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GERMAN BANKING AND THE RISE OF FINANCIAL CAPITALISM

A CASE OF EXTRAVERTED FINANCIALISATION

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Thesis submitted for the degree of
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Declaration

I hereby declare that this thesis has not been and will not be, submitted in whole or in part to another University for the award of any other degree.

Signature:.....

Summary

This thesis examines the impact of the rise of US finance on the financialisation of German banking. The Great Financial Crisis (GFC) has highlighted that German banks have been deeply involved in US speculative practices. Departing from their traditional role as provider of long-term loans to corporations and broader commitment to German industry, it appears that German banks have become increasingly like US American banks.

This shift towards a US form of finance is often understood as a process of 'marketisation'. German banks supposedly adopted 'market-based banking' because they could make higher profits on global financial markets. However, the notion of market-based banking cannot account for the novel imperatives and constraints that the rise of US finance has raised for German banks. Market-based financial practices have a long history in German banking and, therefore, cannot explain the profound transformations of US-led financialisation. Consequently, scholars struggle to grasp why and how German banks changed their practices in response to the rise of US finance.

To understand the trajectory of German banking, I propose the original concept of 'extraverted financialisation'. The concept aims to capture the problems of financial agents seeking to imitate financial practices that others have developed in a different context. The concept more specifically portrays the rise of US style finance in Germany as an outcome of a major shift in the way US banks have funded themselves. In the 1960s, US banks started to fund themselves with short-term securities issued in US money markets, which allowed them quicker access to larger amounts of funds. This strategy, called liability management (LM), imposed novel and distinct imperatives for non-US banks: accessing US dollars (USD). I show how this forced German banks to find a way into foreign financial markets which were based in London and Luxemburg (the Eurodollar markets), and more importantly in the US. As a result, German banks had to gradually implement the practices of LM to obtain USD from US money markets to operate in these markets.

I articulate my argument through historicising the strategies of the two biggest German banks: Deutsche Bank and Commerzbank. Chapter two surveys the CPE literature on the transformation of German banking and establishes the concept of extraverted financialisation. Chapter three examines the strategies with respect to their original market-based funding, the *Pfandbrief*, to highlight that not all market-based practices lead to financialisation. In chapter four, I analyse how German banks started seeking dollars on the Euromarkets in the 1960s to regain their capacity to finance the internationalising German industry. Chapter five demonstrates how the attempts to access USD in US money markets since the 1970s drove German banks' shift to LM. Finally, I scrutinise the banks' internal power struggles over strategies of how to respond to the imperatives of LM. This will highlight the severity of LM's impact and the banks' dependence on USD it has caused. The conclusion emphasises the broader implications of the rise of US finance for (policy) initiatives to transform global banking.

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List of abbreviations

ABCP	Asset-backed commercial paper
ABS	Asset-backed security
AGM	Annual general meeting
BIS	Bank for International Settlements
CD	Certificates of deposit
CCMC	Commerzbank Capital Markets Corporation
CMI	Capital Management International GmbH
DBCC	Deutsche Bank Capital Corporation
DBSC	Deutsche Bank Securities Corporation
DM	Deutsche Mark
EAC	European Advisory Committee
EBIC	European Banks Investment Company
FX	Foreign exchange
KfW	Kreditanstalt für Wiederaufbau
MBS	Mortgage-backed securities
MMF	Money market fund
MNC	Multinational corporation
NPL	Non-performing loan
RAROC	Risk-adjusted return on capital
Repo	Repurchase agreement
RMBS	Residential mortgage-backed securities
RoAE	Return on average equity
SHV	Shareholder value
USD	US dollar

1 Introduction

In September 2008 the Great Financial Crisis, triggered by the collapse of Lehman Brothers, shook the world. A decade later its spectre still haunts us. As the appalling scope and scale of the crash was revealed, the financial institutions that had symbolized the West's triumph since the end of the Cold War seemed – through greed, malice and incompetence – to be about to bring the entire system to its knees (Tooze, 2018).

1.1 The US Americanisation of global banking

Since the Great Financial Crisis (GFC), German finance has been in trouble. Huge losses and several bankruptcies of German banks during the GFC highlighted the reality that the German banking sector was deeply involved in risky speculation to the surprise of academics, journalists and politicians alike. Peer Steinbrück, Germany's federal finance minister at the time, claimed in the late summer of 2008 that the GFC was a problem confined to the US, the product of an "irresponsible rise of the laissez-faire principle" and inadequate regulation (cited in Hardie and Howarth, 2013a, p. 104). Less than a week later, however, he announced the biggest public bailout of a German financial institution to date, €35 billion to Hypo Real Estate. Subsequently Commerzbank, the second biggest commercial bank in Germany, received a public bailout of around €18 billion (Buch et al., 2011) with the German state still now owning a 15% stake in it. German banks were heavily involved in speculating on people's homes with the help of residential mortgage-backed securities (RMBS). Yet their RMBS were financed by US dollars, received from US investors through money market funds (MMF). When MMF withdrew their European investments, German banks struggled to refinance and went into crisis.

About a decade later, Deutsche Bank and Commerzbank, Germany's biggest banks, continue to struggle – to the extent that calls have been made for mergers as the only rescue for them and to restore their capacity to provide adequate funding for the German economy. As John Cryan, head of Deutsche Bank from 2015 to 2018, e-mailed to Deutsche's employees, "we have ambitious goals, but the numbers do not add up just yet" (cited in Willmroth, 2018, own translation). In 2016, Deutsche made a €1.4 billion loss (The Economist, 2017a). These 'numbers' continue to be in a dire state. An analysis by JPMorgan Chase estimated that Deutsche was losing 25 cents for every dollar of business it did in the US. As a result, Deutsche's shareholders called for a withdrawal from US investment banking, which Deutsche seems to run at a loss (Storbeck

et al., 2019b). The world waited aghast for the outcome of Deutsche's court hearings in the United States two years ago, as the US Department for Justice threatened to ask for USD 14 billion to settle claims connected to Deutsche's RMBS business (The Economist, 2016). In the end, the deal was settled for USD 7.2 billion (The Economist, 2017b). This showed nevertheless that the US had the power to bring down the German giant for mortgage fraud in 2016 (Tooze, 2018, p. 16). Christian Sewing, current head of Deutsche Bank, promised a shift away from US investment banking to more 'boring German banking' during last year's AGM, which received loud applause from its shareholders (Schreiber and Willmroth, 2018). Investment banking was Deutsche's main source of profits in the early 2000s. However, since the GFC, German banks linger between a 'retreat' from investment banking and attempts to make it work profitably again.

The problems of speculative investment were initially shocking to many people. Not only politicians such as Steinbrück were surprised but also financial experts, including some of the bankers themselves (Lewis, 2011), expressed surprise about how severe the losses were. In September 2008, Germany had accounted for a quarter of European bank write downs (IMF, 2008). Traditionally, German banks were seen as prudent financial actors that provide funding for industrial production rather than engage with financial speculation (Hardie and Howarth, 2013a; Streeck, 2009). The recent financial deals by German banks have therefore been understood as a departure from the traditional German banking model within the comparative political economy (CPE)¹ literature (Heires and Nölke, 2014). Scholars used to associate German finance with lending long-term rather than speculating with short-term financial practices. Long-term loans would act as buffers for corporations, shielding them against the short-term pressures of financial markets so that they could focus on long-term investments. Banks would monitor and control corporate performance relying on insider information. They had access to that information because of their close relationships to corporations, ensured by many supervisory seats and large equity stakes. For funding, German banks could rely on customer deposits instead of financial markets and institutional investors. Deposits were seen as a more reliable funding source because German retail customers tend to be loyal, and bank runs rare.

Because banks were relatively more important for corporate funding than financial markets, German finance has been termed 'bank-based'. Equity and securities markets as opportunities for firms' finances are less liquid in Germany and therefore often serve as evidence to illustrate

¹ In this thesis, I group the CPE literature with the comparative capitalism and historical institutionalism literature if they have a comparative focus. They have large overlaps, and rest on similar assumptions for the analysis of German banking.

the dominance of bank loans over market-based lending. This demonstrates for many scholars that German banks were largely unchallenged in determining the conditions and prices of their own credit business. Consequently, banks were attributed with monopoly power over capital allocation to non-financial corporations. Indeed, the interdisciplinary debate on finance has long relied on the contrast between market-based and bank-based financial systems to differentiate between socio-economic models. The prevalence of patient capital instead of short-term profit maximisation has often been highlighted as forming the basis for Germany's success with high quality production that ensured its dominant position in the international division of labour (Sablowski, 2008, p. 135).

The increasing use of short-term practices and particularly the losses during the GFC have raised questions about Germany's own shift to financialisation.² For many, this has highlighted that German banks have become more like US banks. US finance is commonly characterised as a market-based system with short-term financial practices that most closely resemble the ideal type of a decentralised 'free market'. US financial markets are seen as very competitive as they are populated by many financial actors that must compete for business. Scholars have highlighted that instead of banks, corporations often use capital markets to fund themselves, showing that banks are unable to dominate financial relations and cannot form monopolies as in Germany's original bank-based system. Funding on financial markets is associated with an 'arms-length' or transactional approach to lending. Instead of personal insider information, financial actors would rely on impersonal market metrics to assess non-financial corporation's performance. Consequently, banks lend short-term because they are reluctant to assume the risk of long-term lending via volatile financial markets (cf. Zysman, 1983).

As I show in more detail in chapter two, the rise of US finance is therefore often understood as a process of 'marketisation'. The concept of marketisation portrays financialisation as a process in which financial actors and corporations increasingly fund their business on financial markets. Because of financial liberalisation and globalisation, so scholars argue, US finance has increasingly affected other national financial logics, a process often located in the 1990s. The growing reliance on market-based practices has significantly decreased the demand of

² Financialisation here is understood as the rise of US finance in general, but specifically the rise of US financial wholesale markets and their growing importance globally for the operations of banks. See below and chapter two for an expanded definition of 'extraverted financialisation'. A widespread definition characterises financialisation as "the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies" (Epstein, 2005, p. 3). This definition is often criticised as too vague to be useful for a historical analysis (Beck and Knafo, forthcoming). See Van der Zwan (2014) for an analysis of different theoretical approaches to the study of financialisation.

corporations for bank loans which supposedly resulted in a decline of banks' business. Scholars have emphasised that, as a result, banks have progressively focused on short-term financial value. This has increased speculative financial practices because banks do not have to assume the risk of holding long-term loans anymore. As a result, commercial banks have gradually transformed into US-style investment banks which speculate on capital markets.

What is surprising about post-crisis financial performance is that US banks appear to be doing well in contrast to German banks. The on-going financial predicament of German banks poses a puzzle. If US banks were so much more speculative pre-crisis, why were they not more affected by the GFC than German banks? Instead, the five biggest US banks increased their revenues by 12% and their assets by 10%, and their workforce has shrunk by less than 10% since the GFC. By contrast, the five biggest European banks' revenues declined by 20%, their assets by 15% and their headcount by almost 30% (Arnold, 2018). German banks, on the other hand, have traditionally been attributed with extraordinary power to determine the interest rates of their own loans. Many authors have suggested that German banks were leading the shift to US-style financial markets because they promised higher profits than issuing corporate loans (Beyer, 2003; Deeg, 1999; Lütz, 2000; Streeck, 2009). If they were, why and how did they lose their ability to shape their own fate in the age of financialisation? Both Commerzbank and Deutsche Bank have been consistently attempting to retreat from investment in 'speculative' assets in the US but continue to struggle. Why can they not reverse their course?

I argue that the difficulty in understanding the changes in German banking stems from our inability to grasp the nature of financialisation. The different outcomes of the GFC illustrate that there are distinct trajectories of financialisation for banks. As I will show, the concepts scholars use to come to terms with financialisation neglect the distinctive role of German banks within this shift and the reasons why they would participate. Banks, contrary to assumptions about growing market pressures, are still central agents in finance (Christophers, 2015; Sgambati, 2019). They have apparently withstood the crowding out by US financial market logics. This thesis will demonstrate that banks' problems instead stem from very distinct imperatives and constraints that cannot be explained by marketisation. By contrast, I show how financialisation rests on a globally unequal power relation: the rise of the money markets³ in the US and the corresponding need of everyone else to institutionalise access to US dollars.

³ The money market is a wholesale market for short-term, highly liquid IOUs. It is a market for securities, rather than equity that is traded on capital markets. See Stigum (1990) for a very comprehensive analysis

Indeed, the GFC brought to light the problems that European banks have had with their USD funding and their dependence on US money markets (Borio and Disyatat, 2011; Shin, 2012). There is a small but growing scholarship that claims that the withdrawal of USD money market funding led to the collapse of European finance. USD money markets dried up, which prevented banks from rolling over their short-term debt. This was a crucial cause of their bankruptcies, rather than the loss of value of their speculative assets. Instead of US financial speculation, it was European banks' USD liabilities that caused the most adverse impact of the GFC (Tooze, 2018). As an IMF financial assessment states, "the legacy of the crisis has been a shift in the availability, form and cost of funding for German banks" (IMF, 2016, p. 4).

USD liabilities have not since declined. In mid-2018, USD 12.8 trillion were accounted for in non-US banks' balance sheets – as large as at the peak of the GFC (Aldasoro and Ehlers, 2018). The capacity to create USD liabilities has become a crucial issue for banks in response to the rise of US finance. As I will show in this thesis, the defining feature of German financialisation was not the loss of banks' ability to determine the prices of their assets. Instead, the transformation of German banking was driven by the banks' struggles to negotiate the imperatives of generating US dollar liabilities.

1.2 Extraverted financialisation: reconceptualising the US Americanisation of banking

The central argument of this thesis is that German financialisation should be conceived as a process of 'extraverted financialisation'. I propose this original concept to analyse the transformation of German banking in response to the rise of US finance. My concept can account for why banks outside the US have sought to establish themselves in US financial markets and to adopt US American financial innovations. It highlights the fact that the transformation of German banks' practices is an outcome of their 'extraverted' strategies through which they actively attempted to capture rising USD flows. The concept frames how banking practices outside the US transform while being constrained in their access to US dollars. By using this concept, I demonstrate that German banks' extraverted strategies actively *started* the process of German financialisation since the 1960s, rather than merely being affected by marketisation in the 1990s.

of the money market and its different instruments, including Certificate of Deposits, Treasury's debt, and Eurodollars, a. o.

