produces mobiles, are seen much more as 'sexy companies.'

The participants also think and know that they pay higher salaries there. Also digital and online, FinTechs or biotechnology, small innovative companies have a high reputation. Telecommunications, new types of communication such as Skype Technologies (Microsoft Corporation) and online conferences, social media evaluation, analysis of customer behaviour, etc. are also exciting fields of work.

Unfortunately the banks "don't do it enough, they have a lot of data, but don't use the chance sufficiently, don't know what to do with it" (Participant 2, Manager). The trend for attractive industries is relatively simple, everything that "has to do with new technologies is considered exciting" (Participant 1, Manager). Banks are attractive because they still pay well, but other industries are much more attractive because in their perception, "the future is being shaped there. Anyone who wants to innovate, make something new happen and somehow feel the impact will not be advised to go into the banking sector" (Participant 13, Junior). In these industries you can get much better involved. Young talents do not like "to sit in a dusty office" (Participant 11, Junior). It counts "generalism instead of specialism, interdisciplinary work [more] than to drill deep into the very small field" (Participant 15, Junior). At the bank, this opportunity is rarely offered.

The question of whether there will be large and systemically important banks in 10, 15 or 20 years is answered in two parts. It is clear to everyone that most of them "will not do their current job until retirement age" (Participant 7, Expert). Reasons are that the personal interest changes or also within the same bank the work profiles change and it comes to a movement of the fields of specialisation; one is clear that also the "banks must change permanently to exist on the market" (Participant 8, Expert).

The main arguments for the future of the big banks are as follows: "The banks are in a difficult environment, in a dilemma, the bank is the type of company the regulators are looking at, especially with Basel III and now Basel IV. Bound to these regulations, they try to achieve pseudo-safety to make the financial system insanely stable and crisis-proof. But on the other hand, there are the shadow banks or FinTechs that offer similar or even the same services and can do so more cheaply because they are not subject to regulation" (Participant 1, Manager).

The large or systemically important banks will remain relevant because they have market power and "buy up start-ups before they become too dangerous" (Participant 10, Expert). The belief is that the banks seek financial power. The trend will be towards larger banks, there are many merger rumours of large banks. "The trend towards big banks, makes the cost side more efficient, but then this one bank is also a bank that is a riskier one for the systems" (Participant 6, Expert).

Nevertheless, in order to achieve this, the banks must as quickly as possible and in the best possible technological way, "renew IT systems and implement artificial intelligence, which leads to the fact that banking can be easily automated without the need for many people" (Participant 13, Junior).

"When you set up technologically, get costs under control and specialise, then there is a future" (Participant 1, Manager). The regulation of the big banks is seen as a big plus in that the barriers to entry are so high that neither FinTechs, shadow banks nor other financially strong companies, such as the tech industry, want to cross this hurdle.

"Therefore the big banks will continue to exist in the future, of course considered from the current perspective" (Participant 1, Manager).

4.3 Conclusion

A careful selection according to professional experience, areas of work in the bank, the hierarchy level and educational qualification of the interviewees is decisive in ensuring both heterogeneous answers and that 17 participants are sufficient to cover this field. With each additional participant, the relevant knowledge became less and less and finally reaches a sufficient coverage. All participants have a clear understanding of what regulation and changes in the banks mean for them and what kind of personal impact it has. At the same time, insight is given into their experience and motivation to fulfil their work in a bank. It became clear that they see themselves as very well-prepared employees, but not necessarily by their company. They feel that the banks do not have the courage to be innovative and dare to make a real transformation and not just seek partial changes based on pressure. Here, they believe that the banks have a responsibility to accept the regulatory framework instead of complaining about it and to have a sustainable business model again, where not every year reduction targets for employees and shrinking balance sheets are announced. In the end, each of the participants looks at whether their goals are in line with the bank's goals and the willingness of the interviewees to have a change out of the banking industry is given.

5 Discussion

The research results and reflections of this thesis are concluded in this discussion chapter. It presents the conclusions derived from the expert interview analysis and reflects on them with the literature review. The following sections outline the outcomes with respect to the thesis questions for the influence of a regulatory impact on banking business model and human behaviour. Those in turn answer the three chosen objectives on increasing banking regulation, changes in the banking business model and human behaviour in the workplace. Finally, an analysis of possible bias of the interview responses is done, referred to here as ''trust scale''.

The general research aim is the exploration of a possible regulation influence on the banking business model and also to evaluate the impact of increasing regulatory demands on bank and regulator employees upon their behaviour and attitudes. The relevant information is collected and summarized in the systematic literature review, case study and the semi-structured interview chapters (2, 4). In line with the aim to close the identified research gaps, a mixed methods approach is used and a view of critical realist is chosen to bridge the hard facts with the personal opinions, according to the descriptions in the methodology chapter 3.

In order to answer the aims, question and objectives set, the discussion can be divided into three sections. First, it is clarified what regulation means in a developed economy and how extensive it has become in major European banks, especially after the financial crisis of 2007-2008. Secondly, it will be discussed to what degree regulation has an influence on the European banks' business model. The last response provides insights into the personal behaviour at the workplace in a bank and the extent to which employees are motivated towards planning for the future. The semi-structured expert interviews serve as a reference, as a representative case for European systemically important banks, and participants from different hierarchies and divisions of UniCredit Bank AG and the German supervisory authority are interviewed.

5.1 Increasing banking regulation

This section responds to the first objective by evaluating the impact of increasing regulatory demands and identify the European authorities' regulation requirements for banks in case of the financial crisis of 2007-2008. But it also lays the basis for the first research question, where the regulation influence of the banking business model is examined and also the first aim is assessed to explore the regulation influence on the banking business model.

Therefore, before looking at banking regulation, it is worth knowing what exactly this means. In a market economy, economic activity is largely coordinated by the market. Nevertheless, when it comes to protecting public goods, for example, state intervention is required (Pigou, 1948, 2013; Stigler, 1971). There are limits to both the market and the state. These laws can be found in the regulation of the market (Macher & Mayo, 2012). The banking industry has a long history as an important market participant in the process of money provision (Sherman, 2009).

The early phase of deregulation of the banking sector in the 1970s (Sherman, 2009) met with an increasingly connected world. In the wake of globalisation, a friendly environment was created for new companies and business areas such as the internet economy, biotechnology and IT industry (Baukrowitz & Boes, 2002; Schmierl, 2003). Banks, which have a central role in the supply of money, were now able to operate globally with their subsidiaries (Gumpold, 1995; Streit, 1992) and not just serve the domestic market. A spiral of deregulation and the almost infinite availability of capital worldwide was only stopped with the great financial crisis. Although the precedents of excess were there in Mexico in 1994, Russia in 1997, Brazil in 1998, Turkey in 2000 and then in Argentina in 2003 (Fahlenbrach et al., 2012; Fidrmuc & Korhonen, 2010; Grugel & Riggirozzi, 2012; Sánchez, 2010), it was seen as an anomaly of undeveloped markets. However, the crisis of 2007-2008 was no longer localized and it emerged from the supposedly developed world such as the USA, Europe and Japan (Suárez-Lledó, 2011).

