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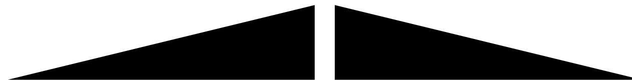

BANKING CHARGES IN THE DIGITAL AGE

Critical Evaluation Of Banking Fees In The Era Of Automation And Self-Service

SEMINARPAPER

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Abstract

Banking fees and the corresponding income share of banks have increased over the recent years, although the technological progress enables new service models, which provide cost reduction possibilities for enterprises in the financial market. Therefore, the prices on banking services are encountering lack of understanding by the customers. However, other factors have to be considered relevant as well. Based on the European financial industry, the paper investigates, whether internal factors from a bank's point of view, like the stock market returns or revenues based on fees in the past, affect the amount of banking fees charged. In addition external circumstances, like key interest rates or the economic cycle, are analyzed and observed by means of four EU member states. Furthermore the paper briefly covers the history of banking and illustrates novel developments within the banking sector regarding digital innovations.

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1 Introduction

Recent developments regarding banking fees provoked lack of understanding among a wide range of customers. While financial institutions increase the charges for basic banking services, the client is facing more and more self-service models. Therefore, the indignation seems justified. Every year numerous bank branches, which represent significant fixed cost objects for the banks, shut down and employees get replaced by machines. These developments already started in the 1960s when the first automated teller machines were installed and have continued ever since. Nowadays customers are able to perform payment transactions and administer their bank account from home, which enables comfortable and convenient ways for the client to manage one's budget. However, the digitalization arguably made banking processes much cheaper for the financial institutions as well. Hence, the question of why banking fees keep growing, although the expenses for banks presumably decrease, seems appropriate.

The method applied in this paper is the literature review. Current reports, scientific papers and books were included, as well as official statistics and numbers published by public authorities, like national banks.

The purpose of this paper is to learn more about the banking sector in general and to answer the research questions expressed in chapter 2. Furthermore, the focus is on the development of banking charges within the European Union, in particular since the financial crisis in 2008. Since the technological progress has a major impact on the banking industry and arguably directly affects the extent of fees, the digitalization of banking processes will be covered as well. This results in the following structure, that covers all subject areas:

After specifying the goals, respectively the research questions, of this paper and declaring the basic terms, a brief overview of the milestones in the history of banking is given. Afterwards, the European banking industry, with focus on the Austrian financial market, is described to provide an insight into the current situation in Europe. Thereupon, the paper deals with the digitalization and automation of business processes in banking and analyzes its impact on business models of financial institutions. The last chapter is dedicated to bank fees in particular. Various fee models are described and the European legal framework is illustrated. Furthermore, the paper compares the situations of four EU member states and tries to justify the different conditions.

2 Research Question

The following chapter deals with the precise definition of the research question, thus the goal of the work. While the main question will affect the whole seminar paper, the additional questions will be covered in certain parts of the paper.

As already mentioned in the previous chapter the work analyzes the development of banking charges in general but especially considering the technological progress in the past centuries. Therefore the main research question is defined as:

To what extend are bank charges justified within the European Union in the digital age considering automation and self-service?

The goal throughout the paper is to give an overview of the banking industry in the European Union, particularly in Austria, to critically describe the development of banking fees in the digital age and to review the adequacy of charging those amounts of fees. The following questions should help to illustrate the purpose of the paper explicitly:

- *What are the milestones in the history of banking leading to the digitalization of the banking industry?*
- *How did bank charges change over the past decades considering technological developments?*
- *Are there legislations which regulate banking fees in Europe and if so which cases are defined?*
- *Do differences between banking charges in different countries inside the European Union exist?*
- *To what extend does the technological progress influence the banking industry?*

Regarding the delimitation of the topic, issues like the activities of financial institutions or developments in the banking industry which aren't related to banking charges and digitalization will only be covered briefly or left out completely. Since the European Union holds a sovereign position, supranational law will be involved and regulations as well as directives applied in the EU member states will be mentioned. However standing orders in countries outside of Europe won't be discussed any further.

3 Basic Terminology

The subsequent chapter explains the main terms, which are essential to understand the following parts of the seminar paper.

3.1 Financial Institutions

Financial institutions are public- or privately-owned corporations involved in monetary transactions. They typically perform tasks like dealing with deposits, loans, currency exchange and investments as well as services supporting these task (Beck & Demirgüc-Kunt, 2009).

Primarily financial institutions can be distinguished based on the objectives the specific corporation pursues. While central banks, respectively national banks, take responsibility for monetary and currency policy, commercial banks are profit-oriented and adopt the tasks mentioned above. The Austrian National Bank and the European Central Bank, which handles the European capital market, are two examples for central banks. However, this type of institution will not be specified any further since in particular corporate banks, which are described explicitly in chapter 5.1, determine fees and charges in the banking industry.

Besides conventional banking institutions, the term, financial institution, covers businesses like insurance companies, trust enterprises, investment dealers and brokerage firms (Beck & Demirgüc-Kunt, 2009). Therefore, all banks can be defined as financial institutions, while not every financial institution is a bank. However, in this paper both terms will be used synonymously and indicate banking enterprises.

3.2 Banking Fees And Charges

Fees or charges in the banking sector cover expenses for special services the customer consumes. Fees are usually valued at a predetermined, fixed amount and do not base upon a certain percentage rate (Wikipedia Contributors, 2020).

Commonly banking charges are partly regulated by governmental authorities. For instance, in Germany banks are not allowed to offset those charges in return for services they have to provide lawfully. Duties, that do not cause financial implications for the institution, would be an example for these kinds of services. In Germany charging for cash deposits and cash withdrawals at the ATM is prohibited, while it is permitted to impose charges for the same service at the bank counter (Wikipedia contributors, 2020).

Chapter 7 deals with banking fees in specific and explains some regulations and directives introduced by the European Union. Furthermore different banking fee models will be defined.

3.3 Taxes

Unlike banking charges, taxes are involuntary fees levied on individuals or corporations and enforced by a government entity in order to finance government activities but without

immediate return benefits (Wikipedia Contributors, 2020). The type of tax that appears most often when it comes to banking is arguably the gains tax. In Austria the gains tax currently, in 2020, adds up to 25% of interest on yield on capital. Although, taxes will not be described any further in this paper, it is inevitable to understand the differences between taxes and banking fees. While financial institutions are able to determine the amount of baking fees they charge, taxes are set by a governmental authority and anchored in law.

3.4 Interest

Interest can be defined as the costs of borrowing money and is usually specified as a rate. Considering banking, financial institutions occur as creditors and therefore receive interest payments but also have to disburse interest of deposit payments to the customers. The interest rate can be set as variable or fixed at the time a loan is taken out. The variable interest rate is based on a key interest rate, which is defined by the responsible central bank. For companies based in the Euro-Zone, the EURIBOR-interest-rate (acronym for Euro InterBank Offered Rate) represents the reference rate, which fell under 0% in 2016 for the first time since its introduction in 1999 (Wikipedia Contributors, 2020).

Since interest rates may affect banking fees, it is inevitable to be aware of the term. However, this paper will not deal with the affecting factors of interest rates over the past decades in detail. Therefore, deeper knowledge is not necessarily required.

3.5 Digitalization

Digitization, not to be confused with Digitalization, essentially refers to taking analog information and encoding it into zeroes and ones so that computers can store, assimilate, and transmit information (Bloomberg, 2018). This process basically influences everyone's daily routine nowadays and can be found in almost every part of our lives. While the terminology in this case seems pretty clear, the term digitalization cannot be labelled that easily.

> J. Scott Brennen, Doctoral Candidate in Communication, and Daniel Kreiss, Associate Professor, both at the University of North Carolina School of Media and Journalism, explain: "We refer to digitalization as the way in which many domains of social life are restructured around digital communication and media infrastructures." (Bloomberg, 2018)

These developments affect various areas and causes changes in human interaction, such as the transition from telephone calls to emails or social media. On the other hand, according to Gartner's IT glossary, digitalization can be defined as the use of digital technologies to change business models and provide new revenue streams and value-producing opportunities. It is the transition towards a digital business (Gartner, 2020).

Considering banking, the second declaration seems more suitable.

4 Historical Developments In Banking

The following chapter covers several milestones in the history of banking and explains briefly how modern financial institutions evolved. However, since the banking history involves developments in many countries and goes back to ancient times, it would be too extensive to deal with every decisive occasion in detail.

4.1 Beginning of Banking

The earliest precursors of banking, in the modern sense of the world, are assumed in Mesopotamia, where in 2000 BC account processing for deposits, bills and cheques were probably well known. These new forms of trading slowly replaced barter transactions and included new payment methods. Obviously the history of banking is rather merged with the history of money. Nevertheless the development of currencies, payment methods and monetary theories will not be described any further (Wikipedia Contributors, 2020).