The concept of extraverted financialisation rests on four theoretical dispositions that will guide my analysis of the transformation of German banking. These aspects can account for how non-US banks have responded to the rise of financialisation. In brief, the four aspects of extraverted financialisation are, firstly, that the concept reconceptualises the rise of US finance as a radical transformation of banks' funding practices, starting in the 1960s. Secondly, it accounts for new imperatives that the rise of US finance put onto non-US banks. Acquiring US dollars became vital for their banking practices. Thirdly, it highlights that US financial institutions uniquely accommodated the requirements for those new funding practices which meant that non-US banks had to establish themselves in the US. Finally, it shows that this process caused fundamental tensions and contradictions within the management of these banks, dependent on how the banks are integrated in the global financial architecture. I will explain these features in turn.

Firstly, to understand the US Americanisation of banking, it is necessary to grasp the model of banking that emerged in the process of financialisation. I focus on radically new funding practices, called liability management (LM) connected with the rise of the money markets in the US. LM depicts a new practice that financial actors use to finance themselves much more dynamically by buying and selling short-term securities in money markets. LM allows banks to collect large volumes of funds much quicker. The rise of LM has caused new constraints and imperatives for banks. In contrast to funding with deposits which accumulate slowly and steadily, money market papers are short-term and much more volatile. As a result, banks came to focus on the management of liabilities as a central strategy for the whole bank.

As I establish in chapter two, LM developed historically out of pragmatic responses to the crisis of funding that commercial banks in New York experienced in the 1960s (Beck and Knafo, forthcoming). In the United States, corporations had started to invest their cash in the money markets, where they could earn higher interest rates, rather than deposit it with banks. An interest cap on deposits due to Regulation Q⁴ meant that banks could not increase interest rates to retain those deposits. Consequently, banks could no longer fund themselves through cheap and secure customer deposits. As a result, they started to go to the money markets to get funding with the help of Certificates of Deposits (CD) (Stigum, 1990, p. 53f).

This new funding strategy imposed new constraints and pressures on banks. Money markets were more volatile and riskier, so funding became more expensive. To afford the higher costs of

⁴ Regulation Q was a Federal Reserve regulation, enacted in 1933, that imposed various restrictions on payment of interest. A current version sets out capital requirements since 2011.

funding, they had to adjust their assets. Banks started to invest in a way that would afford them higher yields. Their practices consequently carried higher risk, and they sought new ways to sell securities more quickly so that the securities would use up less expensive capital on the balance sheet. This caused a huge rise in financial transactions and US banks were able to leverage ever larger amounts of debt. As a result, financial markets grew globally. In that way, LM represents a core financial practice at the heart of the rise of US finance.

The second feature relates to the imperatives this entailed for non-US banks in how they conducted their financial practices. Using LM allowed US banks to control vast amounts of funds they could extend to global corporations. This allowed US banks to outcompete their global competitors. As I reveal in chapter three, the impact of this development cannot be adequately described as the rise of marketisation because German banks had already engaged with market-based funding in Germany for a long time. Instead, I demonstrate in chapter four that the crucial impact of the rise of US finance was the imperative it instilled for German banks to acquire large volumes of US dollars. German banks needed them to operate on global markets to be able to regain their assets. As a consequence, they had to change their financial strategies and start developing the practices of LM to capture the dollars.

Financial liquidity is a core issue that has fuelled the rise, power and leverage of finance (Amato and Fantacci, 2012; Fantacci, 2013). The concept of extraverted financialisation brings to bear the idea that this is not just any kind of liquidity, but USD liquidity. This, the German banks did not have because their home deposits were denominated in Deutsche Mark (DM), or later Euros. As I will argue throughout this thesis, this prompted German banks to innovate, engineering new ways to leverage their limited USD resources. Thus, the rise of financialisation was inherently tied to USD dependence. This was a core factor that caused the extraverted strategies of German banks and shaped the way they were able to compete on global financial markets.

The third feature concerns the financial institutions that the practices of LM are embedded in. The specific funding requirements for LM could originally only be met in US money markets. US financial markets are institutionally complex, deep and highly liquid, resting on a large pool of capital from financial institutions and corporations, but also from the wider populations such as retail customers (Konings, 2011). Large institutional investors in the US, such as pension funds for example, invested their capital in the wholesale markets (of which money markets were one specific market). As I will show in chapter four and five, US wholesale markets were core institutions that enabled banks to raise large volumes of short-term debt to manage the new liquidity needs of LM. They provided a crucial platform for banks to buy and sell securities,

allowing them to expand their balance sheets and leverage “to the extreme” (Sgambati, 2019). Thus, despite the large volume of US dollars that flowed globally, dollars ultimately had to be accessed in the US. In this way, US financial markets became a core anchor point in the global financial architecture.

This has resulted in distinct constraints which non-US banks have faced institutionally and practically in contrast to US banks. The practices of LM could not initially be established in their home markets. As chapter five demonstrates, by the 1970s and 1980s, the extraverted strategies of German banks were characterised by the attempts to establish institutionalised access to US money markets to meet the funding needs of LM. Banks needed a large presence in the US to sustain the funding practices of LM. The smaller debt markets in Europe and the fragmented nature of European capital markets were less suitable for LM. German banks had to circumvent various regulatory US financial restrictions against non-US banks and gain new expertise in developing and sustaining LM. They had to buy new banks and securities houses to find better ways to do LM. As a result, German banks not only changed their liabilities but also their asset side to address the implications of LM. As a result, non-US banks have established a global financial infrastructure with many institutional ties to the US to enhance their access to the US wholesale markets.

The fourth feature relates to the problems and internal contradictions in management that this has caused for non-US banks. Adopting LM meant that non-US banks had to bridge institutional and operational differences between their home institutions and the US money markets. This has posed a unique set of intra-institutional controversies for German banks that is vital in understanding the current crisis of German banking. Bankers refused to let go of their traditional lending practices. LM was not necessarily fully understood by German bankers nor compatible with the operational systems of the German banks. Looking at Deutsche Bank, chapter six highlights, firstly, that changing the nature of its banking strategies received much internal resistance. Secondly, the need to systematically sustain practices on wholesale markets causes fundamental tensions within its own operations. LM provided German banks with huge potential to leverage their USD funds and, particularly for Deutsche Bank, make large profits in the 2000s. However, since the GFC, dollars are more difficult to access, and the big German banks are struggling to sustain the funding of their US financial practices. And yet, both big private German banks, Commerzbank and Deutsche Bank, find it difficult to reduce their costly reliance on them, seemingly running them at a loss. After having created a global financial

architecture inherently tied to the need to access US dollars, German banks must continue to sustain US dollar banking, regardless of their problems with those dollars.

In developing the concept of extraverted financialisation, this thesis contributes to scholarship that aims to understand how global banks shape financialisation and the power they yield over these processes. Banks hold a central place in contemporary financial capitalism and are key protagonists of financialisation. As became apparent in 2008, the large conglomerates have systemic importance as the gatekeepers of liquidity in a highly leveraged financial system. In order to understand what banks do, this thesis opens up the black box of complex financial institutions too often taken for granted. The concept of extraverted financialisation aims to shed light on the processes of financialisation by conceptualising how German banks have contributed to them. The role of German banks in shaping global finance within these processes is often underestimated. By contrast, their practices, and why they have followed this path are central to this thesis.

My concept highlights that banks are crucial market agents concerned with the immediate imperatives and constraints of USD liabilities. As the four features of extraverted financialisation show, the possibilities for leverage have been historically uneven and have integrated a specific USD dependency into global financial markets. Financialisation has therefore given rise to inherently unequal power relations between global banks. These have been vital in how today's global financial architecture was forged.

1.3 Synopsis

This thesis is structured in seven chapters. After this introduction, chapter two analyses five scholars who represent key conceptual innovations within the comparative political economy (CPE) literature that have shaped our understanding of the transformation of German banking. I show how these authors understand the process of German financialisation as a form of marketisation of bank-based finance. I argue that the difficulty of coming to terms with the process of German financialisation rests on the fact that the literature uses ideal-typical conceptions of finance. This has resulted in a binary understanding of previous institutional and social relations as 'non-market' logics that have been infected by US financial markets, and dissolved as a result. This has made it difficult to assess the role of powerful banks within this process. This analysis has rendered them passive recipients of US financial market logics rather than active participants that span markets.

By contrast, I suggest employing the concept of extraverted financialisation that I detail in this section. This concept relies on the assumption that the rise of US finance is a revolution in funding practices that has imposed new but differentiated constraints and imperatives onto German and US banks. It suggests using the financial practice of LM to frame the transformation of German banking. The concept is useful because it helps to foreground the specific challenges that German banks have faced due to their dependency on US dollars. The concept thus zooms in on how non-US banks have innovated in response to financialisation.

Chapter three adopts a historical perspective in examining the trajectory of German finance. This history is important because it challenges some of our assumptions about the nature of German finance prior to financialisation. I show that the dichotomies between market-based banking and traditional German banking do not hold. Instead, I show how my method of focusing on financial practices refines common notions of German banking. With the example of the Pfandbriefe, a traditional German asset-backed security, I show how German banks' strategies were already geared towards market-based practices. This chapter highlights the conception that not all market-based practices necessarily lead to processes of financialisation.

In chapter four, I analyse the beginnings of extraverted financialisation. I examine the Euromarkets that are often considered a turning point in the development of financialisation. They were important because they enabled US American banks to expand their new financial practices globally to outcompete European banks. This chapter thus represents the first contact of German banks with LM. In response, German banks attempted to establish themselves on the Euromarkets to recoup their assets. I use this to challenge common assumptions that the process of financial globalisation had its main impact on German banking strategies in the 1990s and 2000s. Instead, I highlight the fact that the American impact on German finance started in the 1960s. A key objective here is to argue that the making of modern German banking is already bound up with global financial markets in the post-War decades.

This chapter documents the early extraverted strategies of German banks in attempting to build their own capacity to borrow US dollars. I show how the initial strategies of German banks to counter the competitive impact of US banks on the Eurodollar markets, European syndicate lending, meant that they had to start buying US dollars in various ways. Initially fruitful in the 1960s, their success started to wane during the 1970s because of the difficulties in overcoming their limited USD resources. European syndicates could not compete with the financial power of US banks using LM, and German banks had to find better ways to acquire US dollars. They thus started to develop the practices of LM themselves.

Chapter five delves into the heart of the transformation of German banking towards LM. It situates the changes in German banking practices within their strategies for developing LM in the US. This chapter highlights the reasons why the practices of LM were uniquely suitable for US markets. In addition to the benefits of deep money markets for funding, US dollars were cleared in the US and had to be booked via a US bank. Dollar rates on Euromarkets and US domestic markets thus followed each other closely and US banks in New York could easily arbitrage between them. In order to be able to compete on Eurodollar markets, German banks had to access those institutional opportunities as well. This chapter thus shows why German banks went to the United States and how they established a global financial network that institutionalises their connections to US wholesale markets. I therefore challenge common assumptions of a US American imposition and instead portray the trajectory as representing strategies of extraversion for the banks in order to regain control of their financial practices.

Once in the US, German banks had to transform their banking strategies more radically to change their assets according to the needs of LM. To manage funding with expensive dollars and gain the expertise of doing LM, they started acquiring foreign financial institutions. Deutsche Bank had larger networks and put more resources into accessing dollars in contrast to Commerzbank. As a result of adopting LM more forcefully, Deutsche had to transform its entire institution to sustain LM, including selling its German corporate holdings, despite the initial goal of keeping their German banking separate from their investment banking operations. Commerzbank on the other hand focused relatively more on European strategies. Its limited resources meant that it failed in US markets several times. The impact of US American finance came to be felt differently according to the banks' integration in USD wholesale markets. This highlights that the adoption of LM was a key shift which made USD liquidity a crucial concern for non-US banks. As the GFC has demonstrated, this entrenched the capacity to sustain US dollars as a key choking point within the global financial architecture.

The sixth chapter focuses on the consequences of LM for the management of banks. It documents the problems and contradictions that banks experienced when integrating LM into their everyday operations and strategies. It highlights how Deutsche Bank experienced significant resistance as it slowly transformed itself to accommodate the liquidity requirements of LM in US wholesale markets. This chapter demonstrates that the transition to investment banking was not an easy shift, nor was it simply motivated by higher profits to be gained in investment banking. Instead, it was a transformation necessitated to accommodate the higher costs and risks of banking in USD money markets. I further demonstrate the fragility that this

shift has created and the USD dependency of the German banking sector. German banks' adoption of LM can explain why reliance of US dollars has continued to be a problem for the German banks. This chapter thus presents evidence that contradicts assumptions of a marketisation of banking best characterised by decentralised competitive market forces. The contemporary global financial architecture has unequal power relations in which US banks can monopolise, move and leverage USD liabilities better than others.

In the conclusion, I reflect upon what is at stake politically in missing the implications of extraverted financialisation. I examine the recent effort of the German political establishment to merge Commerzbank and Deutsche Bank to 'outgrow' the crisis of German banking. The political elite aimed to create a 'national champion' that could rival US banks and provide adequate loans to German corporations again. By analysing the attempted merger, I expose that the academic misconceptions of financialisation as marketisation are also present in policy circles and continue to mislead policy reforms. The merger debate exposes the fact that political authorities fail to understand how financialisation is much more fundamentally about how banks fund themselves rather than simply what they invest in. As a result, people often underestimate the implications of LM and the constraints of USD dependency that LM has created. Attempts to transform finance have therefore struggled to come up with policies that would work. The recent debate in Germany about building a mega bank highlights the urgency of using the concept of extraverted financialisation to understand the transformation of German banking.