This financial crisis of 2007-2008 was a global shock experience, as not only banks collapsed (De Haas & Van Horen, 2012), but the supply of money worldwide, and thus the producing 'real' economy, was also affected. Even the interviewees, whether already employed in a bank or not at the time due to their young age, felt the financial crisis, but were affected differently. For them it was clear that the excesses of the bank are not sustainable and that regulation is absolutely necessary, even with the knowledge that they themselves, in their function as bankers, had nothing to do with it and did not enrich themselves but now, when discredited in the eyes of society, they have to restructure the future of banking. After all, not a single party in the system was to be blamed by the interviewees; it was the total failure of the market, of politics with the regulator and of society itself, which gratefully accepted the toxic real estate loans for speculations on the housing market.

As the financial crisis of 2007-2008 has a heavy impact on increasing regulatory demands on banks, the business model of the banks was questioned. One of the reasons was seen in the deregulation of the banking sector (Chortareas et al., 2012). Therefore, a quick turnaround was necessary and new efficient regulation was seen as a way to manage the banks' business model. For the European market, and especially the European Union, the existing and new institutions have been given more power and responsibility. (Battiston et al., 2016; Bundesministerium für Wirtschaft und Technologie, 2010; C. Goodhart et al., 2013). The Basel Committee on Banking Supervision (2009) is an independent organisation that develops recommendations to strengthen banking regulation based on two important pillars: The European Union legislature with the national states and the European Parliament, which can influence the type and scope of banking activities through laws and regulations. The executive, superordinate to the European Commission (EC), serves to ensure observance of these laws and is monitored by state institutions (in Germany, the BuBa and BaFin).

Until 2014, national authorities were supposed to monitor the banks. When the introduction of the European System of Financial Supervision, ESFS, took place in 2011, a stronger European Union regulation of the European financial markets emerged. This was followed in 2014 by the Single Supervisory Mechanism (SSM), which covered the core banking supervision of large banks with total assets of over €30 billion or 20 per cent of a country's economic output. (European Commission, 2005, 2014b; Lecher et al., 2018).

From 2011 onwards, the Basel Committee on Banking Supervision (2011a) proposed the identification and supervision of the most important banks worldwide. The Financial Stability

Board (2012) initially named 29 global banks that are considered essential to the world economy and are referred to as Global Systemically Important Banks (G-SIBs). Currently, 30 banks are included (Financial Stability Board, 2020), which will have to build up an additional capital buffer that will apply to other banks beyond the regulations. From the beginning, one of these banks is the UniCredit Group, which serves as a case study for this thesis. After all, the increased minimum amount of capital stock is intended to serve as a larger buffer in the event of a crisis, making the banks more resistant to shocks and also avoiding potential responsibility by the state and therefore the society. Market stability, even ahead of consumer protection, is one of the primary objectives of the regulator, which is also confirmed in the interview.

Therefore, the global and European objectives are clearly defined: first to protect assets that have been entrusted to the institutions, second to enable the correct execution of banking transactions and third to avoid significant disadvantages for the economy as a whole, as is also implemented in the German national law on banking supervision.

As a result of the crisis the Basel Committee on Banking Supervision (BCBS) has established itself as a major think tank in the legislative field, trying to integrate national regulations in an international context. The results are the Basel I, Basel II, Basel III and, currently in the process of being developed, the Basel IV recommendations for European and national law (Basel Committee on Banking Supervision, 2017; Chortareas et al., 2012). The result is that regulation has grown and continues to grow both widely and in depth, which is also the impression of the interviewers, both bankers and regulators. Basel I, with its 1988 banking regulation, was rudimentary and encouraged banks to take high risks with its general capital requirements (Lichtenstein, 1991). But this was the only way the G10 countries could act in agreement on regulation. Basel I was no longer able to handle the dynamics of the financial markets and had to undergo a total revision.

The reform of Basel I created numerous innovations and should now, with Basel II in 2004 (Balthazar, 2006; Basel Committee on Banking Supervision, 2004), no longer only take into account the equity ratio of the banks but also the risk of credit transactions when granting loans. The risk of credit transactions is decisive for the equity capital of the bank (Richard

Baldwin & Evenett, 2009; Levine, 2012). When many banks were protected from insolvency with state funding during the financial crisis, because they had speculated with risky credit transactions, the largest economic nations (G20) reacted to the global financial crisis with the Basel III reform (Basel Committee on Banking Supervision, 2010; Daniels, 2017).

Basel III has two important aspects, where banks must have enough hard equity capital to cushion losses in their current operations and, since the crisis has shown that liquidity is not a matter of course, that banks must therefore maintain sufficient standardised liquidity provisions. The regulation goes so far that even the pricing of banking products is no longer allowed to take place without supervision, which the interviewees criticise because incentive pricing with calculated losses for later successful cross-selling is no longer possible at banks. However, this is a common practice and a successful business model for growth in other industries and for other companies like amazon.com. Above all, the interviewees complain that Basel III regulations were only created as a reaction to crises that have already occurred and are not designed for crises that have never happened before. It proposes a pseudo-security without considering whether banking regulation is sufficient when unprecedented global problems arise in the financial market. An enormous networking of banks worldwide means that a local crisis can infect the global economy.

Basel IV is in the pipeline and there is heated debate that, as in 2020, the Covid-19 pandemic will have to be considered for unexpected risks for banks (Basel Committee on Banking Supervision, 2017). As the year progressed, a general banking regulation has been established and various global and European authorities have proceeded with regulation requirements for banks.

The perception of the interview partners of the financial crisis is a driver of deep regulation is in-line with the facts described for the banking sector in the EU and hits the UniCredit Bank AG as well. As a systemically important bank, UniCredit Bank AG is in the focus of banking regulation and is forced to coordinate almost all processes with the regulator. Above all, the participants are surprised by the speed of regulation and the depth of its intervention in the banking sector, but also it is considered as absolutely necessary. The main point of criticism is that regulation is more and more based on quantitative reporting and that a qualitative overall situation is less and less important. The impression is created that the number and size of documents and reports is seen as a relevant indicator and not the quality of the statements. On the other hand, there is the regulator who, like a hoover, wants to absorb everything and only then can decide what is relevant.