The first European banks flourished in the 13th century when Florence rose to become a trading power and the banking businesses began to expand. The Bardi, Peruzzi and Acciaiuoli from Florence were among the first and then one of the most important banking families. At the beginning of the 14th century, these families maintained branches in almost all of Europe's most important cities and effectively had a monopoly in finance. Though, after the 100-year-war King Eduard III of England, who had been a debtor to the Florentines families, couldn't settle his depts. A new wealthy Italian family named Medici benefited from the financial crises and raised branches in several European cities. To this day Italian terms like Agio, which defines the difference between a banknote's nominal value and its market value, appear in the financial world (Wikipedia Contributors, 2020).

Besides the cashless transaction techniques, the typical banking functions we know today originated from operations of the merchants. In order to be able to trade smoothly with one another, traders lent money among themselves, mostly for interest. It is not known whether banking fees were already charged for certain services at that time, however the banks found additional ways to make money. For instance the Florentine banks financed the maintenance of the European sovereigns' properties. In exchange they received payments based on taxes and customs (Zeilmann, 2008).

In 1407 the Banco di San Giorgio was founded in Genoa. While several prominent families from the city of Genoa were involved in the establishment and management of the bank, it was also closely linked to the government and involved in political decisions. This bank is considered to be one of the oldest banks of the world, but was closed down in 1805 by Napoleon Bonarparte (Wikipedia Contributers, 2020).

4.2 Continuous Developments

During the 17th century common banking services like accepting deposits, lending money, currency changing and transferring funds already existed. The number of services offered by banks, like the issuance of bank dept, increased and promoted commercial and industrial growth. It was at that time, when the first bank began to issue banknotes permanently. The Bank of England was founded in 1695. They promised to pay the bearer the value of the note, which was initially hand-written and issued on deposit or as a loan, on demand. Wealthy merchants started to store their gold with the goldsmiths of London, who in return charged a fee for their service. The goldsmiths bankers were born. In the 18th century new bank practices, like clearing facilities, security investments, cheques and overdraft protections were introduced. Despite the fact that multiple savings banks already existed in Italy or Germany, the first British savings bank, named "Savings and Friendly Society", which was founded in 1810, is considered the first trustee savings bank in modern sense (Britannica, 2017). At that time, during the first industrial revolution, the number of British country banks significantly increased and besides basic services, like issuing banknotes and borrowing, respectively lending money, they offered discounting services (Agarwal & Agarwal, 2017). The first postal savings bank followed in 1861 in Great-Britain and allowed depositors who did not have access to banks, a safe, convenient method to save money. Postal savings banks were originally established to promote thrift among the poor.

After World War I the United States experienced a time of economic prosperity and since credits were easily available and very convenient many loans were taken out. Alongside the average citizens even the big banks and corporations bought stocks using borrowed money, which is known as margin buying. In 1913 the Federal Reserve System was founded to regulate monetary policies and monitor the financial market. Nevertheless, the majority of the American banks were small individual institutions and had to rely on their own assets. In 1929 the stock market crashed and caused distrust in the economy in the United States. There were a bunch of potential occasions that could have been responsible for these developments, for instance the headlines of the New York Times about margin sellers and the exit of foreign investors as well as uninhibited speculation on the stock market (Amadeo, 2020). However, because the people lost faith in the economic system they withdrew their deposits immediately, which triggered several bank runs. Banks went broke and unemployment in every economic sector escalated. The deflation spiral started in 1931 and led to the Great Depression. Many countries beside the US, including several European states, were effected and therefore increased financial regulations (Green, 2013). As a result investment activities and corporate banks got separated and a new kind of special purpose bank emerged: The investment bank (Agarwal & Agarwal, 2017).

4.3 Banking After World War II

In 1944 the Bretton-Woods-System was introduced as a global financial regulation. This agreement included 44 states and pegged multiple currencies to the US dollar's value as an anchor currency, while itself was based on the value of gold (Chen, 2019). Moreover the International Monetary Fund and the World Bank were founded with the intention to reduce barriers in the banking industry between different countries, that emerged after the Great Depression in the 1930s. During this time banks implemented technological components in retail banking. For instance in 1967, British banks installed the first Automated Teller Machines (ATM), which enabled to perform financial transactions without the presence of banking staff. This process turned out to be highly profitable, hence banking corporations began to invest in technology and introduced electronic payment systems (Bátiz-Lazo, 2015).

By the beginning of the 1970s the gold supply owned by the United States was not sufficient anymore and could not cover the number of dollars in circulation, which eventually led to the breakdown of the Bretton-Woods-System in 1973 (Chen, 2019).

Just like a lot of other economic sectors the banking industry was also effected by developments around the deregulation process. Financial institutions provided services globally and could access capital markets in new ways. Furthermore the universal banks increased their banking service supply as well. Home banking was developed and offered a new, more comfortable way to perform financial transactions. Especially one novel service named Pay-by-phone got widely used, however other sorts of interaction possibilities, like the Personal Computer, were tested as well. In 1989 the first precursor of a direct bank, named First Direct, was launched and provided banking services by phone. The introduction of the debit card even changed point-of-sale services as customers could make a purchase in a store while the corresponding withdrawal was performed simultaneously (Johnson, 1983). In the beginning debit card users had to pay a monthly fee, which for instance added up to less than 3 Dollars for clients of Wells Fargo in the United States. Soon the merchants recognized the advantages of debit cards and bore those charges.

During the 1990s and the beginning of the 21st century the technological progress affected the banking industry significantly. At that time interactive banking on the web, better known as online banking, evolved and emerged a flexible way of managing financial businesses reclusively. These developments came along with new challenges regarding online security issues and increased the competition among financial institutions, which resulted in a drop of cost advantages of banks. As a consequence, the banks started to focus on fee and commission bearing services. In Europe, noninterest income has increased from 26% to 41% of total income between 1989 and 1998. (Vozková & Teplý, 2018)

4.4 Banking In The 21st Century

In the beginning of the 21st century it was noticeably easy to take out a loan which was secured by a mortgage in the United States. And since the real estate prices increased consistently mortgages were not considered risky. However, the banks bonded these mortgages and created a new financial product, named subprime mortgage bonds, which received a low risk rating and were traded on the stock market. Towards 2007 more and more mortgage payments defaulted and in 2008 the US housing market collapsed. Big investment banks like Lehman Brothers shut down and the corresponding global banking crisis is considered to be the worst since the Great Depression in 1929 (Wikipedia Contributors, 2020). The European dept crisis followed in 2009 and affected several countries, that were part of the eurozone. The states could not settle their liabilities, hence supranational institutions, like the International Monetary Fund, had to intervene.

As a result the number of banks, bank branches and employees in banking significantly decreased relative to economic activity and population. Figure 1 shows the development of bank branches in Germany, the biggest banking market in Europe, after the financial crisis in 2008. However, the decreasing tendency cannot be attributed to the crisis on its own, since the digitalization is considered highly relevant as well.

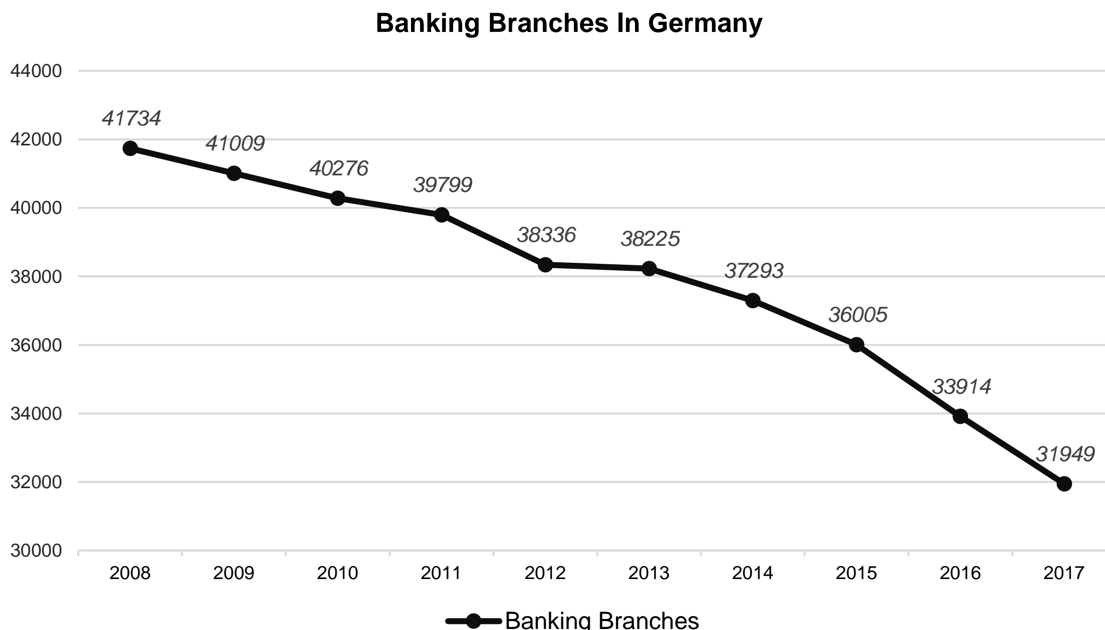

Figure 1: Banking Branches In Germany (Bankenverband, 2019)

Moreover financial institutes started to noticeably raise their capital reserve and liquidity buffers. Another trend showed that advanced economy banks adjusted their business models and reclaimed traditional commercial banking instead of complex trading models (Buch & Dages, 2018).