1.4 Research methods

This research consists of a qualitative, historical study that traces German banking strategies to cope with the rise of US finance since the 1960s. Thereby, I use the original concept of extraverted financialisation as a frame to analyse how German banks have changed their practices to engage with USD wholesale markets. My method closely follows the approach of 'radical historicism' outlined by Knafo (2017). I use a financial practice – LM – to specify, contrast and explain how German banks have integrated themselves in US wholesale markets. To nuance and specify the analysis, I use the two biggest German private banks as a case study. The main focus is on Deutsche Bank, which pushed these transformations furthest. I use Commerzbank's practices as a comparative foil to contrast their various financial strategies, imperatives and constraints. This method can determine how they have responded differently to the same development (the impact of US finance). This prevents the danger of essentialising strategies of

banks as a single actor, i.e. as 'capital' or as investment banks, acting strictly according to the profit imperatives of 'marketisation'. Instead, I will bring to the fore what the specific motivations and constraints were that prompted banks to adopt one strategy over another, profitable or not.

Gathering data on banks is difficult because banks prefer to act in secret as financial historians have pointed out (Wixforth, 2017). Knowledge about the initial strategies of German banking during the rise of US finance is rare (Ahrens, 2010). To narrow this gap, I rely on a varied mix of secondary sources from a range of academic scholarship; banks' own publications including books, annual reports and press releases; official governmental reports and monetary authorities' analysis; as well as specialised financial news articles. These provide comprehensive resources to gather and triangulate publicly available data about banks' strategies. The use of financial news outlets and specialist articles is a particularly valuable resource in grasping the problems the financial world faced at various times. These issues are often different to what we now theorise about them from a contemporary perspective. I use these insights to rethink the history of the rise of financialisation and to re-interpret it from the perspective of the extraverted strategies of German banks.

2 Beyond market-based banking

“Thinking about future alternatives to capitalism requires us to think about alternative conceptions of its past” (Wood 2017:8).

2.1 Introduction

This chapter outlines the debate on the impact of American finance on German banking. I will trace key theoretical innovations that authors within the comparative political economy (CPE) literature have made. I argue that they often understand German financialisation as a form of ‘marketisation’. This has made it difficult to conceptualise the role of banks within this process. Instead, in the second part of the chapter, I will develop an original concept that I call ‘extraverted financialisation’. I will use this concept in subsequent chapters to account for the specific imperatives and constraints of US finance that have shaped how German banks transformed their practices in response to the rise of US finance.

This chapter shows that the concept of marketisation usually implies at least one of the three following theoretical assumptions that scholars rely on in analysing the impact of US finance. Firstly, scholars see this process as a US American imposition. As I will show, in arguing that German banks have become more like US American banks, they often imply that a ‘US financial disease’ has infected German financial institutions with its market logics so that it would converge to US American finance. From that perspective, scholars behold the original German system as a bank-based financial system in which market-based practices and speculation played little role. Before the US disease, German lending was seen as being characterised by more ‘social’, non-market aspects. Patient capital, a long-term credit relation between banks and companies, was based on insider information to monitor firm performance that allowed banks to have a ‘voice’ in corporate decision-making processes. This is often portrayed in stark contrast to the US American system in which firms fund themselves on capital markets, rather than from banks. That way, market logics would determine capital allocation so that credit relations are ‘transactional’ in the US, rather than ‘relational’ as in Germany. As a result of the Americanisation of global banking, German banks have become more like US banks, focusing on short-term market logics.

Secondly, the notion of marketisation often implies that banks are financial intermediaries that have lost out as a consequence of the rise of financialisation. Banking is often taken to be theoretically at odds with financial markets. From that perspective, scholars often derive the

role of German banks from their lending activities vis-à-vis corporations, rather than from what they do in financial markets. Banks are often conceptualised as financial conduits, passing on liquidity from savers to their corporate clients for long-term investment. As a result of growing importance of financial markets for firm finance, banks have lost their power of 'voice' in companies and therefore have ceased to provide patient capital. Thus, from this perspective the marketisation of lending practices dissolved the role and importance of German banks.

The third feature concerns the reasons why banks would follow this shift, given that it dissolved their distinctive role. The explanation often given is that market-based practices offer higher profits compared to the traditional long-term financial practices of German banks. From that perspective, German banks would become more like US American banks because they pursue a strategy of maximising profits in global financial markets. They would turn themselves into investment banks so that they can benefit from global securities markets. While scholars differ in their theoretical dispositions and areas of focus, most of their arguments about the transformations of German banking boil down to an understanding of financialisation as marketisation.

In this chapter, I argue that the notion of marketisation has made it difficult to understand the precise impact of US American finance on German banking. It offers weak conceptual tools to analyse the role of banks within these processes. Firstly, conceptually opposing financial markets and banks makes it difficult to grasp how banks act *in* financial markets. As a result, scholars of German finance have largely overlooked traditional market-based practices in their theorisation of German finance prior to financialisation. This meant that they have overrated market-based practices as the novel imperative of banking that has led to its transformation. As I will show in chapter three, market-based banking has in fact a long tradition in Germany, and therefore cannot act as a signifier of financialisation.

Secondly, and consequently, the idea of marketisation cannot account for the qualitative shift in market-based banking that led to the rise of US finance. Scholars have mostly ignored the novel imperatives and constraints of the rise of US finance that have driven German banks to actively participate in financialisation. If this transformation was about German banks becoming more like US American banks and making more profits with market-based practices, why are they currently struggling so much more in contrast to US banks? Relying on the conceptual tools of marketisation, scholars have underestimated the profoundness of the transformation of banking practices that led to the rise of US finance. Scholars have largely neglected to analyse how German banks have been engaging with the rise of US finance since the 1960s.

Consequently, scholars have struggled to grasp why and how German banks transformed their practices in response. As I will demonstrate in this thesis, it is this history that is crucial in understanding the distinct imperatives that have led to their current way of banking.

To account for this transformation, I develop the original concept of extraverted financialisation in the second part of the chapter. I suggest that it can account for the role of banks in the transition towards US American finance. I argue that the rise of US American finance is best conceptualised as the rise of radically new funding practices, called liability management (LM), connected to the rise of US money markets in the 1960s. As I will show below, these practices enabled US banks to dominate global financial markets. As LM is uniquely adapted to US financial institutions, German banks followed extraverted strategies to establish themselves in US financial markets to capture some of the growing USD flows. The US American impact can thus be characterised as the imperative to capture US dollars. This posed differentiated constraints onto non-US banks as compared to US banks—constraints that cannot be understood with the notion of rising markets. Extraverted financialisation thus accounts for specific financial practices that can highlight how and why German banks adapted to LM. I thus reverse the analytical focus on the impact of US American finance as an external imposition of marketisation. Instead, I frame the transformation of German banking as an outcome of how German banks developed LM in their attempts to access US money markets.

To make my argument, this chapter is divided in two parts. In the first part, I outline the debate with the help of five key theoretical innovations within the CPE literature, made by John Zysman, Wolfgang Streeck, Sigur Vitols, Richard Deeg and, the co-authors Hardie and Howarth. This does not exhaust the literature but rather highlights key themes scholars have used to understand the complexity of financialisation. The first section will give a brief historical overview of the CPE scholarship to situate the debate. In the following sections, I analyse the work of each author to show how the notion of marketisation has caused the impasse of the debate. I demonstrate that in many ways, the idea of marketisation rests on the ideal-typical frameworks of market-based versus bank-based systems that Zysman famously conceptualised in 1983. The second part explains the concept of extraverted financialisation. I detail the theoretical and methodological dispositions of the concept that I will use in the remainder of the thesis to examine the impact of US American finance on German banking.

2.2 The marketisation of German finance: divergence vs. convergence

Scholars have understood financial capitalism as a version of capitalism where financial markets gained dominance over other areas of socio-economic life, commonly referred to as financialisation (Van der Zwan, 2014). There is a long-standing debate about the question of whether financial capitalism is a global phenomenon or if it is something contained to the United States. The debate concerning the impact of US finance is often fought out over the question of marketisation, that is how much have US financial markets taken over banks as primary financier of non-financial corporations (cf. Erturk and Solari, 2007; Hardie et al., 2013).

CPE scholars have most usefully conceptualised different financial systems and how they transform in response to external impacts such as the rise of US finance. They have argued that financial relations and practices are embedded in wider socio-economic institutions. Financial practices are historically and socially contingent and therefore cannot be determined prior to a socio-economic analysis but are deeply affected by their institutional surroundings. Rejecting the market essentialism of neoclassical economics, CPE scholars rely mostly on national institutional networks to understand context-specific economic life, inequality and the power relations they contain (Streeck and Thelen, 2005). From this perspective, Germany's bank-based financial system works on long-term financial logics with banks as its core actors. This has been most famously contrasted to the market-based financial system by Zysman (1983) in which banks play a minor role as I will outline in more detail below. Instead of bank loans, non-financial corporations source their funding from financial markets.

Most famously, Hall and Soskice (2001) have produced a template for the Varieties of Capitalism literature that relies on Zysman's concepts of market-based finance as part of a liberal market economy (LME) and bank-based finance, part of coordinated market economies (CME). Hall and Soskice argue that the transformative changes imposed by US American finance are mediated by the differences in national structures in a way that enhances variety rather than eradicating it. Capitalism still consists of nationally specific models that shape distinct financial markets. Even though deregulation poses a threat that could unravel coordinated economies, financial globalisation has not followed a domino-like effect of rendering financial markets the same. Germany still has its distinctive bank-based model with patient capital. From that approach,

German banks have been identified as a bulwark against marketisation as their ability to issue patient capital can protect corporations from market pressures⁵.

The debates' focus on the persistence of national institutions against US financial markets increasingly changed in the 1990s. Previously, German banks seemed to play a core role in financing Germany's successful productive sector, nurturing it with long-term loans, rather than engage in financial speculation. It was therefore used as a counter example to the often-proclaimed superiority of US American market-based finance by mainstream economists (Streeck, 2010). However, in the 1990s, a flagging German financial sector, a stagnating economy and accelerating global financial innovation made the flourishing scholarship on the German bank-based system sceptical about its ability to withstand the impact of markets. US market forces were more transformative than originally thought. In the 90s, German economic and political authorities embarked on a promotion of securities markets and financial liberalisation in Germany labelled "Finanzplatz Deutschland" in order to adjust to the growing market pressures of US American finance. While scholars have mentioned German banking practices on international financial markets in the 1980s, the 1990s are often seen as the decade when the marketisation of German finance started (Beyer and Hassel, 2002; Lütz, 2005a; Sablowski, 2008).

As a result, scholars concerned with financial globalisation started to question the validity of using concepts that relied on static ideal-types. Instead, scholars started to develop concepts of institutional change (Streeck and Thelen, 2009, cf. 2005) that could highlight financial transformations as gradual processes. Indeed, global securities markets seemed to acquire unprecedented reach and German banks would increasingly engage with market-based practices. Financial markets seemed to progressively take over bank-based lending and scholars began to wonder if the expansion of US American finance would lead to global convergence (Beyer and Hassel, 2002; 2005b, 2000). Scholars have since questioned the usefulness of structurally different ideal-types as explanatory concepts for financial adjustments. Instead, financial globalisation seemed to represent a process in which US American finance infected traditional financial institutions with its market logics, albeit in differentiated ways (Deeg, 2012).

⁵ Hall and Soskice's concepts have been extensively updated, for example with the influence of accounting standards (Perry and Nölke, 2006) or global production networks (Lane and Probert, 2009). The methodological nationalism, rigidity and inflexibility of the concept have been criticised (Bruff and Ebenau, 2014; Bruff and Horn, 2012; Peck and Theodore, 2007), including updates about institutional change by the authors themselves (Hall and Thelen, 2009).

Thus, in order to reflect the impact of growing financial markets on German finance as a process, scholars' theoretical tools increasingly reflected the concept of marketisation outlined above.

In Germany, Deutsche Bank is seen as having led the process of marketisation. Given the decline of national institutional constraints, it moved away from its "quasi-public status as guardian of German industry" (Streeck, 2009, p. 84) to profit from global financial markets. Starting with the purchase of Morgan Grenfell in 1989 (Beyer, 2003), German banks parted from their equity stakes and supervisory seats in German corporations that allowed them to monitor and nurture corporations' performance. Banks' shareholdings in companies were long believed to be a decisive factor that would differentiate the bank-based system from the market-based one (Lazonick and O'sullivan, 1997, p. 137). Instead of handing out patient capital, they opted for international investment banking which promised higher profits (Lane, 2003; cf. Streeck and Höpner, 2003). As a result, big German banks have seemingly turned into US American investment banks.

Despite this rich debate, however, it has been difficult to understand the role of banks within this transition. There are two opposing understandings within the scholarship but each rely on the notion of marketisation. Scholars that mention the leading role of banks give as explanation for their change in practices the lure of profits on global financial markets. What these scholars cannot explain is why, apart from Deutsche Bank, none of the banks has actually achieved substantially higher profits on US markets in contrast to their banking practices in Germany. A second branch argues that the increasing role of financial markets in corporate lending meant that there was less room for banks' loans which is why they struggle now. Both sides, however, rely on the notion of marketisation as having led to the decline of traditional bank lending. The limited explanatory power of this generic concept is highlighted by their opposing conclusions about the power of German banks.

The impasse of the debate results from using the concept of marketisation to analyse financialisation. In the following, I show how this results from a binary understanding of financialisation as simply marketisation in opposition to banking that goes back to Zysman. This understanding has too often led scholars to look for general evidence of 'more markets' to assess how much German finance fits US financial stereotypes. As I will show, this binary understanding of markets vs. banks has led scholars to overlook practices of banks outside those ideal-types. While ideal-types are useful in order to grasp complex social relations, the notion of marketisation of finance has obscured more than it has revealed. In the following, I zoom in

more closely on how five influential scholars have contributed to our understanding of the marketisation of German banking.