The selection of a large number of documents and information is important only in so much as one can get an overall picture, but even the regulator may be cautious about expanding his capacities for evaluating the information. The reasons for this are that there are too few specialists on the market and the fact that it is a public authority and permits for new hires is subject to many lengthy procedures. The current picture is that data is being diligently collected by the regulator but not adequately evaluated to identify the right risks. However, this data is sometimes meticulously collected in the bank and there is an expectation that it is important. But if the effect is not shown, it demotivates the producer. It creates a mismatch between effectiveness and efficiency. Therefore, as the banking regulation has been consequently rolled out, not only will the systemically important banks, like UniCredit Bank AG, feel the intervention of the regulation as institutions, but it will also be felt by their employees.

5.2 Changes of banking business model

From the section before it is shown that regulation began to develop fully after the financial crisis and is continuing. This has an impact on the business model and also how the bank implements the regulatory demanded processes for an appropriate bank steering. Therefore, the second objective is replied where the target is to investigate the impact of the increasing regulatory requirements on the banking business models of European Banks and for a systemically important bank, such as the UniCredit Bank AG, through the change and transformation process. Thus, the first research question and also the first aim on how regulation influences the business model of banks will be answered.

The banks have little flexibility as to what they must or must not implement in order to comply with the regulatory requirements of the authorities. When choosing their business model, the banks can and should decide independently which path they take and which is considered worthwhile. This freedom of choice has numerous limitations, of course, as in addition to customer acceptance and economic factors in the country where the bank operates, regulatory banking rules have become an important factor (Altunbas et al., 2011).

When the financial crisis occurred in 2007, there was a massive rethinking across the whole of society and a detailed and almost all-encompassing regulation was built up very quickly, which is still ongoing and is described in a previous section. Precisely this shock moment in 2007 has been the basis for Ayadi et al. (2011); Ayadi et al. (2020); Ayadi et al. (2016); Roengpitya et al. (2014) to research and empirically measure how the business models of European banks have changed. These and other authors' analyses have been compared with the business model of UniCredit Bank AG from 2006 to 2019. As public sources cannot always see behind the facade of the bank and the employees concerned have a detailed view, these expert interviews supplement the changes to the business model that have taken place at systemically important banks.

Where European banks can be compared, there is one major difference to take into account: in Europe, it is common practice for large banks to offer the full product range of retail commercial and investment banking in one institution (Crawford, 2011; Neal & White, 2012). In the USA, the Glass-Steagall Act has been in force since 1933 and although it has been softened recently, it is still essentially practised in the USA, with few exceptions, that retail or commercial lending is not mixed with investment banking. The lesson of the great depression in 1929 was that the collapse of the financial system should not spread to all areas of business.

However, the complex business model of European wholesale banks eventually leads to the fact that some financial institutions, which are rather medium-sized in the global competition, are on the G-SIBs 30 list (Financial Stability Board, 2011, 2020; Gerster et al., 2007). Currently, 13 European (out of the 30 worldwide banks) are globally systemically relevant, and one of these banks is the UniCredit Group. These G-SIBs banks, among other things, have stricter capital requirements to better absorb any losses. This means that they are obliged to have additional credit buffers in relation to their competitors, which of course cost the banks additional capital as they have to raise it from investors as Tier 1 capital. The additional capitalisation of systemically important banks is one of the effects of regulation.

Moreover, if the impact of regulation on the banking business is to be viewed holistically, the studies of Altunbas et al. (2011); Ayadi et al. (2011); Ayadi et al. (2020); Ayadi et al. (2016); Osterwalder and Pigneur (2010); Roengpitya et al. (2014); Zott and Amit (2008, 2010) complete or confirm the picture. The great strength of Ayadi et al. (2011); Ayadi et al. (2020); Ayadi et al. (2016) is that he has measured numerous granular changes in empirical figures and leaves the discussion of interpretability to the reader. After all, where there is a correlation, there is not always a dependency behind it.

It can be argued that a banking business model depends on two main factors. On the one hand there is the market and the provided finance products should meet the requirements of the customers, on the other hand the product placement is limited or enhanced by the governmental regulations (Altunbas et al., 2011). In order to separate the regulatory effects from the general market development, most studies consider the following aspects. First of all, the fact is used that the financial crisis of 2007-2008 has acted like a shock to the banks and that completely different conditions of banking regulation applied before the crisis compared with afterwards. At the same time, the exogenous market conditions, which could also be independent of regulation, are measured. After all, the world and globalisation are progressing even without the financial crisis and new players in the banking world such as private equity financing through shadow banks or the possibility of digitalisation allows the FinTechs to better present new and also existing banking business models.

The first effects of regulation on the business model only began around the year 2000 (Llewellyn, 2013). The deregulation of the banking industry led to new business activities and in 2000 they started to reach an excessive weight in the financial world. The main new financial product aims to pool various types of contractual debt into securitizations, which can be backed by residential mortgages, commercial mortgages, auto loans or credit card debt obligations residential or commercial mortgages, auto loans or also credit card debt obligations (Vink & Thibeault, 2008).

Then, when this business model collapsed in 2008, the risks and these toxic products were on the bank's books. The studies by Ayadi et al. (2011); Ayadi et al. (2020); Ayadi et al. (2016) and Roengpitya et al. (2014) confirm that the banks were now trapped. Revenues fell massively and have not recovered so far. The reason for that is that the reduction of bad loans has still not been completed. But the financial costs of the bad loans are so high and, above all, the banks have had to incur additional expenses due to the implementation of the regulation but also in the processes, monitoring and compliance, which is only possible through a massive expansion of IT. These high costs force the banks to pursue cost reduction programmes. There is a downward spiral, since although the cost reduction programmes reduce the expenses, there is insufficient money to make additional investments to maintain the existing business, not to mention to expand it. Ayadi et al. (2011); Ayadi et al. (2020); Ayadi et al. (2016) proves that this phenomenon applies to all banks in Europe.

An important investigation is also whether the banks were prepared to change their basic business model after the financial crisis, but the studies confirm that the banks have maintained their structure as retail, wholesale or investment houses and the measured changes before and after the crisis do not differ significantly. This leads to the conclusion that the banks are sticking to their business model and products as far as possible and are trying to shrink down to a healthy level, but the bottom level has not yet been found. This development can also be seen systematically at UniCredit Bank AG, as since the financial crisis the bank exposure has shrunk to around EUR 300 million in 2019 from EUR 460 million in 2008.

Although the risk exposure has been reduced, this has occurred at the cost of high-margin investment banking, which, in turn, is lowering earnings and profit levels similar to those before the crisis have not been achieved. In order to have an adequate cost of capital, the business was focused more on private and mid-cap financing, but was not expanded further. The bank avoids a radical change and only tries to stick to its business model by making minor changes. It is not surprising that outsourcing and cost programmes have reduced the number of employees from 24,638 in 2008 to 12,194 in 2019 (UniCredit Bank AG, 2009, 2020). The facts and figures show that after the financial crisis and the tightening of regulations, the bank's profitability has shrunk, the business model is adjusting moderately, but the total volume of loans is falling continuously.