5 Banking in Europe

The following chapter deals with the banking industry in the European Union, especially in Austria, and discusses different types of banks.

5.1 Types Of Banking Institutions

As already mentioned in chapter 3.1 a bank typically closes the gap between individuals who want to save their money in a secure place and those who need to borrow money, while offering a few more services. However, banks can be classified based on their clients and services. The following classification might apply to banks globally, though it is primarily based on the European banking market. Since central banks have a sovereign position and control monetary policy issues as well as the amount of money in circulation, they can be allocated as an independent type of bank and will not be described any further.

A way do differentiate various sorts of banking institutions would be based on the services provided. While universal banks perform several common banking activities, special purpose banks concentrate on one specific subject. For instance a building society offers building savings contracts, thus they often pursue residential funding objectives as well, provide loans and therefore are called savings and loan associations. Credit card companies, like Visa or Mastercard, issue credit and debit cards along with a variety of prepaid cards. A further example for a special purpose bank is the investment bank, which concentrates on trading with bonds and on supporting companies in corporate actions, like in going public processes. Yet another differentiation can be made based on the target group of a banking institutions. While retail banks focus on individuals, commercial banks center businesses and their complex needs. For instance the total number of transactions performed by a company is usually significantly higher than the ones performed by a single customer. Moreover companies generally require flexible credit facilities and have to deal with different currencies when it comes to businesses with clients abroad. However, both, the commercial as well as the retail bank, can usually be identified as universal banks, since they provide multiple services, like issuing credit cards, offering loans and managing transactional along with savings accounts (Pritchard, 2020).

Since this seminar paper deals with the development of banking charges it makes perfectly sense to classify different types of banks based on their accessibility. While conventional traditional banks with a branch network still charge various sorts of fees, direct banks, respectively online banks, mostly do not (Swoboda, 2000). Therefore the following part addresses these types of banking institutions.

5.1.1 Traditional Banks

Distinctive characteristics of traditional banking institutions are the availability of branches as well as the physical presence. Typically traditional banks are headed by central headquarters,

while having multiple regional administration offices, which are in charge of various branches. Although they often provide their own branded ATMs and offer online banking services, they also focus on personal calls and individual, personal problem solving (Swoboda, 2000). Eric Rosenberg, journalist at Business Insider, describes the advantages of physical presence of banking institutions as follows:

> Bank branches are places where you can handle all of your banking needs with the assistance of a teller or branch manager. This in-person service is valued by some customers, though it may not be around forever. When you have a bank branch, you know exactly where you can go for help with your accounts. Besides bank branches can offer some other less-commonly needed services, like picking up foreign currency before a trip and notary services. (Rosenberg, 2020)

According to a global consumer banking survey of 2016, that included 55,000 participants of 32 countries and was realized by Ernst & Young, 60% indicate they would want to visit a physical branch or speak with a real person in order to purchase a new financial product or ask for advice. However the survey reports that 6% of global consumers have moved their primary relationship to new companies offering simpler technology and services than traditional banks (Bellens, 2016).

As already mentioned, due to technological innovations the number of bank branches in Europe decreased. For instance, there were 5,479 banking branches in the year 2000 in Austria. That number declined by 24% to 4,140 by 2019 (Der Standard, 2020). Similar developments can be observed across member states of the European Union (European Banking Federation, 2019). Chapter 5.2 deals with the status quo in the European banking industry in more detail and discusses recent developments regarding consumer interaction.

5.1.2 Direct Banks

Direct banks, also known as online banks, disclaim the use of a branch networks entirely and the services provided are only accessible by phone or online. From the customer's point of view, direct banking can be characterized as any semi-personal and impersonal contact with a financial institution. Forms of semi-personal contact in this context are phone calls or video chats. However, since traditional banks provide direct banking services as well, these sorts of services do not distinguish direct banks. It is rather the fact, that they do not operate a branch network and therefore are not available in person to their customers. Yet direct banks offer several advantages, like convenient account-keeping. Furthermore they usually charge less fees compared to traditional banks and provide higher interest rates on deposits, which is made possible by lower fixed costs, due to the absence of bank branches. However, hidden extras may appear, as additional services, like guidance by phone, are not free (Swoboda, 2000). Since direct banks focus on online-banking entirely, their platforms are considered well

organized and user friendly and they often enable mobile banking through sophisticated smartphone applications (Bondarenko, Evdokimova, & Shinkareva, 2019).

5.2 Market Analysis

The tertiary sector, respectively service sector, represents the most significant one in the European Union. According to Statista 66% of the GDP generated by the EU member states in 2018 derive from services, while the agricultural and industrial sectors combined merely achieved 24%. This distribution has remained constant since 2008 (Urmersbach, 2019). Similar values appear considering data, that illustrate employment factors. Although differences between the member states exist, most people in every relevant country work in the service sector (Urmersbach, 2020).

However, banking only represents a small part of the tertiary sector. The national banking systems of the EU member states differ regarding types, bank size and organization. The same applies to the size of banking and financial sectors across Europe, although they all slightly decreased considering quantity between 2008 and 2014.

> The process of consolidation of the banking sectors in eurozone countries has continued, due to increased pressure on cost-cutting and restructuring. With a few exceptions, most countries experienced a marked decrease in the number of banks between 2008 and 2014. (Beck & Casu, 2016)

As a result of increasing use of digital channels by the customers, banks are reducing their physical network. The total number of credit institutions decreased by 5% in 2018 to 6,250. In 2019 there were 4,599 credit institutions within the European Union, even though the numbers vary considerably across the EU member states. Figure 2 shows the change in number of credit institutions from 2017 to 2018 in selected countries. While 31%, in total 1,584 organizations, of the European financial institutions are located in Germany, only 17 belong to Slovenia. Austrian, French, German and Italian financial institutions accounted for around 69% of financial institutions in the eurozone at the end of 2014 (European Banking Federation, 2019).

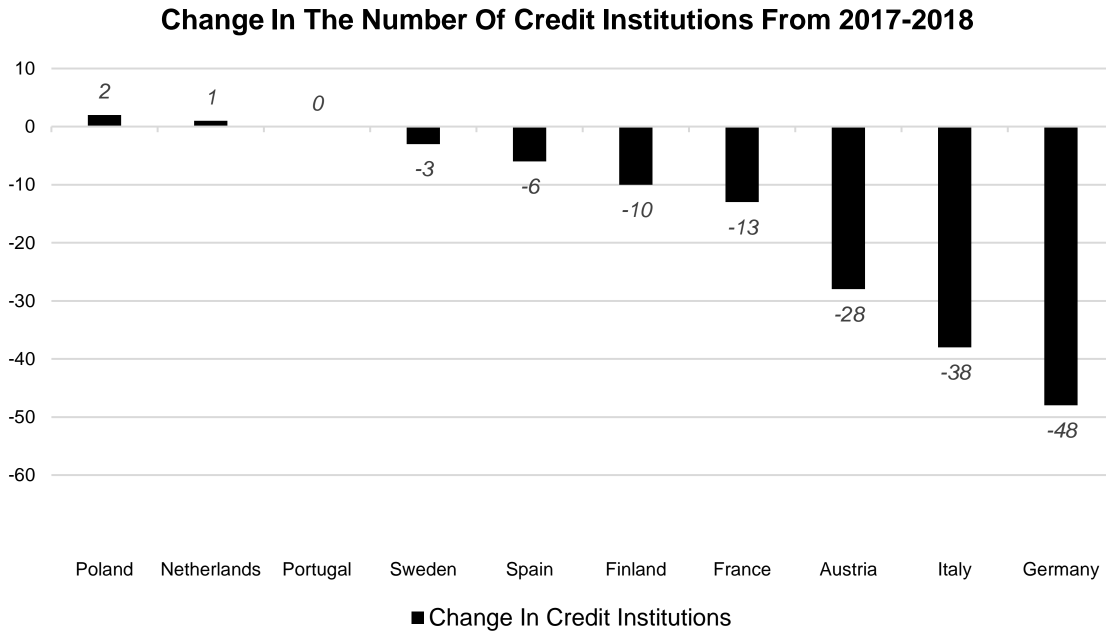

Figure 2: Change In Numbers Of Credit Institutions From 2017-2018 (European Banking Federation, 2019)

In 2018, around 10,000 branches were closed in Europe, a decrease of 5.6% to approximately 174,000, which indicates the largest drop since the financial crisis in 2008. According to the European Bank Federation, 54% of all bank customers, almost twice as many as ten years ago, currently use internet banking. At the end of 2018, the number of bank employees fell to 2.7 million, the lowest level since the start of the ECB statistics in 1997. Compared to 2009, when 3.1 million people were employed by European banks, that is a significant staff reduction. Household and corporate deposits rose by 2.5% in the EU to 16,300 billion Euro, including EUR 12,100 in the euro area. In contrast, the majority of bank loans are provided to non-financial corporations and households. Furthermore SMEs (small and medium enterprises) received 47% of their financing from bank loans and only 12% from equity in 2018, which confirms the importance of the banking industry for the European economy (European Banking Federation, 2019).