Zysman: The structural differences of bank-based and market-based finance

Zysman (1983) was an influential voice in the academic project to establish a relation between the financial structures, external impacts and processes of financial change. His analysis of different financial systems and the politics of industrial change is therefore useful in order to appreciate the challenges that authors faced when trying to understand the impact of American finance on German banking. Zysman's concepts of bank-based and market-based finance subsequently became foundational in the conceptualisation of German and US American ideal-types. By tracing how different countries respond to external impacts such as financial globalisation, he argues that national systems transform in a way that resembles closely the scope of certain economic interest groups to influence change. This scope is determined by financial structures and how they give power to specific interest groups. Thus, while he admits that financial globalisation was only in its beginnings, Zysman strongly suggests that national financial systems remain divergent.

Zysman is part of a scholarship that aims to understand the institutional complexity of different economic models, their historical developments and how they led to socio-economic benefits. His typologies reflected a long-standing academic endeavour of rejecting the simplicity of mainstream economic analysis that relied on one-path-fits-all understandings of the economy such as Rostow's modernisation theory. Relying on authors such as Hilferding (1981 [1910]), Gerschenkron (1979) and Shonfield (1965), Zysman was writing at a time when Japan and Germany were often singled out as better market economies than the US, after the decline in Fordism. Their analysis rebuked the idea that the US and its free-market approach was the only viable option. Instead, Germany's prosperous economic model was 'coordinated' by institutions rather than 'liberal'. Thus, Zysman is part of a long-standing debate that has demonstrated the complexity of differing institutional frameworks that cannot easily be subsumed under the same 'logics'.

However, his classification of financial models into bank-based and market-based systems represent oppositional pools. This binary understanding of finance made it difficult for future scholars to conceptualise the influence one might have on the other. As a result, scholars aiming to bridge the divide in the following decades were often left with few analytical devices to track the change in banking practices in response to the rise of financial capitalism. In the following

paragraphs, I will highlight how Zysman's oppositional nature of bank-based and market-based financial systems set in place a starting point that made it difficult for scholars to conceptualise change outside a binary of a complete transformation or no change. As a result, scholars were stuck in a debate about convergence that brought few insights into the changing nature of banking practices. The conceptual tools would not allow to make sense of practices that do not correspond to these idealtypes. That way, as I highlight in chapter three, scholars would overlook the significance of the Eurodollar market practices in the 1960s. As I show in chapter four, those practices represent a decisive starting point for how German banks came into contact with US finance.

Zysman was interested in how economic models were structured to finance industrial activity. The binary he established was reflected in the relative importance of the roles of banks and financial markets in how they provided funding for corporations. The distinctive character of the German system was that it was bank-based, characterised as a "tutelary banking system" (Zysman, 1983, p. 252). Banks are central to and deeply involved in industrial matters. As a result, the German financial system is a credit-based system in which banks finance corporations through bank loans in contrast to a market-based system where corporations finance in financial markets.

In Zysman's account, the power of banks lies in their capacity to monopolise the issuance and management of corporate debt. German banks have monopolised access to sources of external funding for corporations and therefore hold the power of 'voice' (Zysman, 1983, p. 264). Zysman suggests that the access to equity markets is dominated by banks which hold large shareholdings. The bond market, which is significantly larger, is also dominated by banks. By contrast, securities market were limited in size. Therefore, corporations have no choice but to get their funding from banks. This is underpinned by regulation that allows banks to represent shareholders who deposit their shares with their bank of choice. With these shares, banks acquired disproportionate amounts of voting rights, 'proxy votes', that they exercise at the annual meetings of German companies. Bankers also sit on supervisory boards of the largest companies. Holding voting power in addition to the access to external funding and supervisory seats equipped banks to assert their 'voice' into corporate decisions. The German universal banks thus engage in a wide range of financial activities. In addition, they are able to fund themselves with an extensive deposit base, giving them a stable source of funding.

However, the power of 'exit' as in market-based financial systems is not available for German banks. German banking is very competitive and less concentrated than other financial systems,

for example France or Britain. The big three banks, Commerzbank, Dresdner Bank and Deutsche Bank, received competition from a large network of regional banks that expanded to gain national and even international significance. Thus, while the power lies with banks, “no single bank can exercise power by denying a client access to finance” (Zysman, 1983, p. 263).

The power German banks hold is in stark contrast to what US American banks can do. US American banks have very limited power vis-à-vis corporations because of the decentralised nature of markets. The financial system in the United States has strong securities markets and “power is diffused into the market” (Zysman, 1983, p. 269). Access to securities markets is provided by nonbank intermediaries including brokering houses and large institutional investors such as Pension Funds. Commercial banks primarily provide short-term industrial finance relying on short-term deposits. Because of the different competing actors and specialised intermediaries, funding markets are more “perfect” and “more efficient” (Zysman 1983: 270), preventing financial actors from being able to monopolise credit conditions.

As a result, US American corporations are more autonomous than their German counterparts and can refinance themselves with long-term debt on bond markets. Financial institutions have to rely on external factors such as market prices – “strong objective indicator of firm’s prospects” (Zysman, 1983, p. 269) – to monitor their assets’ performance instead of tutelary personal institutional ties. They have the power of ‘exit’ if these performance indicators do match their expectations. Legal rules for equity holdings further limit bank intervention (their ‘voice’) in corporate affairs. Banks do not have the right to hold influential amounts of equity.

Having set in place two opposing systems, Zysman’s typology made it difficult to conceptualise the impact of US American finance outside the understanding of convergence to markets. In positing an ideal-typical distinction between banks (Germany) and markets (US), they have had difficulties to conceptualise the influence one might have on the other outside the binary of convergence or divergence. While opposition is useful to highlight difference, it becomes an obstacle to analyse change outside that structural binary.

The binary distinction between markets and banks has subsequently become a core obstacle for scholars analysing the transformation of German banking and the role banks played within it. This is because the presence of financial markets implied that banks have very little impact on credit allocation. The core problem with this opposition is the assumption of a level playing field of ‘perfect’ US American financial markets in which decentralised forces do not allow any financial actor to monopolise financial markets or even determine the conditions of their own

lending. His typology has been historically disproven and criticised as too coherent to account for the complexity of banking models (cf. Hardie et al., 2011). However, as I will show below, the more market-based practices seem to arrive in Germany, the less authors pay attention to the changing practices of the banks. The lack of agency Zysman attributes to banks within US financial markets meant that German banks' strategies on financial markets were often sidelined in conceptualisations of the impact of US American finance. While few authors would say that German universal banks were passive actors within the transformation of German finance, subsequent scholars who rely on the notion of financialisation as marketisation have often sidelined the role of German banks within the rise of US finance.

Streeck: Capitalist logics and the marketisation of consensus-based institutions

An interesting intervention in the financial globalisation debate concerning the impact of US American finance came from Wolfgang Streeck (2016, 2014, 2011, 2009). For Streeck, the extent of the marketisation of German finance is a sign of global convergence to a global capitalist system of free markets. The driving force for financial globalisation is not so much to be found in the external impact of US American finance on static national regimes but in the logics of capitalism inherent in those national systems⁶. Conceptually for Streeck then, the impact of US American finance is a historical process in which the forces of free markets reveal themselves across the globe in response to economic stagnation. As the United States historically represented the closest version of a "free market" economy, the process started from there. The resulting increased market power for investors allowed them to escape the barriers of national institutions that provided burdensome obligations of the corporatist model such as holding long-term credits on banks' balance sheets. Thus, the transformation of German finance was driven by the exit strategies of banks, enabled by growing global financial markets.

Streeck exposes that institutional change is more gradual and endemic than previous scholars of divergence thought. Systems "are merely moments in continuous processes of change. While stability is a temporary product of social and political construction, change is endemic" (Streeck, 2009, p. 2). Thus, financial globalisation for him is another stage in capitalist development in which the internal capitalist logic moved beyond national institutional barriers. It represents the stage in which this inherent capitalist drive has finally broken with political and social institutions. From that perspective, the idea of divergence does not hold. Zysman's concepts merely represent a momentary snapshot of the past rather than a tool to assess the impact of

⁶ To some extent, Streeck could be seen as responding to the influential criticism of the "variegated capitalism" literature (see for example Bruff and Horn, 2012; Peck and Theodore, 2007).

American finance conceptually. Looking at internal change, Streeck turns Zysman around, arguing that Germany is in fact a great example of the unifying force of the capitalist logic instead of proving persistent difference.

German finance used to operate on different logics in contrast to the US which is proof for Streeck that financial globalisation de-nationalises economies (Streeck, 2009, pp. 225–226). Counter common perceptions, Streeck provides a revisionist history of the German model that shows how the impact of financial globalisation did not hit Germany belatedly in the 1990s. Germany instead was one of the most internationalised economies with one of the most open financial systems in the 1960s (Streeck, 2009, p. 187f). It did not exclude global financial markets, but German institutions made sure that actors operating on them, such as banks, had to share the corresponding profits equally amongst ‘Germany Inc’⁷. The coordinated model ensured that capitalist actors had to make compromises such as accepting lower profits and workers’ rights in exchange for institutional support for stable business and domestic protection from international competition. One of the core function thus was to *force* capital actors to take mutual responsibility for economic prosperity (Streeck, 2009, p. 189f). German corporatism was organised according to an institutional logic that embedded actors in consensus-seeking processes that contained the capitalist drive of maximising profits.

However, with the globalisation of US American financial markets, it became increasingly difficult for states to contain the interests of private capital. Financial actors were only institutionally embedded for so long as institutions were able to force them to be. Decreasing public resources due to declining revenues and higher unemployment after the decline of Fordism made it increasingly difficult for the state to mobilise enough resources to ensure the corporative class compromise in Germany. Growing public debt empowered German investors which made it easier for them to push for their own interests. This enabled them to successfully demand for financial liberalisation and the dismantling of institutions that had previously forced them to compromise.

As a result of financial liberalisation, German banks increasingly acquired the power of ‘exit’. By threatening to invest their capital outside of Germany, they forced the state to accommodate their interests, as the state needed capital to finance its debt and governmental expenditures.

⁷ Germany Inc (“Deutschland AG”) is often used to describe the tightly knit network of German corporations and banks that sometimes are seen to work in unity and ‘harmony’. Corporations are interlinked in an expansive criss-cross of shareholdings, personnel and insider information, including institutional channels for workers unions (Thelen, 2014).

This power allowed the big banks to slowly abandon their role within German capitalism, something they have always wanted, given their inherent nature as capitalists. They thus joined US American banks that made much higher returns in investment banking (Streeck, 2009, p. 78f). The opportunity costs of a consensus-based economy that meant low profits for financiers became therefore higher and higher. As a result, German capitalists managed to tear down the institutional barriers of Deutschland AG that previously forced them into sharing risks and an equal distribution of power and profits⁸.

From this perspective, then, the marketisation of finance represents the exit strategies of German banks which started the process of de-institutionalisation. Because the “free play of market forces” (Streeck, 2011, p. 7) afforded German banks more market power, “Marktvolk” now trumps “Staatsvolk” (2016, 2014). Indeed, financialisation represents the marketisation of social relations, threatening democracy as a whole, not merely financial institutions. In that sense, financialisation is a global process in which the logics of capitalism, rather than specifically US American finance, impose their imprint on financial markets.

Streeck thus displays a common tension in the literature. While German banks seem to be core actors in the process, their role is not specified and particularly their financial practices are weirdly absent. Having identified a global capitalist process that seems inevitable, it becomes very difficult to analyse the change in banking practices that happened in the process. The precise transformation of banking practices in the US has no place in shaping financial outcomes in Streeck’s account. German banks are seen to be interested in global finance, but which kinds of practices are used on financial markets and their corresponding impact on the nature of global banking would not make a difference. The transformation is already pre-defined by the capitalist disposition to marketise social institutions.

Streeck’s account cannot explain why German banks have severely struggled since the financial crisis and why US banks have not. He conceives of all capitalist actors as “analytical carriers” (Freye, 2015, p. 408) of power relations and therefore does not look for how specific practices would empower specific banks over others. The GFC is a core turning point that highlighted the great extent of capitalist convergence for Streeck. On the contrary, I will demonstrate in chapter 6, the GFC is a crucial turning point for the great crisis German banks are in. German banks did not acquire the corresponding increase in market power that Streeck implies for all capitalists.

⁸ See Melinda Cooper (2019) for a feminist critique of how this was never the case in the first place.

As I will argue, the unequal power relations between the banks has been a driving factor for how global financial markets were forged.

Vitols: The marketisation of corporate control

Vitols is interested in the theme of corporate governance. For him, marketisation represents the growing possibilities of market actors to push through their short-term interest within corporate management. Vitols is representative of a branch of literature that understands marketisation as the rise of shareholder value (SHV)⁹ (cf. Höpner and Jackson, 2006; Lazonick and O'Sullivan, 2000)¹⁰. From this perspective, scholars frame the analysis of financialisation as a development in which the interests and control of stakeholders (including workers, managers, consumers) in decision-making processes become replaced by market-based practices. Scholars often depict shareholders as malign US intruders that aim to restructure the long-term orientation of German corporate governance towards short-term shareholder interests. The more corporations are dependent on external capital from them, the more shareholders are able to direct corporate decisions towards prioritising short-term SHV at the expense of long-term productive strategies. Thus, for Vitols, marketisation is a process which allows shareholders to push through their interests.

Vitols maintains that the impact of US American finance has changed the German long-term corporate governance system into an 'augmented stakeholder system'. This means the German variant of SHV is negotiated through a network of complex institutions. SHV does not over-determine the metrics of firm performance, and other stakeholders such as labour still have a say. Thus, in contrast to Streeck, Vitols' account (2003a, 2004a, 2004b, 2009) questions the fact that the marketisation has led to convergence. He instead argues that institutional obstacles against convergence (that is, against marketisation of corporate governance) persist. According to Vitols, the previous scholarship focused too much on convergence vs. divergence as the only outcomes of processes of financialisation. This was caught between bifurcated understandings of financial change. He criticises the binary in which financial systems could either represent the market-based model (in which shareholder interests dominate) or the German bank-based model (where shareholders were mainly absent so that stakeholders could implement their

⁹ SHV depicts the amount of dividends paid to shareholders or the increase in stock price. SHV often implies that the measure of corporate success is the extent to which it increases the wealth of its shareholders.