However, even the interviewees do not see a clear causality here. What the interviewees noticed is that the bank continues to offer the same banking products, only the allocation is now adequately adjusted to the regulatory risk. This clearly agrees with Ayadi et al. (2016) research that banks are not ready to transform their business models and that only internal processes are being changed. This statement applies to both the European Banks and the UniCredit Bank AG.

One fact that triggered the financial crisis, however, is that processes within the bank have changed radically, even though the same or similar banking products continue to be distributed to the external market. This means that the appearance and the sales activities of the banks have remained almost the same as before the crisis, but internally the processes been completely transformed. The interview partners see the following changes in particular. Decision-making power over the introduction of new products was a core competence of the market department.

But the back office divisions have a better overview of the regulatory requirements and see the effects on other offered products. Here, attention is drawn above all to costs and potential risks, the impact on reputation, business concentration, necessary capital to be employed or the strict compliance and limit systems. Therefore, it is worth considering the regulatory impact first and only then the economic impact. As a result, the back office division emancipates to become a market maker and the sales department loses an outstanding core competence.

Also, the monitoring of the banking books and portfolios is increasingly carried out with quantitative models and methods, using complex IT applications. This high level of quantitative competence, which has suddenly become necessary, replaces the previously essential qualitative management of the bank with a key account relationship between the bank consultant and the customer, but this is the only way to ensure transparency and to disclose conspiratorial agreements. Due to the low equity capital of banks, the cost reductions only support the automation and mechanisation of the bank, but promising products with future potential cannot be offered below cost. This inhibits the innovative power and investment necessary for future development.

However, the lost trust of the banks with their customers is the biggest hurdle. Strict compliance rules ensure that no illegal business is done, but innocent customers are seen as criminals if they want to do simple banking. Another reason is the tedious and long consultation and recording process, this regulatory barrier protects the customer but the documentation obligation prevents the customer from building up trust in their bank advisor. The bank consultants in turn identify which products require the least effort to comply with the regulatory requirements, but even then, these products might not be the right ones for their customers. Thus, extended regulation has a strong impact on how products are sold to customers and how they are managed internally.

Another aspect is that the shrinking of the big banks is a preference of the regulator and this was confirmed in the interview, since banks that are too big to fail are a societal risk. The next interesting aspect is that if the regulator restricts the business of the big banks, who will take over? After all, the credit volume and the money supply have already exceeded the volume before the financial crisis. This also raises the question of whether these players could compete with the business of the big banks, even without the regulatory influence and only through market mechanisms. Therefore, the interviewees, and especially the regulator, see that the processes and capital are being transformed into FinTechs or shadow banks. Above all, these companies take advantage of the effect that they provide only single processes or products for their own and thus do not belong to the regulatory framework that impacts upon the running of the banks. The FinTechs often take advantage of the new opportunities offered by digitalisation and redesign the process. They also do not have to bear the legacy of a bank and can adapt their business model quickly and with a sense of agility.

The shadow banks procure private capital and sometimes also loans from banks and invest it in promising projects such as alternative investments. What is paradoxical is that the banks lend money to the shadow banks, although they can lend the capital directly to the project developers, but the regulatory requirements and associated capital costs are much higher when they are financing the project developer directly than to lend the money to the shadow banks. The shadow banks then transfer the money 1:1 to the project developer. This minimises the regulatory risk, but not the economic risk. This is because the regulator has a restricted field of regulation: as long as it is not a financial institution, i.e. with a banking licence, it is not subject to specific regulatory requirements. But to use regulation alone as an excuse for FinTechs' ability to be more agile is an oversimplification.

The interviewees complain that the banks are bad at implementing new technologies quickly, as decision-makers in the bank sometimes are not familiar with the new technologies and try to lead the banks as they have done in the past decades. But this circumstance is not bank-specific, other established corporations in other industries also have problems; this can be seen in online business, which have turned the business model upside down.

The interviewees see excellent chances that the systemically important banks will continue to exist. They just have to focus on their strengths, as only banks are allowed to create money, transfer it and refinance at the central bank at attractive rates, and big banks have invested a lot of time and money to meet the regulatory requirements. Due to the regulatory requirements, customer funds are also guaranteed by the state, so full banks are the safest place for investors (bank deposits are protected within the European Union (EU) up to 100,000 Euros). The FinTechs are not competitors but are to be seen as partners in that they can manage some processes for the bank where both sides benefit.

However, the big advantage is that the regulatory hurdles are so high that hardly any FinTech group can overcome them without having to invest a lot of money first. Even big tech groups hesitate to enter the path of a full-service bank, even though they have enough capital. Banking businesses have a much weaker profitability than the tech groups, which can only be increased by high leverage. When tech companies take the risks, all their capital could suddenly be liable for the risks and that is, quite simply, not an option. Thus, banks that have overcome this hurdle operate in an almost protected market and are allowed to do business that only banks are allowed to do. In addition to creating and transferring money, they can also operate in government bond trading and clearing.

According to the interviewees, the banks only have one possibility when it comes to becoming profitable now: to leave the mixed product business and to specialise in attractive areas, such as global wealth management, a large bank for small and medium-sized businesses, or to offer products to certain industries, such as banks dedicated to the automotive industry or pure aircraft financiers. Europe's banks are far too small, however, and the example given relates to the large American banks, which have become global players through mergers and, above all, dominate the merger and acquisition market and are highly profitable. European banks need to consolidate and it is only through size that they can reduce and distribute the regulatory costs on their banking products and business models.

Through the interviews, it becomes clear how well the employees know their own bank and how deeply they consider the issues. They also recognise numerous strengths and weaknesses through their deep reflection. It is clear to them that regulation must transform the business model of banks, but often the courage is missing.

5.3 Human behaviour at workplace

Through the first two sections it is clearly explained that regulation has grown massively and it has an impact on the bank's business models. Consequently, it has an influence on the bank's organisation, employees and regulators. Therefore, here it is clarified for the third objective how the impact on human attitudes and behaviours is experienced during the change process for managers, experts and juniors at UniCredit Bank AG and German regulators. Also, in the following, the second objective and research question is answered: 'what is the impact of increasing regulatory demands on banks and regulators employees upon their behaviour and attitudes?'