5.3 Recent Developments

The banking industry is clearly effected by the digitalization as well as by the globalization. Modern technologies, like mobile and online banking, experience an increasing demand, since convenience and speed are inevitable for every service in today's highly developed economy. According to Andrew Meola from Business Insider this applies especially to Millennials and older members of Generation Z, who are not willing to manage their banking businesses offline (Meola, 2019). As already mentioned, since 2008 the number of branches has fallen by 27%, respectively by almost 65,000 objects. The trend addressed above seems to be confirmed by the data. In 2019 half of EU individuals, 54%, used internet banking in 2018, up from 51% in 2017, and 25% in 2007, when the

data series began (European Banking Federation, 2019). However, banking in the digital environment will be further analyzed in chapter 6. Changes considering cross border banking in Europe can be observed as well.

> Banks located in the euro area and in the rest of the EU reduced their cross-border bank claims by around 25% since the global financial crisis, driven by a sharp and sustained reduction in intra-EU claims, which make up 60% of total EU cross-border claims. Within the EU, banks have cut their cross-border loans by around 40% which particularly affected cross-border interbank lending. (Emter, Schmitz, & Tirpák, 2018)

Further significant shifts regarding banking, that emerged from the financial crisis in 2008, are intentionally induced by the European Union. The regulations under Basel III provide stricter regulation of banking institutions and were first published in 2010. In the EU, they came into force in the form of a new equity capital directive in 2014. Basically Basel III was introduced to create a comprehensive protective mechanism consisting of several buffers, which ensure security in times of crisis and make government financial aid for banks unnecessary. However, the customer is not directly affected by these regulations (European Banking Federation, 2019).

6 Digitalization And Automation Of The Banking Industry

The following chapter covers changes regarding business models in the banking sector triggered by the Digitalization. In this context the resulting kinds of services and potential challenges are described.

As already discussed, alternatives to classical branch banking have attracted increasing attention as Internet usage started to spread. Banking institutions began to benefit from internet usage since it provides a way to lower costs and enhance profits. Furthermore the web increased customer convenience and procured innovative payment methods (Arnaboldi & Claeys, 2008).

These developments affected and created business models across industries and led to significant changes in banking. For instance innovative industries, like the FinTech industry, emerged and sustainably modified banking services.

6.1 FinTech

According to a paper by Patrick Schueffel (2016), FinTech, which serves as an acronym for financial technology, is a new financial industry that applies technology to improve financial activities. A report of 2016 indicates that the amount of investments in FinTech companies increased by 75% to USD 22.3 Billion in the previous year and more than

12,000 of these types of firms existed in 2016 (Schueffel, 2016). Statistics show that the number of FinTech-startups consistently grew throughout the years and currently adds up to 21,000 enterprises globally (Szmigiera, 2020). However, the FinTech industry is not only characterized by numerous startup-companies, but also attracts the attention of well-established technology enterprises, so called BigTechs. Globally operating firms, like Google, Apple or Alibaba already began to provide financial services and have decisive, competitive advantages over traditional banks. For instance, BigTechs operate on the highest level of technology, possess loads of client-related information and are experienced when it comes to analyzing costumer's data (Tanda & Schena, 2019).

Fintech can also be defined as an ongoing process, during which finance and technology have evolved together, and which led to numerous incremental and disruptive innovations, such as internet banking, mobile payments, crowdfunding and peer-to-peer lending (Arner, Barberis, & Buckley, 2016). Nowadays FinTech companies, like Klarna and N26, are competing directly against traditional banking institutions in areas like payment, lending as well as investing.

According to their paper on the evolution of FinTech, Arner, Barberis, & Buckley (2016) define five major areas when it comes to today's FinTech industry:

- *Finance and investment:* Alternative financing methods became more attractive recently and crowdfunding or P2P lending prove to be serious loan substitutes. Prospectively FinTech is increasingly involved in areas such as robo-advisory services, which constantly improves due to technological progress.
- *Financial operations and risk management:* Since 2008 this area has been responsible for increasing IT-spendings by financial institutions, since banks had to improve their compliance systems to cope with numerous regulatory changes.
- *Payments and infrastructure:* FinTech focuses on innovative payment methods enabled by the internet and mobile devices. While payments have been desperately regulated since the 1970s, domestic and cross-border electronic payment systems today globally transfer USD 5.4 trillion per day. Furthermore, in the security trading area, IT and telecommunication enterprises investigate new ways to disintermediate traditional banking institutions.
- *Data security and monetization:* Since the financial market directly affects the global economy, vulnerabilities regarding cybercrime and espionage are classified as a crucial area of FinTech companies. Besides, the usage of big data emerged as profitable and additionally increased the efficiency and availability of financial services.

- *Consumer interface:* This area refers to online and mobile services and constitutes a major scope for competition with the traditional banking sector. FinTech firms benefit from their pre-existing large customer bases to introduce new financial products.

The establishment of FinTech companies combined with the market entrance of BigTech enterprises lead to growing competition among financial institutions, which in turn decreases cost advantages of banks. Subsequently traditional banking services' profitability declined and services, that involve fee and commission charging, flourished (Vozková & Teplý, 2018).

Furthermore, banking institutions nowadays have to constantly refine their business models to keep up with FinTech companies. The following chapter deals with this topic and addresses crucial developments in the digital age regarding banking.

6.2 Changing Business Models

The following summarizes the findings of Schmidt, Schirmer and Drews describing changes of bank business models based on seven key strategic directions in their paper "Digitalization of the Banking Industry" (Schmidt, Drews, & Schirmer, 2017).

Arguably the most significant attribute that distinguishes a well-functioning business model is the value proposition. During the digital age product differentiation became more relevant since customers tend to modify their needs more frequently and demand appropriate products. Therefore customer relationships require frequent interaction, although many enterprises react, rather than act in an active way.

> Further topics such as big data and analytics stress the relevance of tools to create precise user profiles for inventing financial products, which fit to the individual customer. Customer loyalty can be established by inventing innovative products and outstanding service. (Schmidt, Drews, & Schirmer, 2017)

Direct banks in particular have to win customer's loyalty since the lack of personal interactions often causes falling client retention. To prevent these developments from occurring, channels and customer segments have to improve. For example, banks need to enhance their user's interaction experience and diversify their communication channels, whether it comes to personal or impersonal interaction. Regarding key activities, banking institutions' support of digital channels provokes changes of structures and business processes. Companies need to improve and harmonize innovative as well as existing procedures simultaneously while optimizing the value chain. These processes require an open-minded organizational culture and often cause the reduction of hierarchies through decentralization. Furthermore the architecture of enterprises must be based on reusable technology, which in turn has to be coordinated. Hence, a new sort of key resource emerges from collecting user data, that has to be optimized and

provides an innovative way of analyzing customer's needs (Schmidt, Drews, & Schirmer, 2017).

The revenue streams of different sort of banking institutions varies, although a common pattern can be identified. In their paper on banking business models in Europe by Ayadi et al. (2016) they split income stream in four groups: net interest, commission and fees, trading and other income streams. Regardless of the bank type, net interest income represents the largest source of revenue, always followed by commission and fees. Furthermore net interest income became more significant since the financial crisis in 2008. However, chapter 7 particularly focuses on the different revenue streams of banking institutions and especially describes the role of fees.

Cost structures radically change due to technological progress. For instance self-service channels may reduce the marginal cost of service interaction significantly. From an entrepreneurial point of view, the variable labor expenses are replaces by relatively fixed-cost technology assets. However, the technical infrastructure, the administration of electronic banking systems as well as investments in research and development again create new sorts of costs, while traditional expenses, for instance caused by interest on deposits, remain (Campbell & Frei, 2009).