¹⁰ He has also written about the nature of (public) funding in Germany and its importance for patient capital (1998). However, here I will focus on his work on shareholder value as representative of a wider body of literature that wrestles with similar themes.

long-term, productive interests) (Vitols, 2009, 2004a). Vitols instead was one of the first to argue that the impact of US American finance resulted in a hybrid system in which stakeholders cushion the short-term orientation of SVH.

The change in German corporate governance for Vitols starts from Germany's 'stakeholder model' that was characterised by a complex institutional network that would ensure that long-term interests from several different stakeholders, such as unions, managers and banks, were represented in corporate decision-making processes¹¹. Accordingly, a host of actors holds long-term stakes and supervisory board seats in companies, which ensures that everyone has a stake in corporate governance. The long-term orientation of corporations is thus seen to be embedded in a broader institutional network. Patient capital, handed out by banks, is the crux of the interplay of these institutions because it allows corporations to invest in high quality production that ensures the viability of long-term and secure labour contracts and protects managers from having to follow short-term market logics. Banks ensure the profitability of their long-term bank loans via the possibility of 'voice' as conceptualised by Zysman (Vitols, 2004a). From this perspective, banks are crucial actors because they allow other actors to perform their long-term interests in the industrial sector without having to worry about short-term SHV.

According to Vitols, this complex institutional setup is in stark contrast to the much simpler American system (2004a, p. 362). In the US, firms supposedly fund themselves on short-term capital markets. This market dependency allows shareholders to engrain their interests in NFCs through the easy route of the threat of exit. Possibilities for external monitoring of financial investment are ensured by standardised and transparent financial practices. As a result, shareholders in the US do not have to negotiate a complex process with a coalition of multiple interests but have market power over corporations (Vitols, 2004a, p. 368). As a consequence, foreign institutional investors were previously reluctant to invest in Germany because Germany's insider model would not allow for much market influence in corporate decisions.

Vitols' framework illustrates that US American finance marketised the German stakeholder system to some extent. To stay competitive and attract enough capital in an increasingly integrated global financial market, the insider model had to change. As a result, more and more corporate funding was reoriented towards SHV as corporate rationale for refinance and performance (Vitols, 2004a, p. 358, 2004b). As a response, major firms have announced that they would sell their long-term holdings, reduce their seats on supervision boards and adopt the

¹¹ Vitols however cautions against concepts that present the German model and corporate interests as too coherent (Vitols, 2004b).

US-based accounting methods. Corporations aimed to enhance transparency and frequent trading of shares, core features that shareholders demanded in order to assess if a company represents a productive asset for their investments¹². This transformation caused large banks to shift their strategies towards higher profits associated with global equity trading and capital markets at the expense of patient lending.

However, despite increasing market pressures, banks have continued to lend long-term, so Vitols argues. Access to patient capital has allowed corporations to resist shareholders' priorities for short-term dividends to some extent so that German corporate governance has not fully been marketised. While banks internationalised some of their financial practices (Vitols, 2009), their banking and investment practices continue to be 'conservative' (Vitols, 2004a, p. 366). The institutional investor of Deutsche Bank, DB investor, created after the US American model, invests in large stakes in companies, rather than small ones that would be easier to trade (Vitols, 2004a, p. 367). Their patient capital maintains the status quo rather than leading the transformation towards US finance. This has allowed other stakeholders to adopt the pressures of SHV selectively and maintain some degree of power over pursuing their long-term productive interests (Vitols, 2009). As a result, the German model turned into an augmented stakeholder system in Germany, rather than unfolding into a straightforward adoption of all SHV practices. In that sense, Vitols aims to overcome the shareholder – stakeholder dichotomy that often attributes too much significance to shareholders in dominating corporate decision making.

It is not clear, however, if Vitols has escaped a binary understanding of the contrast between shareholder and stakeholder systems. Scholars examining the impact of US American finance through the lens of the rise of SHV and corporate governance often rely on ideal-typical understandings of shareholders vs. stakeholders. From that perspective, banks are often seen as passive intermediaries that provide patience through tutelage and thereby shield corporations from short-term market pressures. This is particularly paradoxical because in the German concept of bank-based finance, banks are typically seen as core actors. Vitols reproduces this paradox in his analysis. Even though he nuances the outcome of the transformation towards US finance as one of an augmented stakeholder system, rejecting simple understandings of convergence to marketisation, he still relies on the notion of marketisation to conceptualise the impact of US American finance. Having identified the impact of US finance as a marketisation of corporate interests, financial change is caught within a binary

¹² The book "Alle Macht dem Markt" edited by Streeck and Höpner (2003) details those changes extensively, alas, in German

understanding of more or less markets. In that sense, he remains trapped in precisely that debate between convergence towards market-based systems or divergence if bank-based finance persists. In the guise of shareholders vs. stakeholders, he reproduces the typology of market-based vs. bank-based that Zysman has set in place.

Within this typology, it becomes very difficult to conceptualise the role of banks. For Vitols, banks are crucial actors that have provided a bulwark against marketisation, playing a rather static role to maintain the status quo. He thus displays the common theoretical binary where the role of banks is diametrically opposed to the role of financial markets. As I have mentioned, this often implies that when financial markets increase, the role of banks decreases. The impact of US finance is then conceptualised as a market dynamic from outside. It is orchestrated by foreign institutional investors that bring market pressures into Germany's stakeholder system. He therefore posits the process of marketisation outside of what German banks would do. While labour and corporations seem to have an active role to play in limiting the power of shareholders to maintain their own interests, marketisation somehow decreases the role of banks as corporate funding shifts to financial markets. Banks are rendered rather passive. Being reduced to passing on patient capital, banks' role is mostly limited to allowing other actors' interests to unfold. This makes it difficult to decipher banks' distinct role in the transformation of German finance.

Deeg: The marketisation of corporate loans

In contrast to Vitols (but in accordance with Streeck), Deeg sees banks as central agents both within the traditional German model as well as in actively transforming the model in response to the rise of US financial markets. For Deeg (2010a), the process of marketisation represents the extent to which banks do 'deal-based', rather than relationship-based finance and can be assessed on the basis of the amount of corporate loans within banks' balance sheets. Deeg (1999, p. 86) argues that banks have not become superfluous as common understandings of financialisation suggest. From this perspective, banks have responded in innovative ways that cannot be directly read off the impact of market logics. Deeg addresses the theme of rising market pressures in global finance, but in contrast to Streeck, these pressures are not necessarily a sign that financial actors have become homogenous capitalists with structural market power. Instead, their practices reflect of their unique institutional dispositions and adaptations that are different in time and space.

In focusing on banking practices, Deeg alerts us to the fact that they make a difference for the competitive positions of banks and how they manage their balance sheets. He thereby revises common characteristics of German banking as “tutelage” that put too much emphasis on bank-firm relationships as a core enabler for long-term credits. German banks have never been able to influence firms’ decisions as much as supervisory boards have limited access to information and firm’s decisions. Instead, Deeg (1999) suggests in his influential book “Finance Capitalism Unveiled”, that the characteristic feature of traditional German finance was the fact that the big banks provided a wide range of financial services in the form of both securities business and corporate loans (Deeg, 1999, p. 73).

His revision highlights how banks position themselves vis-à-vis other banks and that this has a large influence on how they conduct their practices. He describes how specific funding conditions of public banks made them a relevant contestant to the big banks. According to him, the public state banks draw from a large pool of cheap savings deposits, which allowed them to effectively compete against the big banks in firm finance (Deeg, 1999, p. 81). As a result, big banks already lost their share in corporate lending in the 1960s and 1970s, right at the time when the model of German finance started to emerge. Because of the higher competition in the supply of credit, it was increasingly difficult for banks to influence large corporations and to gain their financial services. This led them to provide such a wide range of financial services, including patient capital, to keep their business.

The rise of US finance represents the growth of US securities markets for Deeg and the growing profit opportunities they represent for investment banking. In keeping his empirical focus on banks, he exposes the reactions of German banks to the securities markets. In fact, for Deeg, German banks were core actors in pushing for changes in German finance (Deeg, 2005). Global financial markets provide prospects for higher profits for German banks than German borrowers could. As a result, they re-oriented themselves towards securities markets business in order to become more like investment banks since the mid-1980s (Deeg, 1999). German institutions and investors, however, were sluggish to adjust and could not be expected to invest enough into banks’ securities. As a result, the big banks started to try to attract foreign investors and lobbied to change German market regulations and norms to accommodate investors’ interests (Deeg, 2005; Deeg and Lütz, 2000).

A second focus on banking is the changing power relations of banks vis-à-vis corporations. However, there is a tension here in Deeg’s conceptualisation of the changing capacity for banks to engineer their own fate. Deeg focuses on how German banks transform themselves and their

institutional surroundings more towards investment banking because of better profit prospects. Deeg thus claims that banks drive the transformation of German banking. Having established them as central actors, one would expect an analysis of their changing power. However, instead, Deeg claims that they lost in power. The rise of securities markets has led to disintermediation because corporations started to fund themselves on global financial markets (Deeg, 2010b, p. 478, 1999). “The traditional Hausbank system has weakened, as securities markets have become more important for both borrowers and savers” (Deeg, 2010a, p. 116). It is this second observation that determines his assessment of the power of banks. Exposing insightful data on changing corporate demand for bank loans, he claims that the loss of bank loans made them “victims” of the rise of securities markets (Braun and Deeg, 2018). There is thus a puzzle in his analysis. Why would banks start to engineer their own decline?

As I will reveal in chapter five, there was a crucial imperative for the German banks to engage more systematically with US securities that cannot be explained with the notion of marketisation. Rather than reflecting a profit motive, these practices on securities markets were a distinct outcome of the adjustments of German banks to the strategies of LM. However, relying on the concept of a bank-based model, Deeg misses to conceptualise from early German financial practices in US financial markets.

In that way, Deeg displays perhaps most interestingly the tension within the literature that results from understanding financialisation as a form of marketisation. Similarly to Vitols, he critiques ideal-typical understandings of the German bank-based system as ‘too coherent’. However, when conceptualising the transformation of German banking, he reverts to Zysman’s binaries of market-based and bank-based finance as starting points to assess financial change. As a result, he too falls into the trap of putting too much emphasis on the contrast of ‘traditional’ German banking with market-based finance as the main framework to highlight financial change. Financialisation from this perspective is seen in the growing distance of bank-corporate relationships because deal-based banking replaces relationship banking. This leads him to argue that firm – bank relations became more distant as the main indicator for financialisation, even though he himself argued they have never been that close in the first place. His conceptual starting point for change in the 1980s is in fact a stereotype that he himself says was never there. As a result, it is difficult to decipher the precise qualitative change in banking.

This has problematic implications for how we can understand the challenges that the rise of US finance posed for non-US banks and, consequently, why and how their power declined. Despite highlighting various banking strategies and challenges vis-à-vis other banks, Deeg conceptualises

banks' power from their links to German corporations, rather than how they are able to create their own capacity to compete against other banks. He thus misses the significance of early financial practices on the Euromarkets for example, a vital starting point for how German banks have started to counter the US American challenge as I show in chapter four. Instead, he prioritises banks' role within the ideal-typical German model at the expense of focusing on transformations in global financial markets. This is unfortunate because he himself contends that global finance is "intricately linked to institutional change in domestic financial systems" (Deeg, 2010b, p. 469). As a result, his analysis reflects common understandings that derive banks' diminishing role from growing financial markets, positing financial markets at odds with bank-based practices. Accordingly, banks lose power as the result of disintermediation and diminishing loans. While he describes how German banks have pushed for financial change within Germany to accommodate global financial transformations (Deeg, 2012, 2009, 2005), he does little to conceptualise banks' precise practices in those markets. His conceptual tools thus remain stuck in the dichotomous distinction of bank-based and market-based financial systems that offer weak conceptual tools to analyse the role of banks within financialisation.

Hardie and Howarth: Market-based banking

Hardie and Howarth (2009, 2013a) seek to contest the CPE literature's understanding of the nature of banking within bank-based systems and have developed the new concept of 'market-based banking'. They argue that German banking has transformed more fundamentally than the literature has heretofore recognised. Elaborated in more detail in a collaborative project, Hardie et al. (2013)¹³ have taken up the challenge to conceptualise the new nature of banking in Europe that emerged from the rise of financial markets. They argue that to understand banking and corporate finance within contemporary financialisation, the literature needs to break with Zysman's original typology of market-based vs. bank-based financial systems. Instead, scholars should consider market influences directly on banking practices themselves. They aim to capture the paradox of contemporary finance where banks continue to be core actors in European economies even though market-based practices seem to direct financial matters such as corporate lending or funding for banks themselves.

The concept outlines that rather than losing importance, banks' method of how they transform financial maturities has changed. Previously, banks enjoyed an oligopolistic status as lenders that could control the conditions of their own lending. They could rely on stable deposits and

¹³ Hardie et al. make a more general point about the new nature of banking whereas Hardie and Howarth zoom in on its implications for Germany. I will therefore mainly focus on Hardie and Howarth.

had little competition from other financial market actors. However now, in fact since the 2000s, German banks have been increasingly engaged with financial trading. Their international subsidiaries have bought huge volumes of assets and German banks were increasingly refinancing on financial markets (Hardie and Howarth, 2009, p. 1021, 2013a, p. 109f). As a result, banks' lending is now subject to financial market pressures. Banks have shifted from being price makers to financial intermediaries that cannot influence competitive market prices. They thus demonstrate that market-based finance is much more prevalent in Germany's bank-based system than the Zysmanian concepts could ever account for. Banks cannot be seen in opposition to financial markets anymore.