Therefore, the human attitude and behaviour at work are essential for the success of a company, but a company can often only measure 'overall' success and failure, which is then regularly expressed in financial figures at the end of the year. However, every single employee who makes his or her contribution contributes to this success/failure. The reasons for motivation are very different, individual and often perceived differently from outside. As a small example, some employees do not have any interest in their job and only work to earn money. They would quit immediately if they were no longer financially dependent on this position, since they have not been emotionally motivated for a long time. The paradox is that, seen from the external perspective, they are still productive and are therefore perceived as such, but the company is wrong to believe that they have a committed employee.

The chosen interviewees provide exactly one of these deep insights, which allows a personal view of their motivations, wishes and challenges for working in a bank. Especially their messages are interpreted and valued in this thesis with the job satisfaction and performance models from section 2.5.

The interviewees are confronted with the challenge that, especially after the financial crisis, banks had to change radically in terms of regulatory requirements and the new orientation of their business model. Most of the interviewees believed that the banks would go through a real transformation process and will have to take new, unknown paths. But the reality, as already shown in section 5.1.2, is that the banks were not bold enough and continued to offer similar and identical banking products externally and have simply changed or modified the processes internally. In the end, the company has pursued pure change management, where only the existing processes are improved. The reasons are complex, but cost pressure and the loss of the good pre-crisis earnings above all forced the banks to take a more cautious and slow approach.

After all, the path of a true business transformation means that even a medium-sized event results in the insolvency of the entire bank. But it is precisely this courage that the interviewees miss. Instead, they see a shrinking bank from year to year. Above all, the banks have repeatedly stated that they have 'bottomed out' and that they are now on the upturn, but shortly after that the shrinking continued. This exogenous working environment, where the banks have lost and continue to lose their leading role and attractiveness, is profoundly affecting the behaviour of employees and, above all, extrinsic and intrinsic motivation. It can be seen that extrinsic and intrinsic motivation differs among the interviewees and between the different peer groups interviewed, such as managers, experts and juniors, both at the bank and at the supervisory level.

In principle, it can be said that this idea applies to all individuals that develop a relationship to their work. The degree of measurement is how much this corresponds to their own value system and whether it fits in with their own identity. But it is also important how the relationships develop over the years in a work environment. Above all, it is one's own colleagues and managers who give the feeling of community, that one belongs to a group with which can be identified or defined. In addition, of course, the work itself is also important: what you do all day, how the tasks are structured and if they create a feeling that they are meaningful are all notable factors that should be considered because the job accompanies a person over a long period of time in life. It is also the case that many people define themselves very strongly through their choice of career and are also judged by others according to it.

In order to correctly classify the measurement of job satisfaction, according to Maslow's (Maslow, 1954), the focus here is on the fulfilment of the 'pyramid', such as a sense of social belonging, the 'I-needs' of self-esteem and the individual who seeks infinite self-realisation, and not on basic needs such as eating, drinking and sleeping. Therefore, the bank's extrinsic motivation is mainly based on the following instruments, which it also implements with the help of their managers. These are mainly at salary level, as salary increases and salary structure can help in the selection of the right employees and thus the right colleagues, the status in the company and the directly responsible managers. Attention is also paid to ensuring that there are appropriate workplace conditions and safety, but the chosen business model is also significant. However, according to Herzberg (Herzberg, 2017; Herzberg et al., 1959) these factors can only lead to dissatisfaction, but that fulfilment does not necessarily lead to satisfaction, rather it is seen neutrally. The assigned needs are called 'dissatisfiers'.

It is also confirmed by the participants that all these factors must be taken for granted and it is the company's mistaken belief that an improvement must also lead to an increase in motivation. The following situation can arise: in some cases the managers have made a personal effort to improve one of the factors and the staff may be happy about it for a short time and quickly the motivation may return to the previous level. For the managers, the employees appear to be ungrateful and the workforce feels that the managers' behaviour is too arrogant, because the effect is not so great to praise. This is especially visible with the juniors, who have high expectations of the company in order to fulfil themselves, but often only these extrinsic factors are used to motivate them. Conversely, if these factors deteriorate, it has a negative effect on the atmosphere of the employees. Here the participants find many points and reported about them at great length.

A relevant topic is the unequal treatment in salary levels, salary increases and the salary structure. The younger colleagues see the discrepancy that the older ones secured their high salaries before the financial crisis and still hold on to them. For the juniors and the young experts, it is not comprehensible why they are pushing the bank forward as current knowledge providers through structural change, but are paid less than the older ones, who no longer make full use of their former specialist knowledge. However, it must also be remembered that these supposedly overpaid older colleagues have usually not had any salary increases since the financial crisis and, of course, do not feel valued. The reasons are that management is struggling with the new cost structure and reduction, neither has the resources nor is it worth the effort to close this gap because the idea is that it will close naturally over time.

Another point that came out as important is the status in the company and the company policy within the business model. The interviewees see limited opportunities to achieve a status in the company, reasons are related to the numerous aspects of hierarchy but also the permanently shrinking bank in terms of the number of employees and the business volume. The bank cannot offer the possibility that as the business grows the employees grow with it, where one takes on more and more responsibility. They rather see the problem that departments and teams are merged and thus managers are more likely to be degraded to specialists again. This situation would only be half as bad if the banks did not always claim that from now on growth is the order of the day and instead stay motivated to focus on developing for the future together. But the reality is that the shrinking is not over as long as new cost reduction programmes are launched every year.

However, the banks can also use the 'satisfiers' (Herzberg, 2017; Herzberg et al., 1959). Examples are recognition, performance success, attractive work content, responsibility, personal promotion and opportunities for development. Above all, these points belong to the intrinsic motivation, which has the great advantage that the bank employees themselves can proactively improve the situation if the general conditions in the company are appropriate. The advantage of the 'satisfiers' is that, according to Herzberg, the company can only win if they improve their performance, because then motivation increases, but if the company undertakes no action, it is seen as neutral by the staff.

Especially the younger colleagues and the management have a very strong desire that these factors are encouraged in the company. The juniors have very high expectations of their jobs and also of themselves as to how they can achieve self-realisation; according to Maslow (Maslow, 1954; McLeod, 2007), it would be the top of the pyramid. They are fully motivated and want to make the bank better, through sustainable processes and products that benefit the community and not just profit. The managers are striving for careers and more responsibility, but they place high value in moral action and are not willing to promote immoral behaviour.

The experts are rather reserved in this matter, for them it is clear that they are not moving forward in their career and are tired of playing the world improver. For them a stable working environment and job security are more important, but there are also personal reasons. After all, the experts sometimes have school-age children, spouses who no longer work and have to pay mortgage debts on their real estate. The stability of their income and leisure time are more important as they have to take responsibility for their families, which is not yet the case with the junior.