6.3 Automation Of Banking Processes

Rapid IT-developments in previous decades generated substantial cost saving possibilities in various industries, including banking. These innovations involve automating multiple business processes, while credit cards, debit cards, e-money purchases, mobile-payments as well as online access channels provide easier and more convenient transaction methods for customers and banks. Business processes for instance are payment transactions and generally can be defined as a collection of activities with shared objectives (Nikolaidou, Anagnostopoulos, & Tsalgatidou, 2008). In their work Nikolaidou, Anagnostopoulos and Tsalgatidou (2008) describe the automation of business processes at a medium-sized, private bank in Athens regarding loan monitoring. Further they demonstrate how inefficient and unproductive human-based operation procedures can be compared to the usage of information systems and machine power, especially when it comes to data intensive processes.

In addition computers establish themselves as decision makers. Lending evaluation, factoring and creating costumer-specific credit scores are all examples for services, that have been performed by humans but nowadays are realized by computers. In this case quantitative data constitutes the foundation for accurate and fast processes. However, further developments, like blockchain-technology and artificial intelligence, lead to a gradual replacement of human labor by machines in many sectors of banking. According to a benchmarking survey by Forbes and Kofax, in which over 300 managing directors worldwide participated, more than 50% of all

business processes in banks can be automated (Maguire, et al., 2019). Technologies that have already changed the banking industry in terms of automation are, for example, the ATM, several innovative payment methods and internet banking. The latter is dealt with in detail in the following chapter.

6.3.1 Internet Banking

Internet banking, respectively online banking, is an example for the ongoing replacement of human-based business processes, although banking branches still provide personal services. Chavan defines the term in his paper as followed.

> Internet banking is defined as the use of the Internet to deliver banking activities such as funds transfer, paying bills, viewing current and savings account balance, paying mortgages and purchasing financial instruments and certificates of deposits. (Chavan, 2013)

Online banking can be classified as part of electronic-banking, which involve banking techniques like the ATM and telephone transactions. Internet banking provides numerous benefits for customers as well as for financial institutions and is already widely adopted in Europe. Since banking enterprises save costs by substituting human labor with computers and automating account-keeping processes, fees tend to be lower, while interest rates on deposits rise. However, these developments are not always reflected in reality, which indicates, that the amount of banking fees charged depends on other factors as well.

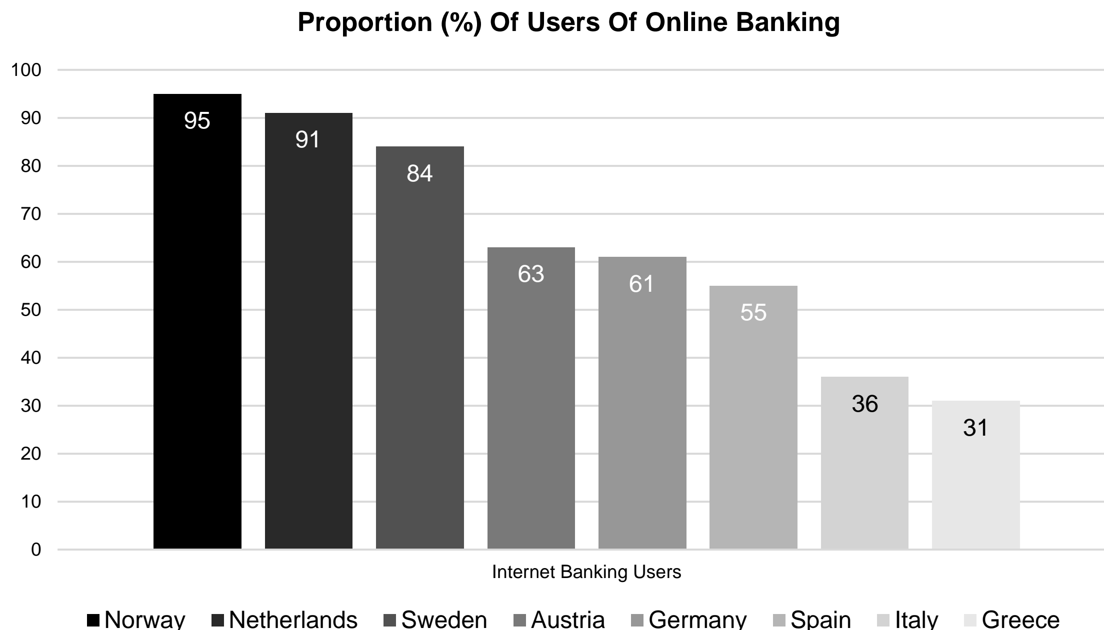

Figure 3: Proportion Of Users Of Online Banking (Rabe, 2020)

Furthermore the customers benefit from innovative services, like standing orders, and the ubiquitous accessibility of several services. Challenges on the other hand may discourage potential clients. The most significant issue banking institutions have to deal with is the guarantee of web security, which affects a customer's trust behavior significantly (Wu, Hsia, & Heng, 2006).

Regardless, online banking is widely used in Europe. Figure 3 shows the proportion of users of online banking in selected countries in Europe in 2019. While Scandinavian and Dutch citizens establish themselves as front-runners, Austria and Germany indicate average values. With around 30%, Italy and Greece are the EU member states, in which online banking is least used. The adoption of new technologies by the customers is considered highly relevant, since banks rely on of clients' behavior. Therefore, the implementation of cost intensive, modern distribution channels would not be constructive, when the consumers are not willing to use them once they are available.

According to Campbell and Frei (2009) the adoption and use of online banking is associated with various factors. For instance, the rise of the estimated average cost to serve due to an significant increase of the total transaction volume and other aspects. Although declining customer profitability in the short-term can be observed as well, the use of online banking is associated with higher customer retention rates.

6.3.2 Self-Service Models

Self-service models are considered extensions of the automation of business processes. Technological progress enables constantly enhanced self-service distribution channels in numerous industries, including banking. According to Sannes (2001), self-service technologies can be defined as technological interfaces, that enable customers to produce a service independent of direct service employee involvement. Self-service models, like the ATM or online banking, possibly reduce the marginal costs per interaction for enterprises as well as for customers. However, this may not apply on certain circumstances. For instance, the number of self-service channel users significantly affects the profitability from the bank's point of view. On the one hand the consumption of service resources per service interaction may decrease, on the other hand it may affect customers' demand for service, so that the overall demand for service resources increases. This trade-off decides whether financial institutions benefit from a specific self-service technology (Campbell & Frei, 2009). Rising banking fees may seem unfair to the customers, while the number of areas, where self-service models are applied, increases as well. However, the effective profitability of these innovations varies with the corresponding factors mentioned above.

7 Development Of Banking Charges In Europe

Originally, banking institutions generated a major part of their revenues by issuing loans and hence, charged interest rates based on the current market situation. However, the share of noninterest income in total revenue has increased significantly over time, in particular since the financial crisis in 2008 (Haubrich & Young, 2019). Although the data on the percentage of noninterest-based income varies across European states, holistic developments can be observed. In Austria, Italy, France and Germany the share of noninterest revenue grew by at least ten percentage points between 2008 and 2017. In Portugal the numbers even rose from 32% in 2008 to 54% in 2017 (The Global Economy, 2020).

Nevertheless, potential reasons for the mentioned developments are complex and versatile. Since banking institutions essentially rely on income, based on interest payments, it seems obvious, that developments regarding loan conditions affect banks' financial structures fundamentally (Haubrich & Young, 2019). Therefore the European key interest rate's impact on banks operating within the eurozone is rather immense. While the share of noninterest income in total revenue has increased, the EURIBOR index recently dropped below zero percent, which suggests a mutual dependency between those numbers. In comparison, back in 2008 the European key interest rate added up to 5%. Due to the financial crisis the index decreased constantly and has not grown notably since (EURIBOR-Rates, 2020). However, it is inevitable to keep in mind, that the number of loans taken out in the specified time period plays a vital role in this context. Considering the German market, besides a drop in 2013, an almost consistent rise of amounts of credits issued by German banks between 2001 and 2019, taken out by German companies or individuals, can be observed (Statista Research Department, 2020).

Figure 4 shows the relation between the EURIBOR and the share of noninterest income of banks in Austria, Germany, Italy and Netherlands. These countries will be analyzed regarding their banking fees in more detail in chapter 7.3. The graph indicates that the share of bank revenues based on noninterest income has increased in the selected European states since 2000. Furthermore it also demonstrates, that high key interest rates can come along with low banking fees, like in 2008 in Austria, Germany and Italy. Though, the numbers regarding the Dutch financial institutions illustrate, that this is not always the case. Therefore key interest rates may affect the share of noninterest income, however there are numerous other factors, that are considered influential.