Hardie et al. argue that the impact of US finance is to be found in the nature of banking itself, rather than a shift of 'more markets' and 'less banking'¹⁴. Focusing on changing banking practices, Hardie and Howarth (2013a) can disprove the explanatory power of concepts such as SHV or short-term profit motives associated with the rise of financial markets. They argue that these concepts rest on a problematic assumption that bank lending is to be contrasted with market-based finance (Hardie et al., 2013, p. 694). The impact of foreign institutional investors in German finance in the 1990s was indeed rather small as foreign financial institutions were only a small minority in Germany. Foreign bank branches held only 6.4 per cent of total bank assets in 2003 (Hardie and Howarth, 2013a, p. 108). They demonstrate that SHV, a common theme to assess the extent of marketisation in German finance in the 1990s (see Vitols and Streeck), could not capture the impact of US American finance because banks with and without shareholders were engaged with market-based banking in the 2000s.

Instead, Hardie and Howarth argue that it is international financial market pressures that have eradicated the monopoly power of German banks on lending. The nature of decentralised financial markets means that financial actors are intermediaries, merely passing on capital at market prices. As Zysman has explained, US financial markets do not permit any kind of monopolisation of financial relations. Banks thus face price constraints rather than being able to impose their own credit conditions.

In contrast to the previous literature, Hardie and Howarth thus demonstrate the importance of differentiating between different kinds of market pressures that can potentially pose different constraints on banks. They indeed differentiate between different financial markets that exert different constraints on actors based on maturity lengths and the fragility of financial products

¹⁴ For a conceptual critique see Christopher (2018) and Erturk and Solari (2007).

(Hardie et al., 2013, p. 117). For example, bonds as a method of funding allows banks to refinance long-term, giving them some buffer for lending. Hardie and Howarth (2013a) can therefore explain several surprising aspects of the impact of the GFC on Germany. Banks continued to lend long-term despite their losses. This was due to the fact that the German inter-banking and wholesale markets were more stable and long-term oriented and thus less affected by a sudden liquidity constraint (Hardie and Howarth, 2013a, p. 115f)¹⁵.

There is an interesting puzzle in Hardie and Howarth's analysis. They state, and demonstrate quantitatively, that banks have lost the monopoly power of determining their own conditions of lending. However, in fact similarly to Deeg, they do not explain why banks would give up this power in the first place. If banks had monopoly power before, then an explanation is needed for why they would lose it. It remains perplexing why they would transform themselves, particularly given the lack of external pressures from foreign shareholders as Hardie and Howarth themselves point out. While Deeg attributes to banks some power to determine their own fate during the rise of financial markets, the concept of market-based banking proposes that banks could not. Even though Hardie and Howarth make us aware of the fact that banks continue to be central actors in European finance, they seem to be agents without agency.

Hardie and Howarth propose market-based banking as an innovative concept that moves beyond the bank – market dichotomy. However, it is unclear how exactly they leave Zysman's binaries behind. Firstly, Hardie and Howarth's (2013a) analysis of German banking is rather a description of a quantitative shift than a qualitative change. I agree with Hardie and Howarth in that the volume of securities on banks' balance sheet has increased. As I will examine in chapter six, the GFC and particularly the current crisis of German banking seem to prove the fact that German banks have lost their power in US financial securities markets where they cannot determine their own fate. However, the concept of market-based banking does not represent a new nature of banking for German universal banks. As Deeg (see above) and Fohlin (2007) have highlighted, German banks have always been involved with securities trading to some extent.

Secondly, Hardie and Howarth, too, rely on Zysman's understanding of US finance as 'perfect' decentralised markets. Hardie et al. (2013) criticise the fact that 'change' is not recognised within scholarship on German finance but miss to identify any substantive change within US finance. The concept of "the market", however, cannot capture how the rise of US American finance has posed new and unique imperatives on German banks that are different to those of

¹⁵ They also attribute this phenomenon to the prevalent existence of the large regional networks of the cooperatives and savings banks that continued lending to corporations.

US banks. It is telling that both Streeck and Hardie and Howarth use the notion of financial markets but reach opposite conclusions in terms of the changing power of banks: for Streeck, financial markets are the epitome of financial power. For Hardie et al., the rise of financial markets meant that banks no longer had a monopoly on maturities transformation and therefore lost out. Both arguments rest on an ahistorical assumption that market pressures are the same for all agents and that the competitive nature of such pressures means that all banks are nothing more than intermediaries. The concept of market based banking depicts banks as central agents but they seem to be without agency.

Even though Hardie et al. (2013) display an acute awareness of the existence of different kinds of market pressures for funding, they neglect two fundamental, new imperatives that have arisen with the expansion of US financial markets. One is the new strategy of LM which posed new pressures on banks to manage liabilities in a different way. Secondly, the expansion of US wholesale markets connected to this dynamic have impacted German banks differently in comparison to US banks. As I will argue throughout the thesis, these features can account for why and how German banks have changed the nature of their banking practices. However, the notion of “market pressures” neglects both of these power imbalances. It therefore cannot assess how and why banks have transformed in response to US finance. While the concept of market-based banking might depict a current state of balance sheets of banks, it cannot account for why banks have historically evolved the way they have. Hardie et al.’s concept leaves little room to conceptualise the role of banks within these transformations. The next section therefore develops an alternative concept to account for the changing practices of US American finance and how that impacted German banking.

2.3 Extraverted financialisation: conceptualising the transformation of German banking

I propose to use the concept of extraverted financialisation to analyse the transformation of German banking. Extraverted financialisation suggests that banks have actively started to engage with the rise of US finance since the 1960s, rather than merely being infected by the ‘US financial disease’ from the outside. The rise of US finance is connected to the development of a radically new funding strategy, called ‘liability management’ (LM). In response, German banks have sought to establish themselves in US financial markets to benefit from the rising USD flows. The concept suggests that the transformation of the German banks’ financial practices is an outcome of these extraverted strategies.

LM represents financial practices that banks use to fund themselves much more dynamically by buying and selling debts in wholesale markets, instead of mainly relying on their own capital and deposits. This means that they actively manage their debt rather than simply waiting for funds to arrive from retail customers. While the accumulation of deposits is steady, and seen as secure because those customers tend to be loyal, LM has enabled banks to exploit financial markets in a new way and raise large amounts of funds much quicker.

The concept of extraverted financialisation thus suggests using LM, a financial practice, as a framing device to trace the transformation of German banking. The history of LM has several benefits for rethinking the transformation of German banking as I will demonstrate below. I show firstly, how LM developed historically in the US and how it came to wield its transforming imperatives and pressures onto other banks. Secondly, I elaborate on four features that define the concept of extraverted financialisation. The four features highlight how the concept can account for the global imprint of LM and its differentiated impacts on non-US banks. Thirdly, I emphasise the advantages of conceptualising the process of financialisation from financial practices.

Historicising liability management

Historically, LM developed out of pragmatic responses to the crisis of funding for commercial banks. In the 1960s, corporations started to invest their cash on the money markets in the US rather than deposit it with banks because they could get higher interest rates (Beck and Knafo, forthcoming). The money market is a wholesale market for short-term, highly liquid IOUs. It is a market for securities, in contrast to capital markets which are for equity¹⁶. It comprised several different though interrelated segments and instruments. Financial institutions trade Treasury debt, federal agency securities, bank deposit notes and Certificates of Deposits (CD). Particularly pension funds and other institutional investors used money markets so that they would provide a deep pool of capital.

This loss of deposits caused a fundamental change in banks' funding strategies (Beck and Knafo, forthcoming). Because corporations used money markets for their surplus funds, banks were losing their deposits as a funding possibility. This was problematic because deposits were a convenient funding strategy for them. They accumulated steadily, if slowly, and were a cheap resource for funding. Customer deposits were considered as secure because customers tend to be loyal. That way of funding allowed banks to put their strategic emphasis on the accumulation

¹⁶ See Stigum (Stigum, 1990, p. 1ff) for a sophisticated analysis of the money markets.

of assets. Banks had to change this strategy, however, with the loss of corporate deposits. An interest cap on deposits due to Regulation Q meant that banks could not increase interest rates to compete against the money markets to get their deposits back. This meant that banks could no longer fund themselves through cheap and secure customer deposits. As a result, they started to go to the money markets themselves to get funding with the help of CDs (Stigum, 1990, p. 53f).

Funding on money markets created new pressures on banks. These turned the management of liabilities into a central concern for the overall banking strategy. In contrast to the slow and stable accumulation of deposits, money markets allowed banks to raise funds very quickly. But CDs carried higher interests than deposits and therefore funding became more expensive. These markets were also more volatile and riskier so funding became more insecure. Money market securities are short-term and can therefore be sold easily in case investors need cash. As a result, money market investors can withdraw their money quickly and it is difficult to manage funding under these conditions. Funding on money markets is thus a fundamentally new constraint: rather than relying on secure and cheap deposits, banks had to worry about their funding on an everyday level. They had to find ways to manage that volatility and risk.

The new ways of funding led banks to a re-evaluation of their traditional practices, a re-organisation of their institutions and what banking was about. As a result, the strategies for investment became much more closely connected to the banks' liabilities. To afford the high costs of funding, banks had to invest into assets that carried higher yields. These high-yielding assets are also very risky. Thus, banks not only had to change their asset side according to the liquidity requirements of LM, they also had to innovate to manage the corresponding risk. Sanford, chairman of Bankers Trust, pioneered a new approach to risk management and banking in the 1970s to address this newly arisen issue. He (1996) claims in a speech to the University of Pennsylvania that this transformation "would affect the very foundations upon which commercial banking - at least wholesale commercial banking - relied".

Bankers Trust is a useful example to highlight the transformation of banking that this process propelled (Knafo, 2018). In the 1970s in response to the funding crisis, Bankers Trust would embark on a restructuring of its entire business model in order to overcome "the downward spiral of credit within the loan account" (Sanford, 1996). Initially in the 1950s and 1960s, Bankers Trust was one of the most prominent banks to invest internationally (Kobrak, 2007). In the 1970s, however, it ran huge losses and was in severe trouble, barely a second-tier commercial bank anymore. In order to overcome these problems, Sanford, then an employee in the resource

management department, started to change its funding strategy with innovative risk management tools. In the process, “Bankers Trust has embraced risk management more boldly than any other bank” (The Economist, 1993, p. 16) and thus slowly transformed the whole bank.

The risk management innovation Sanford started to develop was RAROC¹⁷ (risk-adjusted return on capital) (Guill, 2016). It was a tool to manage the increased funding costs and volatility of the money markets. RAROC was a statistical tool to price and measure the performance of traditional loans by taking into account the risk of the individual positions and, importantly, the capital they would absorb. That way, RAROC was used to evaluate whether a loan or security was an efficient use of the bank’s expensive and scarce capital.

The outcome of this new way of measuring risk was that Bankers Trust would start to question the validity of holding a loan on its own balance sheet. This had tremendous implications for the asset side of banks. Measuring the risk of holding a loan on the portfolio exposed the costs of corporate loans that were traditionally ignored. RAROC visualised a fundamental insight into lending: corporate loans were highly risky. If things go wrong, getting rid of a loan is usually much more difficult than selling a security. Bankers Trust started to question the viability of one of the core functions of a bank: holding loans – the risk of credit – on its own books. Loans that stayed within the loan portfolio came to be seen as “unfinished business” (Guill, 2000, p. 24; cited in Knafo, 2018). Bankers Trust thus transformed as the first commercial bank into a bank that went against their traditional nature of a commercial bank as financial intermediary. Usually, commercial banks would lend money out and hold the credit – and therefore the risk – on its own books.

That way, Bankers Trust developed a new business for commercial banks that had a much more dynamic approach to issuing loans and funding their positions. Underwriting and then selling the loans (e.g. corporate bonds) was previously only done by other financial institutions. In response to the new awareness of the costs of holding loans, it started drafting contracts that would allow the bank to sell its loans to third parties like other banks or institutional investors. Thus, it shifted from a focus on growing its assets to an emphasis on selling the loans. The result was that Bankers Trust shrank its loan portfolio to half in value from 1986-1992 (The Economist, 1993, p. 19). Bankers Trust thus shifted from considerations of doing finance as “buy and hold” to “buy and sell” (Sanford 1996).

¹⁷ For a critical political economy analysis of risk models such as RAROC see de Goede (2004).

Of course, RAROC was not completely reliable and Bankers Trust lost several million dollars despite the aim to account for the risks involved (The Economist, 1993). In the end, RAROC in essence simply compared historical data of risk and return. However, it also allowed banks to exploit all kinds of new financial areas. For example, Bankers Trust started to underwrite loans and bonds of non-investment grade clients. It excelled in junk bonds and high leveraged buyouts even though it had less capital than some of its bigger competitors. In 1995, with a volume of US dollars 18.5 billion Bankers Trust led the leveraged finance league tables (loans and bonds) (Sanford, 1996) and other banks had trouble to compete.

Because of the flexibility and funding opportunities, it became a common practice that would spread to other banks as they needed to keep up with the rapid increase in other banks' financing power in the 1980s. Because of the practices of LM, banks started to increasingly trade with each other to optimise their respective loan portfolios. Banks were therefore increasingly selling these loans quickly to keep the costs of the capital they absorbed to a minimum. This would allow them to go on underwriting more. This propelled a huge increase in the volume of financial transactions and the speed that US American banks could issue loans. Securitisation, the construction of tradeable securities out of illiquid loans and future income streams, has been identified as the "frontier of financial expansion" (Bryan and Rafferty, 2014, p. 895) and one of the key innovations that fuelled the rapid increase in financial transactions.

However, this history of the development of LM shows that the rapid increase in securitisation, the change of assets, was an outcome of the revolution in funding strategies. It was the rise of the money markets that precipitated the rapid increase in the use of securitisation. The increased costs of funding meant that the reliance on interest as compensation was not sufficient anymore. While initially developed to address a squeeze in funding, the turn to managing liabilities much more dynamically led to a massive increase of balance sheets. What started as a weakness, the inability to attract deposits, turned into a strength in banking (Beck and Knafo, forthcoming). The rise of LM enabled US banks to put pressures onto their global competitors. Because of their increased flexibility and dynamic capacity for funding, US banks could capture assets on global financial markets much more easily than non-US banks. As I show in chapter four, US banks thus began to take over German banks' assets. In that way, the funding revolution in the US generated a global dynamic, as the rise of money markets came to affect the funding strategies of non-US banks. As a result, German banks had to transform their banking strategies. The next section suggests a concept that can account more specifically for this change.