The banks have few opportunities to find time here, as focusing on stabilising the business model ties up resources that are handled by fewer and fewer colleagues. However, managers emphasise that they try to motivate their employees, sometimes independently. They have a personal approach and try to respond to individual wishes as much as possible. Mechanisms are that the right colleagues work together where they complement each other and don’t compete for personal success, here everyone has the opportunity to play an important role in the project. Personal circumstances are taken into account by young fathers and mothers when they do not have to travel often anymore. The managers see the personal exchange, outside of the job evaluation, as a time waster, but if you don't do it, the resulting bad feelings and subsequent lack of motivation will do more harm than the supposed loss of this invested time.

It is precisely when intrinsic motivation is necessary that the interviewees have considered and pursued different strategies. Often, they are not visible to the outside and this is the intention. In order to achieve personal job satisfaction, the financial crisis and the associated regulation, which also has great influence on the workplace, are taken as given and not reversible. Therefore, everybody concentrates in his own way on how to shape his future work. You can either design your own jobs in such a way that the tasks are very limited and constantly repeated, or you can actively create opportunities and freedom of action, which many employees seek anyway, whether or not this is encouraged or allowed by the company. It does not matter which kind of job it is.

Brüggemann's model (Bruggemann, 1974; Bruggemann et al., 1975) is well qualified to analyse the answers of the interview partners. Essentially, it is about how everyone looks at their work situation, whether they are satisfied and motivated and what and how they might or might not want to change it. It has been seen that there is a wide range of answers, between fully motivated and total resignation. The differences are that the juniors are more positive, the experts more negative and the managers neutral. But if the experts and managers are asked when they themselves were juniors or young experts, the answers are the same as those of the current juniors. Consequently, job satisfaction is not only dependent on age, position and experience but also changes over time in some cases.

The juniors are the most flexible, they see the bank as an opportunity to acquire their first relevant work experience. For most of them, the bank is only seen as a chance to progress or gain experience and the idea of switching roles to a different business is not excluded. They constantly reflect on whether their salary is appropriate or whether the knowledge they acquire is relevant to their future career. Here lies the desire for individuality and a broad sense of work style methods; a hierarchically oriented, strict, disciplined and purely rational manager is no longer in demand. Instead, empathy, proximity and empowerment of employees are the order of the day, as new employees see themselves as the best critics. They want to expose weaknesses because they are less biased than their colleagues. They are highly motivated, but see the bank as a large company with many restrictions and hierarchies. That is why they approach their tasks with determination and with full enthusiasm, but with the hidden intention of leaving the bank in a few months' time and realising their potential in the next position. Small start-ups and new technologies are particularly attractive to them. Their general attitude can be considered according to 'stabilised job satisfaction' (Bruggemann, 1974; Bruggemann et al., 1975), where the target comparison is positive and the level of expectations remains the same.

The experts often look back on a long career in banking or similar industries. Although they see that the general conditions are getting worse and worse, especially if you look at other industries, stability is important to them. They are in a dilemma, in itself the motivation is rather negative, but they are aware that they have only two options: to leave or choose to stay and make the best of the situation. Experience is still relevant as although they have lost some of their knowledge and competence due to the transformation of the banking landscape, they are still employed by the bank. At some point, however, the condition of dissatisfaction is unbearable in the long run. A defensive mechanism is created, whereby a person fools himself and just pretends that he is happy. Consequently, a pseudo-job-satisfaction is developing according to Brüggemann - the principle is that people think, "I still have several years of professional life ahead of me, so I'll look for a niche in the bank and think positively." Those who do give up, however, like to take advantage of the opulent severance pay programmes.

It is divisive among managers, on the one hand they see how the banking business is under stress, but they also see an opportunity to proactively improve it. Through their position within the bank they have active opportunities to initiate changes according to their wishes. Therefore, they are rather neutral and according to Brüggemann (Bruggemann, 1974; Bruggemann et al., 1975) they can be classified as having a sense of 'resigned job satisfaction'. They are aware that if they reduce their expectations of being able to do everything better, only then will they reach the state that with small steps they can achieve something. But the big shot is not coming, a bank is too slow as a large corporation.

The bank regulator holds an interesting position, because nearly anyone who goes to a public supervisor agency, especially as a young person, is convinced that they are doing something good for society by making the banking landscape safer. The regulator can certainly be an exciting employer, as it requires good judgement of where to be able to pick out the problem cases from all the financial institutions it supervises. When a problem case is discovered, you have to act quickly. Although you don't lose money if the problems are dragged out, you lose, more importantly, reputation and trust. As a supervisor, you have to be able to stand up to the banks and lobbies and always be independent in your actions.

But the final recognition is exactly the problem: if everything goes well, the supervisor is not noticed for the good work; if there are problems in the banks, he is quickly the scapegoat. That creates few incentives to work in supervision. In addition, promotion opportunities are determined by the classification at the beginning, the career progression is very sluggish and often felt to be non-existent. Thus, potentially outstanding supervisors, who have also acquired their competence through their work as supervisors, often decide to go to the banks, which means a salary jump, even if they notice that they lose part of their identity. But supervision is and will remain enormously important, and on the whole they do a good job. This should be recognised more often by society in general and by the financial sector in particular.

In conclusion, it can be said that most interviewees do not see their career path with a bank as negative. It was and still is an exciting employer. The regulatory pressure on their own place will always remain, but the participants have come to terms with it and consider it a partial obligation if you want to do sustainable banking. The change in internal processes, which were also triggered by regulation but not only by it, has made the bank less attractive as an employer. Everyone is aware that one is no longer the centre of the universe but an industry that has its own structural problems.

But people still know about the advantages of working in a bank, because the disadvantages described above are not seen as a bank-specific problem. Everybody is aware that every industry and especially big companies have their own advantages and disadvantages, and digitalisation, as an example, is not a bank specific issue. It could be a big improvement for one person to re-orientate, but for another it is a deterioration to give up a still safe job. It can be said, and this is also confirmed by the interviewees, that regulation has an influence on work processes, job satisfaction and increased work processes, but only indirectly. After all, it has only accelerated the process of change in the systemically important banks, because without regulation working mentality and method would have been changed, as the other sectors did. In the case of the automotive industry, where they are also undergoing a process of change to mobility providers instead of car manufacturers, an introduction of sustainable engines can also be felt as critical and stressful among the workforces.

5.4 Trust scale - facts and opinions deviation

For this thesis it is also important to consider to what extent the identified facts, which can also be looked up in the literature review, also represent the opinion basis for the assumptions and derived actions of the interviewees. For this, the term 'trust scale' is chosen, see the considerations in section 4.1.4.

At first glance, it looks as if the interviewees are well-prepared and also possess and promote the accepted opinion on the impact of the financial crisis on society and also on the banks. Thus, they achieve optimal agreement on the trust scale, where the given facts also reflect personal opinion. After all, no one disputes that the banks are to be held most responsible for this misery and that banking regulation and the associated changes in the banks are necessary.