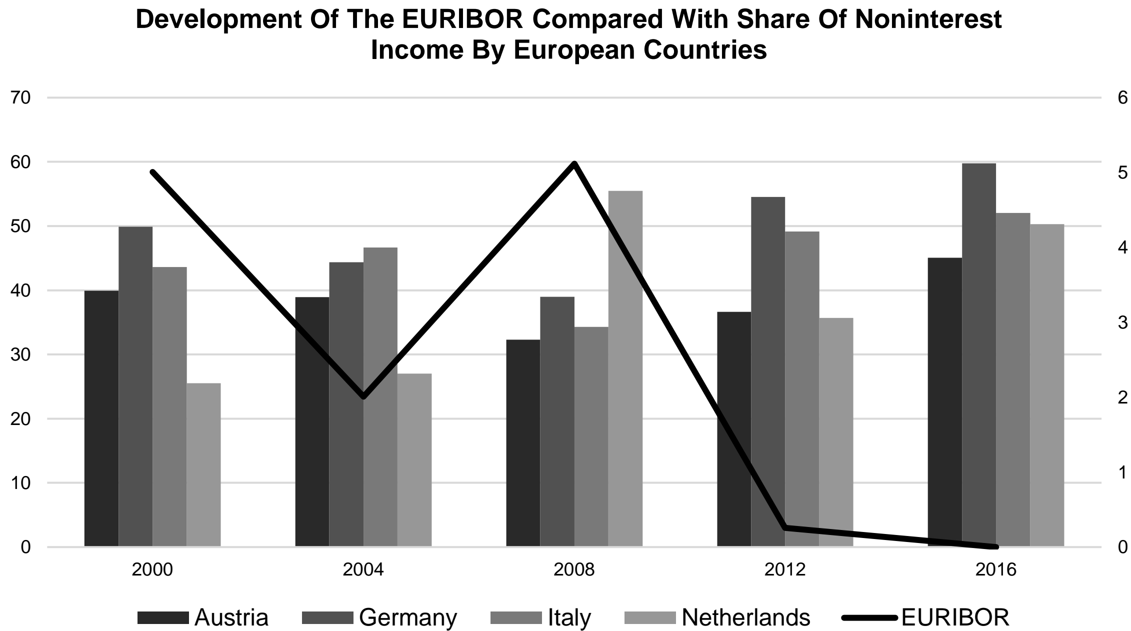

Figure 4: Development Of The EURIBOR (EURIBOR-Rates, 2020) Compared With Annual Banking Fees By European Countries (The Global Economy, 2020)

Nevertheless, noninterest income cannot be equated with fee-based revenues. As already mentioned in chapter 6.2 noninterest income can be partitioned in two main revenue streams: fee-based and trading-based income. Ayadi et al. (2016) as well as Köhler (Koehler, 2013) confirmed that fee-based income traditionally represents the largest part of noninterest earnings of the European banking institutions. Effectively, fee and commissions on average comprises two thirds of banks' total noninterest income within the euro area and between 22% and 30% of euro banks' total net revenue (Kok, Mirza, & Pancaro, 2017).

Since charging fees can be almost defined by banks themselves, fee and commission income is considered much more stable and flexible, while trading and interest income is significantly more volatile (Koehler, 2013). Therefore banking institutions tend to raise banking fees, due to revenue-inhibiting developments, like the drop of the European key interest rate, which led to damages regarding interest earnings.

In addition to the EURIBOR, there are other factors, that provoke increasing banking fees. These factors base on differences across European member states. For instance, market competitiveness and industry concentration affect developments regarding banking charges. In this context Dvorák and Hanousek specify relevant aspects and differentiate between supply-side and demand-side circumstances:

> The existing literature implies that among the most likely supply-side factors affecting the vast differences in bank fees from country to country are bank costs, market competitiveness, and the extent and form of banking industry regulation. Among demand-side factors, cross-subsidization between different bank products is a

possibility as banks try to maximize the benefits from a pool of clients with given demand characteristics. (Dvorák & Hanousek, 2009)

According to a paper by Kok, Mirza and Pancaro (2017), where the authors analyzed the development of European banking fees in the macroeconomic context, fee and commission income ratio is particularly varying with changes in its own lag, the interest rate, stock market returns and the economic as well as the financial cycle, respectively the real GDP growth. All figures mentioned seem quite reasonable, since internal factors, like the revenues based on charges in the past and stock market returns, as well as the externalities, like interest rates and the economic activity, directly affect the income structure of banking institutions. If one income stream drops, the elevation of the banking fees appears to be the obvious solution, due to their flexible and rapid yielding characteristics (Kok, Mirza, & Pancaro, 2017).

Regarding the European area, banking institutions are typically not affected by that many differing, national regulatory procedures, since the European Union operates as a supranational regulatory authority and determines a common scope. However, this topic will be covered in chapter 7.2.

Other differences can be observed based on the specific type of bank. For instance, retail banks in particular rely on net interest income, which amounts to 71% of their income in total, while investment banks' income consists of less than 50% of net interest earnings. Therefore the share of fee and commission income of investment banks is relatively high and adds up to 31%. For the commercial banks, commission and fee income are significantly more important than for other ownership structures. The trading income and other income are significantly lower for cooperative and savings banks (Ayadi, et al., 2016).

7.1 Banking Fee Models

Although a vast range of banking fee models exist, the financial institutions themselves decide, in compliance with the regulations, which one they apply and to what extent. Therefore this chapter aims to mention the most common types and describe them briefly.

Maintenance fees are charged for maintaining a bank account, usually giro accounts, and providing additional services, like personal counseling. Direct banks tend to waive these charges. However, in return maintenance fees sometimes offer benefits to the customer, like free ATM withdrawals. ATM fees are usually charged for using the service of an independent or third party bank's ATM. Nevertheless amount and application methods vary across countries. While in Austria, independent ATMs impose 1.95 EUR, cash withdrawals for Dutch debit card owners are usually free (Wikipedia Contributors, 2020).

Wire transfer fees are charged for electronic transfer transactions between bank accounts. Potentially European banks can apply that kind of fee model, though it is not very common

within the European Union. Basically, EU banking institutions are obligated to charge the same rate for payments in euro across the EU as it does for equivalent national transactions. This includes any transfers between bank accounts in different EU countries as well as direct debit transactions (European Union, 2020). Indeed, this topic will be covered in detail in the following chapter.

Some banking institutions offer overdraft protection, which can be described as a loan, provided to costumers, who's bank account reaches zero. It enables to continue performing payment transactions and therefore the client has to pay interest on the loan as well as a flat fee. However, in case the overdraft has not been arranged priorly, the bank may also charge an additional penalty fee, which happens to be substantially higher (N26, 2019).

Debit or credit card fees affect individuals as well as merchants. While merchants usually have to pay basic fees, that imply the rent for card terminals and a fixed contingent of free transactions, many financial institutions issue credit cards to their customers for free, though some require a certain amount of revenue on the credit card in return. Others charge an annual fee. However, special regulations apply within the European Union. For instance traders and banks in general are not allowed to charge an extra fee, just for paying with a particular card. Indeed, credit and debit cards issued by three party schemes, and business or corporate credit cards, where the employer is billed, are not covered by EU rules on payment services. Furthermore financial institutions can legitimately charge currency conversion fees for payments using other EU currencies than euros (European Union, 2020).

7.2 European Law Restrictions

After the European dept crisis in 2009, which affected several countries, that were part of the eurozone, the EU decided to establish the European Banking Union in 2014. Its purpose was to transfer national competencies to central institutions as well as the introduction of common guidelines across all Euro states (Demary & Bauer, 2014).

Numerous new regulations followed, including several guidelines, respectively directives, regarding banking fee adjustments. The following deals with these directives and describes the impact of the introduction of the Single-Euro-Payments-Area (SEPA) on banking fees.

7.2.1 EU Directives

Since the European Union operates as a supranational regulating authority, usually the European Commission specifies directives, which, in contrast to regulations, do not apply directly. Hence, they have to be converted into national law by the EU member states, which leaves a certain amount of leeway. Therefore the exact implementation of these regulations varies across countries, even if the main specifications are the same.

Directive 2014/92/EU of 2014 represents a significant guideline regarding banking fees and applies to all states within the European Economic Area. In addition to other consumer protection policies, this directive aims to ensure transparency in dealing with banking fees regarding payment accounts. Financial institutions are no longer allowed to charge hidden fees when calculating account costs and have to disclose all fees, costs and commissions that incur for opening, maintaining or closing an account. Furthermore a limit on fees regarding credit card payments was established in 2016, which was based on the purchase value. Since 2017 extra charges for credit or electronic cash payments are prohibited. As already mentioned, traders and banks in general are not allowed to charge an extra fee, just for paying with a particular card (Abele, 2020).

Another crucial directive, introduced by the European Commission in 2015, is the Payment Services Directive (EU 2015/2366), respectively PSD2, which aimed to standardize national legislations across member states of the Single-Euro-Payments-Area. In addition customers should be better protected when paying online and cross-border. The Payment Services Directive affects FinTech enterprises as well. For instance, in Germany PayPal, an online-payment service, interdicted merchants from passing the PayPal fees on to their customers (Wikipedia Contributors, 2020).