The rise of liability management and financial globalisation

In this thesis, I propose the original concept of extraverted financialisation to frame the global impact of LM on banking. The fact that specific US American financial practices represent a relevant concern for German banks has not always been the case. While I do not dispute the fact that the US has imperial power through which it can influence socio-economic outcomes (cf. Gindin and Panitch, 2012), I argue that the rise of LM in the US had very specific implications for global banking and the global financial infrastructure. These implications cannot be understood without looking at the change in banking practices and the imperatives and constraints it imposed on non-US banks.

The concept of extraverted financialisation accounts for why and how German banks have engaged with strategies of extraversion, relying on four theoretical conceptions. In brief, these four features are, firstly, a reconceptualization of the rise of US finance as the rise of LM, as I outlined in the previous section. Secondly, it accounts for new imperatives that the rise of LM put onto non-US banks. Acquiring US dollars became vital for their banking practices. Thirdly, it highlights that US financial institutions uniquely accommodated the requirements for LM which meant that non-US banks had to establish themselves in the US. Finally, it shows that this process caused fundamental tensions and contradictions within the management of these banks, dependent on how the banks are integrated in the global financial architecture. I will elaborate on these features below. They will frame my analysis on the transformation of German banks in the following chapters.

The first feature represents the transformation of US banking in response to the rise of US money markets as I described above. LM enabled US banks to capture large-scale projects of investment much more easily than non-US banks. US American banks started to sell securities to foreign banks to finance corporate loans and bonds capturing international trade and international flows. As I have outlined, this caused a fundamental transformation in the way banking worked.

The first challenge US banks imposed on European banks with the help of LM were via the Eurodollar markets. Eurodollars are deposits of large sums of US dollars that are created outside the US by any institution not resident in the US. This can include the foreign branch of a US bank or a foreign bank that is non-resident in the US. Thus, when a US bank shifts US dollars to its London branch and receives in return a deposit, it has created a Eurodollar deposit. A large chunk of the Eurodollars are sold to US corporations and investors. However, European banks,

mostly situated in London also participated. The Eurodollar markets grew quickly. The Eurodollar CD market for example was more active in 1990 than the market for CDs in the US (Stigum, 1990, pp. 56, 199ff).

The Eurodollar markets represented the initial global impact of the rise of LM (Battilossi, 2010)¹⁸. When money rates rose in the 1960s and Regulation Q prevented US banks from raising their interest rates to re-attract the deposits going to the money markets, US banks started funding from Eurodollar markets. There were no interest restrictions for them there (Schenk, 1998). This was a crucial change from their previous interest in the Eurodollar markets. Initially, in the 1950s and early 1960s, US banks did not engage that much with the Eurodollar markets. Their foreign branches however, started receiving 3-6-month money deposits and did not know what to do with them. Their US American parents did not want them because they did not fit their accounting books. As a result, the foreign US branches started lending these to other banks and commercial customers (Stigum, 1990, p. 207ff). However, the development of LM made the Euromarkets more interesting because they represented additional trading opportunities for their securities such as CDs. This way, US dollars made inroads into European banking. This fundamentally started to change international financial flows that were previously managed through foreign correspondence banking that handled bills of trades and other international trade-related financial papers (Mayer, 1976).

The second feature relates to the precise imperative this entailed for non-US banks in which kind of liquidity they could use to conduct their financial practices. Financial liquidity is a core issue that has fuelled the rise, power and leverage of finance (Amato and Fantacci, 2012; Fantacci, 2013). The concept of extraverted financialisation brings to bear the idea that this is not just any kind of liquidity, but USD liquidity. Counter to the Zysmanian understanding, financial markets are inherently hierarchical (Christophers, 2015) and this relates to the hegemonic position of the US dollar. Thus, global financial markets posit a very specific financial hierarchy in both geography and currency. As scholars have suggested, currencies represent vital power relations and pose dependencies between countries (Bonizzi et al., 2019). Most crucially, global financial markets are centred on Wall Street and US dollars (Konings, 2007). As a Fed study revealed, historically, once a country uses dollars, its financial system has tended to require more of them, particularly after financial crises such as the GFC (Judson, 2012).

¹⁸ For a more detailed analysis of the origins of the Eurodollar markets see Battilossi and Cassis (2002), Burn (1999), Green (2016) or Schenk (1998), for example. Here I focus on its role in accommodating LM and allowing US banks to exert their pressures onto non-US banks.

The history of LM highlights that the hegemonic position of dollars for global banking is not simply because the US is powerful. The centrality of the US dollar has not always been a central issue for the everyday operations of non-US banks. The concept of extraverted financialisation suggests that it was the development of LM that started a transformation of global banking that weaved a specific infrastructure of finance in the 1960s. This created a very specific power relation that US American banks have had in contrast to German banks: easier access to US dollar liabilities. The use of US dollars for global banking has been a limitation for non-US banks because their home deposits were denominated in other currencies. LM therefore generates a distinct market imperative for German banks and a very specific power position for US banks. With the rise of LM, banking on global markets became integrally linked to developing practices geared towards accessing US dollars. Thus, the rise of financialisation was inherently tied to USD dependence.

As I will argue throughout this thesis, this dependence prompted German banks to innovate, engineering new ways to leverage their limited USD resources. This was a core factor that caused the extraverted strategies of German banks and shaped the way they were able to compete on global financial markets. Ultimately, as I will highlight in the following chapters, this meant that they had to develop strategies of LM to access those US dollars.

The third feature accounts for the specific financial institutions that the practices of LM are embedded in. LM could originally only be developed in the US because it has very specific liquidity requirements. LM derives its flexibility from funding with over-night securities in US money markets. While inherently volatile, banks can manage money market funding much more precisely to meet the everyday liquidity needs of LM, as compared to customer deposits or longer-term liabilities. For this to work, deep and liquid financial markets are needed to buy sufficient amounts of liabilities with very short-term maturities. US money markets were core institutions that enabled banks to manage those new liquidity requirements. Cash rich corporations and other institutions in the US would channel their surplus funds through the money markets to the banks (and other institutions that need those funds) (Stigum, 1990). As a result, banks and other financial actors could trade billions of US dollars on money markets every day.

Next to the money markets, the wider financial landscape in the US was uniquely conducive to the rise of LM. US financial markets are institutionally complex, deep and highly liquid, resting on a large pool of capital from financial institutions and corporations, but also from the wider populations such as retail customers (Konings, 2011). Large institutional investors in the US, such

as pension funds for example, invested their capital in the wholesale markets. As I will show in chapters four and five, US wholesale markets were core institutions that enabled banks to raise large volumes of short-term debt to manage the new liquidity needs of LM, for example through the use of repos (Gabor, 2016)¹⁹. US financial markets provided a crucial platform for banks to buy and sell securities, allowing them to expand their balance sheets and leverage to the extreme (Sgambati, 2019).

The unique embeddedness of LM in US financial institutions caused a significant imperative on non-US banks. In order to develop practices of LM to acquire sufficient amounts of US dollars to operate on global financial markets, non-US banks had to establish themselves in US financial markets. Despite the large volume of US dollars that flowed globally, dollars in the US still represented the most crucial source of funding because they uniquely suited the strategies of LM. In this way, US financial markets became a core anchor point in the global financial architecture. Banks needed a large presence in the US to sustain the funding practices of LM. The smaller debt markets in Europe and the fragmented nature of European capital markets were less suitable for LM. Money markets outside the US are rather small and mainly provide funds for the inter-banking market instead of mediating larger pools of funds between various different financial institutions, retail customers and banks (cf. Mai, 2015). Developing practices of LM was therefore very difficult outside the US. As a result, non-US banks have established a global financial infrastructure with many institutional ties to the US to enhance their access to the US wholesale markets.

The fourth feature relates to constraints and problems in management that banks faced in developing LM. Integrating strategies of LM in the overall banking strategy was complex and caused resistance from many bankers who were reluctant to give out their traditional lending practices. Bankers did not want to see their old strategies being redundant in the new environment (Guill, 2016). It entailed new ways of devising investment and funding strategies, and new ways of managing the risk involved. This caused power struggles within the internal operations of banks. This was difficult enough for US banks. More fundamentally, this caused internal controversies and fundamental contradictions for non-US banks.

Firstly, adopting LM and operating in US financial markets meant that German banks had to bridge institutional and operational differences between their home institutions and the US money markets. This has posed a unique set of intra-institutional controversies for German

¹⁹ Short for repurchase agreement, a short-term, collateral – backed loan.

banks that is vital in understanding the current crisis of German banking. LM was not necessarily fully understood by German bankers nor compatible with the operational systems of the German banks. As I will show, this has caused many financial losses. Crucially, this feature highlights that the impact of American finance is best understood as a dynamic shaped by social struggles between and within the banks that arose out of the financial practices of banks when attempting to address the implications of USD LM.

Secondly, the need to systematically sustain practices on US wholesale markets causes fundamental tensions within the strategies of their own operations and financial well-being that banks need to manage. USD LM has crucially shaped the capacity of how German banks can compete. LM provided the banks with huge potential to leverage their limited USD funds and, particularly for Deutsche Bank, make large profits in the 2000s. However, when access to US dollars becomes more limited, as it has for European banks since the GFC, the reliance on LM becomes a problem. LM has fundamentally transformed banking and entrenched USD liquidity securely into the everyday operations of global banking. This highlights that German banks cannot simply reduce their costly reliance on them, even if they are running their US wholesale banking at a loss. After having created a global financial architecture inherently tied to the need to access US dollars, German banks must continue to sustain US dollar banking, regardless of their problems with those dollars. This tension can highlight a core struggle that has shaped their banking practices.

Analysing agency: conceptualising from financial practices

The concept of extraverted financialisation suggests that the impact of US finance is best conceptualised as the active attempts of non-US banks to capture US dollars in the US through the practices of LM. It was this radical change in funding practices, the rise of LM in the US, that lies at the heart of fundamental change in global banking. Using LM as a framing device for the impact of US American finance on German banks, I therefore identify a social practice as a core anchor to conceptualise my analysis. LM specifies a very specific imperative that can account for changes in banking outside the US.

My theory of banking agency thus relies on historicising financial change from financial practices. As many authors have highlighted, new and complex financial techniques represent growing flexibility of financial markets that create new modalities of power (Nesvetailova, 2014). In this sense, financial practices are analytical devices that can reflect upon the power and the destructive forces banks can yield with the help of financial innovation. With the focus on LM, I

want to go back to the very origin that propelled the imperative to systematically use techniques such as securitisation. In that sense, I follow Knafo (2013a) in understanding financial practices as attempts of empowerment. Thus, rather than understanding practices as reflective of pre-conceived power relations, I understand them as actions that banks develop in their attempts to create the capacity to act. In this sense, extraversion represents the disposition of German banks to go out and actively transform themselves in order to anchor themselves in the US.

This theory of agency rests upon two methodological foci. I combine them in my analysis to understand the role of banks in shaping financialisation (cf. Knafo, 2017). Firstly, I assume that it is the contextual constraints faced by banks that compels them to act and innovate in new ways (Knafo, 2017, 2013b). In other words, agents respond to distinct imperatives that are historically specific (Wood, 2017). Secondly, I place a focus on the financial practices that banks come up with to navigate those constraints. Financial practices represent innovations for banks that they thought were solutions to the problems they confronted. They were created in an attempt to enhance their capacity to engineer their environment but they were not necessarily successful (2013a, 2010). In other words, I analyse the financial practices of German banks that they came up with to manage the specific impact of American finance. These attempts therefore cannot be read-off from a generic profit logic of financial markets. The fact that banks are profit-seeking is obvious. Yet the notion of the profit logic reveals very little about the concrete financial processes and contradictory financial pressures on the ground. As monetary relations are continuously different in time and space (Fourcade, 2011), banks have different interests in different points in time “depending on their competitive position as well as their regulatory constraints and resource endowments” (Mertens, 2017, p. 15). Thus, tracing the practices connected to USD LM reflects both the constraints and opportunities German banks have had when directing their response to the impact of US American finance.

Using financial practices to conceptualise banking agency has three crucial benefits. Firstly, it enables me to rely on a change in funding strategies to historically trace how big German banks have adapted to USD LM since the 1960s. I will focus on the specific pressures this change in banking put onto German banks and how they attempted to respond, without relying on the notion of ‘market forces’ to explain their role. A key benefit of focusing on specific financial practices instead of whole markets lies in the fact that it can highlight the differentiated challenges of banks within global finance. As I will show, German banks in fact faced hugely different imperatives in comparison to US banks. Different endowments and the specificity of which kind of liquidity they fund with have played a huge role in funding strategies and was a

driving factor for financial change. The focus on financial practices means that I can better contextualise the corresponding imperatives and therefore understand better the mechanisms of financial transformations.

In addition to understanding the precise imperatives of change, this focus has the benefits of contrasting strategies of different banks within the same financial systems. Looking at the precise practices, I can contrast different practices to highlight the various different forms of innovations German banks came up with in response to the rise of US finance. Banks in Germany are normally grouped into private commercial banks, cooperatives and public banks (Deeg, 1999). While authors often mention how Deutsche Bank was unique in its advance on US investment banking, the reasons are often not specified. By contrast, I will use the specificity of two different banks in order to highlight the social construction of financial change and the variegated impact that cannot be derived from 'capitalist logics' or the opportunities for profits in investment banking. This will keep the essentialism of ideal-types or financial logics to a minimum.

Thirdly, global banks construct through their practices the very financial architecture they inhabit (Sgambati, 2019). Thus, their practices can highlight how German banks have contributed to the unique construction of the contemporary global architecture. Despite their seeming loss of power and their apparent failure to monopolise liquidity to compete with US American banks on the same level, they have contributed to the very financial architecture they are now struggling with. Taking practices centre stage offers a revealing approach to financial construction and the making of its institutional complexity. It systematically recasts financial processes as attempts of institutionalisation of power, rather than defeat. In that sense, it allows me to show the contradiction of the transformation of German banking. I show how German banks have significantly transformed financial relations in response to the impact of US American finance. However, the way the global financial architecture was transformed as a result means that they still struggle with a similar issue as at the beginning: access to US dollars to be able to continue weaving the global financial architecture.