But when everyone looks at their personal role, to consider to what degree they are responsible, it turns out that everyone sees themselves as the 'good' part. The explanations for this are complex. As the individual is only responsible for one part of the process, they cannot have a notable impact. Another reason given is that people are usually focused on day-to-day operations and cannot predict the future effects. Here it becomes clear that the financial crisis is a chain of many actions within the bank, but it is difficult for each individual to see himself as a part of this chain. The conventional wisdom is that someone else is to blame, but not me personally. However, if the reality is, as everyone believes, that they personally are not to blame for the financial crisis, and I am not excluded here, then a financial crisis would not have happened at all. Thus, on this point, the trust scale is definitely different, between the fact and the opinion.

Another important point is that the financial crisis is seen as a sunk cost by the interview partners. It is partly irrelevant to the interview partners in terms of who is to be blamed and what effect it has. For the individual, the focus lies on looking forward, what conclusions they would draw from this it and what personal possibilities for action arise for them. It is noticeable that the interview partners have become more suspicious of external information, they question more strongly the statements of the managers who suggest that 'we are now finally on the road to recovery' with the facts that are then actually published.

Notice here that the search for the personal trust scale has become stronger. At the same time, people's actions are driven by personal benefit, as even when they consider the given facts to be true, they make a distinction as to whether these facts are socially or personally true. Socially, it may be true that the banks are stabilising, but personally it is often considered which personal sacrifices are necessary for this to be achieved e.g. with salary cuts and greater work input. Thus, the statement is generally correct and accepted, but for those affected, the cause must be identified, and this is then the focus of consideration.

In conclusion, it can be argued that the interviewees do trust the information from outside and do not question the effects but instead the causes of it and try to use this information in shaping their personal future behaviour.

5.5 Conclusion

All set aims, objectives and questions of this thesis have been fulfilled, justified and explained. Therefore, after the financial crisis, the deregulation phase was replaced by excessive regulation and high control of the business model of the banks, and it is still being expanded. The previous business models that transferred risk to the society have been prohibited or massively restricted. The banks now must prove that their capital has to bear risk of the business model under bad market conditions. Due to this restrictions, the banks' profitability has decreased and at the same time the costly transformation of the banking processes has to be implemented. This transformation process has the effect that the banks have changed and become less attractive to current and future employees. At the same time, these employees perceive the changes very realistically, partly co-initiated them and also reflect very strongly on whether it is still a suitable working environment for them. The motivations, views and desires are as unique as each individual interviewee and however, all are sure that the banks have not completed a real transformation, but have only optimised their internal banking processes, while still retaining the allowed business model. Thus, these banks are struggling for shrinking market shares and must also face competition from FinTechs, private equity, hedge funds and shadow banks. Each of the participants hopes that the banks will be more courageous in focusing on certain business models and areas, be successful and then there are willing to participate and contribute to the success of the bank. Also the answers of the participants are correct and important, as it can be seen that there is a high ‘trust scale’ among all participants given. They all have the common consensus on the financial crisis and the regulatory impact on the banks.

6 Conclusion

The purpose of this work is not only to make a theoretical academic contribution, but also to find out how it can be realised in practice. Therefore, a possible application is discussed here. Finally, the known limitations that affect the answers to the objectives, questions and goals are presented and targeted recommendations for further research are discussed.

6.1 Practical Contribution

The contribution of this thesis should help to improve the awareness of the big banks about their role in the future, how they can shape the development of the banking industry and how they can achieve this with the help of motivated employees. It is easier for the banks as a company, but also for us humans, to complain about the external factors in relation to why we do not achieve something, instead of treating it as a challenge to learn how we can improve. For exactly this reason, there are banks that are still complaining that regulation, digitalisation and also the low interest rate environment are to blame for the bad performance. The employees are partly more active here, as they know that the whole exogenous circumstances are to be regarded as existing and not changeable.

The financial crisis of 2007-2008 with its negative effects on the global economy and the social structure worldwide provided good reasons for the revision and expansion of banking regulation. An important step has been taken to ensure that bank problems do not immediately contaminate the real economy. The low interest rate environment has been one of the measures taken to stabilise financial markets. Cheap capital has improved the debt service of governments, companies and private households and has even boosted investment activity. Disregarding the growing money supply as a threat, the low interest rate environment will likely continue and 'watching out' is no longer an option for banks.

Above all, digitalisation is helping to break through the structures of the banks and other sectors, it is an evolutionary act that is irreversible and those who do not keep up with the times will disappear as companies. For this reason, the employees of the banks and the regulator are looking ahead with the understanding and acceptance that the situation must not and will not be the same as before the financial crisis. Thus, the banks underestimate how well-prepared and reflective their employees are. To hear bank strategies with empty promises for growth, that everything will be fine again even if we continue as before and hope not to go bankrupt are not credible after more than 10 years of stagnation and downsizing programmes.

The employees in a bank have been recruited because of a certain competence, not because they are good with money, IT or with customers, but banking means above all that they are good with dealing information. The true purpose and task of a bank employee is to gather, exchange and strategically use information. They know exactly where the strengths and weaknesses of a bank lie, are excellently networked internally and externally and do not work for the love of this or that bank, but for when there is at least a mutual benefit both now and in the future. The major regulated banks seem to have a reasonable perspective, with the best proof being that many people are still working there and some of them continue to like it and still believe in what they are doing.

The banks do not have to grow permanently - it is also sufficient to divest certain business areas, to concentrate on a few segments and products and to become a champion in a more reasonable size. For this, the bank must have the right scale to be a market player. In the initial public offering (IPO) environment, a consolidation wave is necessary. In the case of specialisations such as wealth management or certain industries or sectors such as small and medium-sized enterprises, a focused restructuring of the business model is sufficient.

However, banks need a transformation process and not just inadequate change management. Most interviewees would prefer to see a hard cut rather than economically languishing and also would like to be an attractive employer compared to other industries. However, the limited capital base forces the banks to see cost savings as a short-term goal, thus transformation processes fail, as these investments are only made if they are immediately highly profitable during the year. The competition from direct lending and private debt providers, as shadow banks, and the financial start-up scenes take advantage of this fact.

Obviously, the employees are not only part of the solution, but also part of the problem. The banks are well organised in trade unions, which is good and important for the collective labour relations, salary fairness, health and safety at work. However, this protection also creates a comfort zone, especially in a transformation of the bank where many employees need to be trained with new skills or new ones have to be hired, but many are afraid to learn something new and leave their established comfort zone. This inhibits the banks and also harms the employees, since the banks are not able to resolve the problems this way.