Although PSD2 does not deal with banking fees primarily, its precursor of 2007 eliminated various obstacles regarding the introduction of SEPA (Wikipedia Contributors, 2020).

7.2.2 Single-Euro-Payments-Area (SEPA)

SEPA is a payment-integration initiative of the European Union (Wikipedia Contributors, 2020) aiming for harmonization and standardization of noncash monetary transactions within the EU and beyond. This involves the abolishment of differences in electronic payment services and hence, regulations regarding banking fees. In 2008 pan-European payment instruments became operational and in 2014 the migration of SEPA payments in all Eurozone countries was completed. Currently, in 2020, SEPA consists of 36 member states, including all 27 EU member states, the four EFTA states, the United Kingdom and several ministates (Wikipedia Contributors, 2020).

Since 2009, charges for cross-border euro-transfers and direct debits within the European Economic Area (EEA) have to be equal. In addition the following regulations apply within the EEA:

> Banks and payment institutions still have the option of charging a credit-transfer fee of their choice for euro transfers if it is charged uniformly to all EEA participants, banks or payment institutions, domestic or foreign. This is relevant for countries

which do not use the euro. Domestic transfers in euros by consumers are uncommon and inflated fees might be charged. (Wikipedia Contributors, 2020)

Regulation 2015/751 caps interchange fees at 0.2% of the transaction value for consumer debit cards and at 0.3% for consumer credit cards (EUR-Lex, 2018). Furthermore Regulation 260/2012 declares multilateral interchange fees as prohibited (EUR-Lex, 2019).

Besides arrangements regarding transparency, charges for currency conversion and maintenance fees in general are not regulated.

7.3 Comparison of EU Member States

This chapter deals with the banking industry in four EU member states, focusing in particular on the recent developments of banking fees. The selection of relevant countries is based on statistics published by the European Commission in 2009.

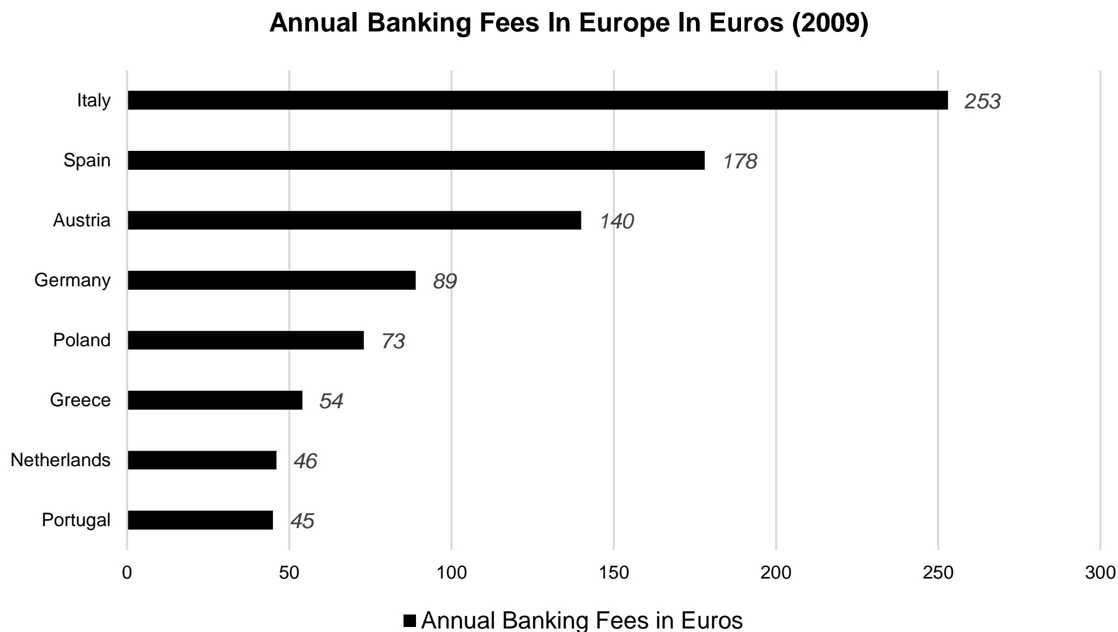

Figure 5: Annual Banking Fees In Europe In Euros (Statista Research Department, 2009)

Furthermore, it was crucial, to ensure that all countries have the Euro as their currency, which facilitated comparisons regarding key interest rates. Hence, the consideration of currency exchange rates and varying regulation standards was not necessary. Another crucial requirement was comparability based on GDP per capita, so significant economic differences could be excluded. However, in addition to Austria, Germany and the Netherlands, Italy was selected as well, despite the fact, that Italy’s GDP per capita is below the EU average. Nevertheless, Italian banking institutions relatively charge tremendously high fees and therefore are covered as well.

The following table compares the analyzed countries based on economic and bank-specific key figures. The figures mentioned give an overview of the relevant state. In addition, dimensions, that are considered influential when it comes to banking fees, are specified as well. Therefore, GDP per capita and the economic growth rate operate as indicators for the economic state of the specific country, while the branch density and the share of users of online banking, illustrated in Figure 3, distinguish the degree of adoption of new technologies in the financial sector. Although other factors, mentioned above, are considered relevant as well, the development of banking fees in Austria, Germany, Italy and the Netherlands will be explained based on these specified dimensions.

	Austria	**Germany**	**Italy**	**Netherlands**
GDP Per Capita (2019, EUR)[1]	45,000	41,000	30,000	47,000
Branch Density (2017)[2]	4.8	3.5	5.0	1.0
GDP Growth Rate (2018, %)[3]	2.4	1.5	0.8	2.6
Population (2019)[4]	9.01	83.78	60.46	17.13

Table 1: Economic Statistics Of Selected EU Member States

7.3.1 Austria

In 2019 the Austrian GDP, according to the Austrian National Bank, increased again relatively to the previous year, which also affects the banking industry. While financial institutions observe a decrease of net interest income since 2011 from 20.4 Billion to 15.2 Billion in 2018, revenues based on fee and commission basically remained the same. However, the demand for loans is growing steadily, which applies to households as well as to companies. These contrary developments demonstrate, how a low key interest rate affects banks' net interest income (Fuchs, Vondra, Wittenberger, & Roitner, 2019).

According to a study by Korntheuer, Prantner and Rupprecht from (2019), which analyzes the developments regarding bank charges on the basis of 12 banking institutions in Vienna, the majority of banks raised their fees in 2018. Just like in previous years, the most significant increases occur in areas, where traditional banking services are provided. Hence, additional costs regarding banking fees mainly affect customers, who prefer performing banking transactions at the counter, rather than using an ATM or online banking, potentially due to lack of trust or computer skills. Furthermore banks increased their fees remarkably for services, that involve the effort of an employee in a branch. For instance, charges for performing cash deposits in branches rose significantly compared to 2010. Depending on various factors, like whether the

[1] Total value of all goods and services that were produced within a country's borders in 2019 in Euro (Urmersbach, Bruttoinlandsprodukt (BIP) Pro Kopf In Den EU-Ländern 2019, 2020)
[2] Number of bank branches per 10,000 inhabitants in 2017 (Brandt, 2017)
[3] Annual GDP growth rate relative to the previous period in 2018 (World Bank, 2020)
[4] Population in Million in 2019 (Clark, 2020)

client keeps an account at the specific bank, customers have to pay 8.00 EUR for depositing cash. By comparison, in 2010 the relevant bank only charged 4.50 EUR for the same service. Nevertheless one third of the reviewed financial institutions did not raise their banking fees (Korntheuer, Prantner, & Rupprecht, 2019).

The comparison of maintenance fees regarding checking accounts shows the range of annual costs for costumers and indicates differences between direct and traditional banks (Bankenrechner AK, 2020). The only institutions, that do not charge fees for a basic checking account in Austria are DADAT and ING-DiBa, which are direct banks. The most expensive account model annually costs 241.30 EUR. On average, account management fees in Austria amount to 112.39 EUR. However, despite the fact, that all the offers compared relate to checking accounts, there is notable variation regarding additional services. For instance, some models are aimed only at students and while various offers involve the provision of a credit card, others do not. Thus, comparing banking fees in general is rather complex, due to the variety of services and its charges.

Referring to the numbers in Table 1, there are a few figures, which would adumbrate low banking fees in Austria. For instance, the Austrian real economy, measured by GDP per capita, seems relatively stable and the economic growth rate, which is above the EU average, indicates an increasing demand on loans and therefore decreasing bank charges. Nevertheless Austria holds comparatively high amounts of fees. Figure 3 shows, that only two-thirds of the Austrian bank customers are actively using online banking. Furthermore, Austria has a high value when it comes to branch density and therefore banks tend to deal with immense costs regarding facilities and labor. Both circumstances indicate a low level of acceptance regarding internet banking. As a result banking fees tend to be relatively high, since banks are not able to implement novel, cost-reducing technologies and reduce traditional services due to a lack of adoption.