Here the bank and the employees are forced to find a middle ground, where processes that are important but can only be realised with intensive retraining can potentially be outsourced to the FinTechs, while core competences that are still in demand, such as personal customer relations, remain with the banks. In the end, the banks achieve in the sense that they can give back to the employees not only extrinsic but, more importantly, intrinsic motivations. Recognising that only they, as a large bank, can master the complex regulations, they will continue to be needed in the future and cannot be quickly replaced.

On the specific issue of employee motivation, banks face the challenge of ensuring that their staff, especially young employees, are very well trained, have easy access to the labour market and have high expectations of the company they choose. The labour market has positively changed and the presumed job security and the perspective of working on the same issues until retirement are hardly convincing aspects. The financial crisis has achieved exactly that, the banks have to get out of their illusionary world and face the competition as employers. The financial crisis has damaged the image of the industry; the banks have lost their appeal and suddenly are no longer in a position to choose between the best university graduates and most qualified employees. In the past, very good graduates often chose a banking profession because it promised security and a good career. The financial sector was considered solid and financially prosperous. Nothing could go wrong. Since there were so many applicants, the institutions could cherry-pick the best.

Now, the future employees choose the right company or bank, and they reflect very strongly their expectations and the possibility of achieving goals. The banks still have employees who are very strong in character and willing to perform, which is good for the banks, but also employees who strive for individual rather than general development opportunities. The middle management level, which is directly dependent on the employees, has taken this into account. It is also mentioned in the interviews, but on a more or less voluntary basis by the manager.

It can only be recommended that even major banks give the management time and skills, that the individual development programmes are applied and implemented as opposed to more general offers from the intranet. Often these offers are not targeted but are based on the principle that there is still capacity and plays on the fear that if you don't do it, you will have to wait until next year for a new training course. Intrinsic motivation can only be achieved if the employees are satisfied with current and future development. Unmotivated employees will cost the company much more than a small investment in this perspective.

Unfortunately, training budgets are still seen as a cost factor and not as an investment factor in companies. Banks are in fierce competition for the employees of the future and have to accept that strong, competitive offerings can attract the minds of tomorrow with sustainable human resources development and an exciting, successful business model. In other words, making an investment that generates costs first and delivers increased levels of entrepreneurial success are likely to be increasingly visible and widespread over the coming years.

6.2 Limitations

This thesis can only be completed to this extent by observing numerous limitations. It is important to note that the construction of a critical realist case study on a systemically important bank only tries to scale the selected findings and outcomes to all European (systemically important) banks. In order to limit this one-sided approach, the literature review is carried out objectively, although the interviewees also had experience in other large banks and sectors. Above all, the selection of interview partners and then the very open and personal conversation (which is a great strength of this work as it has brought forth the hidden fears, hopes and motivation) also has its disadvantages. These disadvantages are that usually only interviewees who know me from my close professional and sometimes private environment, and therefore trust me, wanted to give me an interview. The personal closeness might also be too private for some answers, as they would rather tell an anonymous researcher, but it also means that many other answers and insights are not gained by the anonymous researcher.

Similarly, the semi-structured interview mean that the insights are only made possible through a personal conversation. The advantage of an anonymous internet survey is that the participants may be able to reflect on the question at their leisure and give more precise answers. I, as the author of this work, have also made my career steps within this system-relevant bank and unavoidably, I hope unconsciously, may have potentially influenced the answers by my enquiries in the direction that I would like focus on. In order to avoid this, the pilot interviews were examined precisely for these biases, and great care was taken to ensure that this error remained minimal in the subsequent interviews.

In addition, it is almost exclusively the financial crisis that is seen as a trigger event, which has an important reason for the influence of regulation on banks. However, it has also become clear in the discussions that a strong correlation is seen, but a strong dependency cannot be considered as assumed. Other factors, like digitalisation, could play an important role, which are (consciously) not considered here in the work.

It is also interesting to note that the statements do not distinguish between the interview partners and the literature review, so there is hardly any recognisable bias-error problem between perception and fact, see section 4.1.4. It could just be a coincidence that the interview partners feel the external factors are very similar to reality. However, it is not impossible that the differences will become visible in a slightly different worded question and topic shift. Therefore, a more detailed examination is not carried out.

The literature, with the review is also a big limiting factor, the research of the big banks after the financial crisis is quite well covered, but the empirical evidence about the human behaviour within the bank and other industries is very poor. The research rarely distinguishes specific industries or relevant observation periods on work behaviour and motivation. These and other issues will be examined for potential further research in the next section.

6.3 Further research

The limitations also make possible further fields of research visible that can be pursued in the future. First and foremost, the choice of methods and methodology is crucial, as the selection of the critical realist for this thesis is based on the positive intuition of comparing given information with qualitative interviews and, above all, to supplement them. Other approaches could provide further information, as it is in the design of the interview and the choice of completely structured questions through an interview survey that the findings are made, which one would like to communicate rather anonymously. The possibility then arises to filter out more relevant information from different forms of interview.

The biggest challenge is to carry out similar surveys at other systemically important banks in Europe and possibly to check whether major North American banks suffer from the same problems or not. A factor that should not be underestimated is whether new developments, such as digitalisation, will overlay the regulatory environment and thus initiate the true core of the changes needed to transform the working environment.

Therefore it is of interest if there are other trigger events in the other industries, but have similar effects on the work environment and if there are possibilities to see what other companies have mastered, or changed for the better or worse, or to see if it is consistent in large corporations. The literature shows that either very narrow cases, as in this thesis, are constructed or very vague and broad ones, especially in the area of work motivation where there is no solid empirical evidence, partly due to the strong qualitative evaluation. Therefore, there is huge potential to investigate the individual interactions more precisely, as the individual relevant influencing factors can also change quickly and even new ones can be added.

Above all, in order to develop a purposeful strategy and also to observe it in a more differentiated way, it is important to establish comparability in addition to in-depth analysis. It is appropriate to collect multiple sets of comparable data and also to measure regularly over a certain period of time.

The sampling should first be done in other banks, then comparable industries such as insurance, then IT companies, manufacturing companies and finally, for example, mining or steel production. Surveying equivalent banks in different countries or continents can be used to see if cultural influences create changing perceptions. Thanks to the great diversification, it is easier to determine the similarities and contrasts, which can then be examined for cause and impact.

A significant factor that should not be underestimated is that samples are collected regularly and repeatedly over longer periods of time. Here the advantage is to measure whether or not the world and society change have an influence on certain factors.

Most challenging is to find exclusive access to different individuals and companies, here a research collaboration of several researchers would be useful. Through pre-defined data collection procedures for later comparability, the respective researcher, preferably an insider, can compare and analyse the collected data from each other.

In general, the topic of human behaviour at the workplace is very fragmented in empirical research, although it affects us all.

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