7.3.2 Germany

Nowadays German banking institutions are facing typical challenges. According to Joachim Wuermeling (2019), member of the Executive Board of the Deutsche Bundesbank, banks in Germany have traditionally generated their income majorly based on net interest earnings. However, low interest rates lead to low profit margins. Therefore increasing fees, for instance maintenance charges, are inevitable from a bank’s point of view. Furthermore Wuermeling mentions other factors, that drive changes in the banking industry:

> Germany’s banks also have an efficiency problem and many are trailing behind in the digital revolution. First, Germany's banking sector is close to the bottom of the list in the international comparison of cost ratios, i.e. the ratio of administrative expenditure to income. Budgets are stretched through too many branches, time-

> consuming processes, generous headcounts and antiquated IT. It is therefore not enough to merely raise charges. (Wuermeling, 2019)

A study by McKinsey notes that banking fees in Germany generally increased over the last years, nevertheless gains were often offset by declines in net interest income. For instance, fee income of German banking institutions represents a share of 25 percent of total income from 2014 to 2017. By comparison, it was only 23 percent from 2010 to 2013 (Koch, et al., 2019).

In February 2020, the largest direct bank in Europe, the Dutch ING DiBa, announced the abolition of the free giro account in Germany for specific clients. Therefore costumers, who particularly use their account for saving purposes, have to pay charges of 4.90 EUR per month. However, a monthly deposit of 700 EUR will waive these maintenance fees (Focus, 2020). This example shows, that direct banks, despite having significantly less fixed costs than traditional banking institutions, need to start charging fees, due to factors, like market competition or other developments mentioned above.

Germany in specific holds relatively average values in Table 1 and has the same share of online banking users as Austria. Nevertheless, German banking branches are not as widespread as Austrian ones, which indicates a relatively higher level of adoption of the new financial technologies. Therefore, the amount of banking fees charged in Germany fits well with its determinants, considering the mentioned figures.

7.3.3 Italy

Italian banking institutions have the highest costs of banking services in Europe. Mammone, Parini and Veltri mainly justify this incident with cross-ownerships among the major Italian bank groups (Iona, Leonida, & Silipo, 2015). However, first it is crucial to get an general overview of the Italian banking industry, before specific reasons can be detected.

The Italian banking sector has been in trouble since the financial crisis in 2008, although the financial institutions seemed fairly robust compared to banks in Germany or Greece. Italian banks continued issuing loans, mainly to finance the real economy. In 2009, the total amount of bad debt was 60 billion EUR, which was considered comparatively few. As a result of the Euro crisis in 2011 more regulations were introduced and the European economy plunged into recession. Therefore the number of bankruptcies in Italy increased and private income fell (Braun, 2016). Furthermore the amount of distressed dept has increased and currently adds up to 360 Billion. Most of these bad loans are based upon credit transactions with the Italian corporate sector. As a result, the insolvency risk of companies was transformed into the credit risk of commercial banks. However, the current crisis in the Italian banking sector is only partially a result of a risk-based business model. The risk of loan defaults is particularly high in

times of economic weakness. Nevertheless, as already mentioned the European Union introduced new regulations and is now taking a closer look at the larger banks. In addition there is the low interest rate policy of the European Central Bank. All these factors affect financial institutions in critical situations and hence, can be seen as potential reasons for the necessity of public bank rescues in Italy (Schrooten, 2016).

The annual report of the Banca D'Italia in 2019 indicates that the total income of Italian banks slightly increased from 2017, though compared to 2008 the total revenue declined notably. For instance the net interest income in 2018 remained 13.1% lower than in 2011. The earnings based on fees slightly increased over the last years. In 2018 nearly half of the significant banks' fee income came from asset management activities, especially the placement and distribution of investment fund units and insurance policies of group entities or third parties (Banca D'Italia, 2019).

Figure 5 demonstrates, that Italian banking institutions charged the highest fees in 2009 across Europe. However, according to a study by the Banca D'Italia of 2019, the annual maintenance fees in Italy declined from 2011 to 2015. Since then, they increased again and the cost of managing a bank account in 2018 added up to approximately 87 EUR (Banca D'Italia, 2019). Regarding these figures, it should be pointed out again, that direct comparisons of banking fees are difficult to make, since offers significantly vary, relative to service and banking fee model.

However, the numbers in Table 1, to an extent explain the relatively high amounts of banking fees in Italy. For instance, a GDP per capita value below the EU average and a low economic growth rate underline the circumstances described above. While the economy in Austria, Germany and the Netherlands has constantly grown since the financial crisis in 2008, Italy experienced another slump in 2012 (World Bank, 2020). In addition, Italy holds one of the highest branch density values in Europe and only 36% of bank customers are currently using online banking. All these factors combined lead to increasing banking fees, which can be observed in the Italian banking sector.

7.3.4 Netherlands

The Dutch banking market particularly differs from the banking sector in Austria, Germany and Italy by its market concentration. According to De Nederlandsche Bank, the Dutch national bank, the five largest banks in the Netherlands account for about 85% of the balance sheet in total. In addition Rabobank, ING and ABN Amro control 60% to 80% of the banking markets for mortgages, business loans and savings and since the financial crisis in 2008 their combined market share regarding mortgage lending has even grown. Over the last decades Dutch traditional commercial banks developed into universal institutions, offering a variety of services, which enabled the trend towards an oligopolistic market (DeNederlandsche Bank, 2015).

In addition the banking sector in the Netherlands is considered relatively competitive and the large banks are internationally active in order to serve the open and export-oriented Dutch economy.

A closer analysis of the three market leaders mentioned above shows that these financial institutions operate significantly less branches. In 2019 the Rabobank maintains 367 branches, while ING and ABN Amro offer their services in 231, respectively 162 branches. By comparison, the Erste Bank in Austria alone operates around 1,000 branches (de Best, 2020). These circumstances confirm the figures regarding branch density in Table 1, where the Austrian value is almost 5 times higher than the Dutch value. Since bank branches are traditionally considered significant fixed cost objects, this may be one reason for relatively low banking fees in the Netherlands. In addition, Figure 3 shows, that internet banking is widely-used in the Netherlands, since 91% of the Dutch bank customers declare to manage their bank account online. Another indicator for low banking fees is the relatively high GDP growth rate in 2018.

Developments regarding Dutch banks' income structure, indicate a stable level of revenues based on net fee and commission amongst the leading financial institutions. Although the net fee income of the ING bank increased by almost 25% in 2018 compared to 2013, the numbers of the Rabobank and ABN Amro remained basically the same (de Best, 2020).

8 Conclusion

This paper focused on the development, particularly the increase, of banking fees in the recent years in Europe, while improving technology and digital innovations have led to cost reduction possibilities. Furthermore self-service models in the banking sector have flourished as well, which results in more and more customers complaining about unjustified prices. However, a critical evaluation needs to include more than only these factors and should consider different points of view.

Since charges represent a revenue stream for financial institutions, the income structure of banks is a critical issue when it comes to fees. Although most banking enterprises primarily rely on net interest income, fee-based earnings constitute a significant share of the total income of banks. In fact, fees and commissions, on average, represent almost 30% of euro area banks' net revenue. Despite various regulations regarding bank charges by the European Union, the amount of fees charged can be defined by banks themselves and therefore provides a stable and flexible kind of income stream.

As already mentioned, the most significant part of the banks' total revenue is based on net interest income. However, this source of income heavily relies on external developments, that cannot be controlled by banks themselves. For instance, key interest rates are considered highly influential when it comes to banking fees. In Europe the EURIBOR was at 5% in 2008,

dropped under zero in 2016 and has not recovered notably since. Therefore, interest rates for loans are low and since banks' income based on interest decreases, financial institutions usually tend to increase charges instead. In addition, the existing literature indicates, that banking fees vary with the economic cycle and the GDP growth rate. The Italian financial industry, where the highest amounts of fees within the EU are charged, demonstrates, that crises regarding the real economy directly affect the banking system and its enterprises.

Another significant factor regarding the development of bank fees is the market competitiveness. Due to new innovations in areas like internet banking or payment, a whole new industry, called FinTech, emerged and bore innovative financial companies, which directly compete against traditional banking institutions. Hence, banks' cost advantages decrease, in return traditional banking services' profitability declined and services, that involve fee and commission charging, flourished. Moreover, established banks are forced to invest in novel technologies to stay competitive. Therefore, parts of the saved costs are turned into essential innovations and entire business models are adapted.

Considering all aspects, the development of banking fees is determined by various factors and cannot be attributed the technological progress on its own. However, a general evaluation of banking fees across Europe, or even a country, is hard to perform, due to a variety of financial products with corresponding charges and different external factors. The determinants of fees, listed in this paper, explain certain developments and therefore justify the amount of fees charged for the most part.

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