2.4 Conclusion

In this chapter, I have shown that the literature relies on the concept of marketisation to frame financialisation. This has made it difficult to account for the role of German banks within this process. Too often, it leads scholars to fall back on Zysman's ideal-typical understandings of bank-based and market-based finance that the scholars themselves have criticised as 'too

coherent'. Consequently, there is a lack of conceptualising the trajectories of banking practices in financial markets. While ideal-types are useful to grasp complex social relations and frame financialisation in a way that allows for comparison between economic models, the notions of bank-based and market-based finance have obscured more than they have revealed. Referring to the rise of markets, the rise of SHV or the rise of securities markets says nothing about the specific institutions and politics created, neither in the process leading to it nor about the response of the German banks. The profit imperative cannot account for the specific strategy of a bank or why it chose to pursue one strategy over the other. The fact that Zysman's binary concepts linger through the literature means that, firstly, too often, banks have been rendered passive intermediaries of financial flows instead of active financial agents. Secondly, scholars have disregarded vital changes in banking in the US. The impact of US finance has imposed distinct imperatives and constraints on banking that cannot be explained by Zysman's understanding of decentralised financial markets devoid of politics and power.

Instead, I have proposed to use the concept of extraverted financialisation to account for the role of German banks within processes of financialisation. As I have argued, banking practices are better understood by examining how they are geared towards overcoming the specific problems and imperatives of their immediate context. I have shown that the rise of US money markets and the adoption of LM have enabled US banks to increasingly leverage and outcompete European banks. This dynamic posed fundamentally different constraints for US American banks compared to German banks. The rise of LM meant that German banks had to follow extraverted strategies to capture USD to operate on the Euromarkets. Extraverted financialisation therefore suggests that the adoption of LM is a core imperative within the rise of financial capitalism and is key in understanding the transformation of German banking. These dynamics have imprinted a globally uneven power relation with respect to accessing US dollars. The concept of extraverted financialisation therefore can account for the changing practices and power dynamics of German banks.

This chapter has thus established the theoretical grounding for examination of how German banks have actively navigated the impact of US American finance. In the next chapter, I apply this concept to refine what is commonly understood as German finance. To understand financial change, it is necessary to explain where German banks started from before the impact of American finance came to be felt. Therefore, the next chapter will trace a traditional German asset-backed security, the Pfandbrief, that has its origin in the 19th century. I use this to provide evidence that German finance has long been market-based. This will set the change in banking

on a much more specific historical footing. In the subsequent chapters, I will trace the development of how the imperative of LM came to impose its pressures on German banking, starting with their extraverted strategies on the Euromarkets (chapter four), followed by attempts of German banks to anchor themselves in the US domestic money markets (chapter five) and a focus on the problems and contradictions within this process (chapter six).

3 Pfandbriefe – a history of market-based practices in Germany

“Michael Philipp said they had something really innovative: asset-backed securities. They could securitise mortgages. I responded: we do this for the past 150 years in Germany. It is called Pfandbrief.”

A Deutsche Banker²⁰

“The massive write-downs on the structured asset-backed securities make it painfully clear: mortgage-backed securities, CDOs etc. have no similarities with the Pfandbriefe, yes, indeed, they represent striking differences.”

Axel Weber (2009), president of the German Bundesbank during a conference talk to the Association of German mortgage banks

“If we perceive the fundamental problem of the financial system as one of ABS, we miss an opportunity to come to grips with the larger systemic problems inherent in finance”

(Amato and Fantacci, 2012)

3.1 Introduction

German banks have a long history of using asset-backed securities (ABS). The *Pfandbrief*, literally ‘letter of pledge’, has existed since the 19th century to fund German banks assets, backed up by mortgages, public debt or even ships. If market-based banking has only been a crucial issue for banks since the 2000s (cf. Hardie and Howarth, 2013a), Pfandbriefe²¹ represent a puzzle in the history of German banking. Yet, rather than representing a paradox or an exception to the rule, this chapter demonstrates that the understanding of financial change as ‘marketisation’ is of limited use in understanding the trajectory of German financialisation. In examining the Pfandbrief, I highlight the fact that not all financial markets, or indeed ABS, lead to financialisation. I thus address the question of which kind of financial practices *do* lead to it. In that sense, I use the chapter to provide the empirical and comparative grounding for the conceptual argument that the rise of financialisation is not about market exposure for banks but about the rise of LM. I therefore demonstrate the necessity of conceptualising from concrete financial practices in assessing financial change. Refining ideal-typical understandings of German finance in this way opens up the possibility of accounting for the changes in funding strategies of German banks in response to the distinct imperatives and constraints that the rise of LM has imposed on them.

²⁰ Personal conversation, own translation; Mr. Philipp was only the second US investment banker who joined the management board of Deutsche in 2000.

²¹ Plural for Pfandbrief.

Pfandbriefe, often called ‘covered bonds’, have a long-term maturity and are thus commonly seen as typical of the German bank-based financial system. Pfandbriefe provided stable, long-term funding options for banks (Hardie and Howarth, 2013a). Long-term credit relations meant that, for many scholars, German banking has been predominantly stable, based on economic fundamentals instead of experiencing excessive credit growth based on speculation. Their key role in housing finance has prevented high mortgage speculation (Wijburg and Aalbers, 2017). As a result, Germany escaped excessive housing bubbles in the 2000s, and even experienced declining levels of household debt during this period (Mertens, 2017, 2015; Van Gunten and Navot, 2018). This is in stark contrast to high levels of private debt in the US or UK, often identified as key features of financialisation (Montgomerie, 2006; Schelkle, 2012; Robertson, 2012). The long-term, risk-free and stable nature of Pfandbriefe are often seen as a backstop against financialisation.

This chapter does not refute those arguments. However, I refrain from using ideal-types to understand the role of Pfandbriefe within German finance. Instead, I turn the question around and ask not about Pfandbriefe’s role as a restriction that holds up convergence towards market-based finance but about its historical role in banks’ funding of assets in capital markets. What is unclear from these accounts is the issue of why big German banks have not engaged with Pfandbriefe more, if market-based practices, particularly ABS, hold the potential for higher profits. Why did German banks go to the trouble of entering US financial markets instead of lobbying to change Pfandbriefe in Germany? By tracking concretely how and why big German banks got involved in the Pfandbriefe, this chapter begins to historicise banking strategies with respect to their funding in markets. I thereby focus on the risk management, innovations and strategies that banks have or have not pursued with the Pfandbrief. Contra common assumptions that Pfandbriefe are basically risk-free, have never failed nor in fact significantly changed during the 20th century, I assess here how banks have changed their strategies to deal with Pfandbriefe’s risk.

Relying on the history of the Pfandbriefe, this chapter argues that the role of Pfandbriefe within German finance undermines common assumptions about German finance and about the role of ‘markets’ in changing the trajectory of German banking. I show that market-based practices already existed in Germany and German banks made use of them according to their needs. I demonstrate that Pfandbriefe represented a strategy for the big banks to capture growing household income, particularly in the 1970s and 1980s. While initially sceptical about extending credit to “small” borrowers in the 1950s, Pfandbriefe represented a convenient way for the big

banks to use an existing market-based institution to manage the risk involved in long-term lending and to find compensation for the loss of corporate deposits in the 1960s. This represents a crucial difference to the US, where the loss of corporate deposits meant that US banks went to the money markets in the 1960s (see last chapter). However, once German banks were more connected to US money markets, Pfandbriefe were no longer a strategic option for them. The history of the Pfandbriefe thus marks the conceptual starting point for analysing the transformation of German banking on a more rigorous historical footing.

The rest of the chapter is divided into two sections. The next, the second section lays out the unique characteristic of the Pfandbrief as a market-based practice and how it emerged historically. This will highlight its unique role in the German financial landscape and highlight its difference to the market-based practice of LM. In section three, I delve into the commercial banks' engagement with the Pfandbrief in order to capture retail and housing finance in the 1960s and 1970s. I document how German banks adopted new financial institutions to compensate for their stagnating corporate deposits but later lost interest in the covered bonds.

3.2 The role of Pfandbriefe in managing German banks' debt

Investment in and funding by Pfandbriefe have played a rather small role within the strategies of big German banks. It was a core funding strategy for the German mortgage and public banks, but not the big banks. Why am I still highlighting the role of the Pfandbriefe as crucial to understand the trajectories of German finance? The fact that the big banks did not pursue their strategies more vigorously has several reasons. In this chapter, I use this age-old market-based security to show that the Pfandbriefe are good for managing the risks of long-term market-based funding in Germany. They represented a strategy for German banks to expand their balance sheets into new areas of investments, for example during the rise of retail finance in Germany in the post-war years. However, the fact that they did not pursue the Pfandbriefe further in the 1970s can highlight a crucial change in the way German banks have conducted their market-based practices. This speaks to the fact that the big banks started to need different market-based practices. As I will demonstrate in the next two chapters, they needed market-based tools to access USD markets, rather than 'market-based' practices per se. While German banks are now rediscovering Pfandbriefe after the GFC (Wijburg and Aalbers, 2017, p. 979), Pfandbriefe have not been useful during the rise of US finance. Pfandbriefe do not fit the US American context of LM, only the German one. This highlights that the use of asset-backed securities do not lead to financialisation per se. Looking at the extent of 'market-based' practices within

German banks' balance sheets is thus of limited use to explain the fundamental changes in banking in the era of financialisation.

Pfandbriefe in fact never quite fitted the classic German model that scholars have ascribed to them. As the opening paragraphs demonstrated, the perception of Pfandbriefe is instead rather controversial. To specify the role of Pfandbriefe in managing and funding German banks' debt, this section examines two crucial features of financial securities. The first is their function in expanding banks' balance sheets, that is, increasing banks' indebtedness. The second is managing the risk involved in doing so. To understand how banks have approached Pfandbriefe in managing those two issues, this section is split in two parts. I explore, firstly, the emergence of the Pfandbriefe to understand why banks have constructed them in the first place. This set in place their usefulness for expanding the banks' lending practices in new areas. The second part refines what is commonly understood as the differences between the Pfandbriefe and mortgage-backed securities (MBS). I contend that the binary understanding of the nature of their riskiness is overstated and show that German banks had to manage the risk of funding through Pfandbriefe in various ways.

The origins of the Pfandbriefe

Pfandbrief dates back to the 18th century. Apart from mentioning German Pfandbriefe as the most established covered bond, few scholars have delved into its controversial history. In Germany, it is a well-known financial asset, and yet, it is under-researched (Spangler and Werner, 2013). The first Pfandbrief was established by the Prince of Prussia in order to finance the reconstruction of Prussia, particularly to provide credit to the country-side gentry, the *Landschaften* (Frost and Raab-Rebentisch, 2005). 'Pfand' refers to 'deposit' or 'security' and 'brief' is a letter, used in the sense of economic document in the middle ages. Interestingly, Carl Jäger (1831) describes how the city of Ulm used the future rents of their city gate as security for a loan as early as 1378. This represents a very early use of securitisation for raising credits. Thus, Germany actually has a long history of dealing with securitisation.

Analyses of the Pfandbrief can be found within scholarship on the historical development of financial practices, particularly concerned with housing finance. It is these scholars who have highlighted their long history of providing a convenient security for capital market funding (Seabrooke, 2007; Kohl, 2017, p. 92). Pfandbriefe enabled agrarian landowners to get cheap credit (Seabrooke, 2007), while they allowed Friedrich II to provide a security with a collateral to assure bankers when lending to the state despite several bankruptcies, and to help finance

Prussia's reconstruction (Frost and Raab-Rebentisch, 2005). Interestingly, mortgage finance at the end of the 19th century was seen as too risky for 'normal' banking (Hughes, 2016). The Pfandbrief was invented because banks demanded better collateral from their lenders in order to better manage their risk.

Because they suited banks' practices in German well, they became a convenient tool for growing the indebtedness of German banks. Financial expert Frederiksen (cited in Snowden, 1987, p. 688) found that the German mortgage banks used bonds regularly to refinance themselves on the formal securities market. This was in stark contrast to the US American banks where mortgage banks only had 2% of total banking capital on their balance sheets at the end of the 19th century. Back then, mortgage banking in Germany was well-capitalised in comparison to the US (Snowden, 1987, p. 690), with German mortgage banks benefitting from consistent refinancing options on the securities markets for over 100 years. This meant they did not need to innovate with new financial products. Right up until today, German covered bonds have provided banks with "convenient direct or indirect access to the capital market" (Deutsche Bundesbank, 2006, pp. 39, 43). Indeed, often rated AAA, they usually carry a higher yield than state bonds. Indeed, Pfandbriefe are sold on capital markets and traded on stock exchanges and have provided an alternative to corporate bonds for a long time (Kohl, 2017, p. 93). As this thesis will show, German banks' need to fundamentally change their market-based funding practices only arose, when financial markets presented German banks with a new challenge: funding with US dollars. Having outlined the historical emergence of Pfandbriefe's role in increasing banks' own indebtedness, I will now turn to the differences commonly ascribed to the Pfandbriefe vis-à-vis MBS. This is useful in understanding the security better, in order to appreciate that each represents different versions of riskiness. While the idea of Pfandbriefe as a 'never-failing' financial security does not hold, the different opportunities that these financial tools provide to manage the risk of lending will prove crucial in how banks would transform themselves with the rise of LM.

Pfandbriefe vs. mortgage-backed securities (MBS)

There are three crucial features of the Pfandbrief that speak to its difference to those contemporary market-based practices that scholars identify as representing the impact of American finance on German banking. Pfandbrief is representative of the long-term orientation and stability inherent in German finance. And yet, this chapter will show that these differences are often overstated in our theorisation of German and US finance. It has led to an overstatement of the security and coherence of the German financial system. In fact, relying on

the conceptual starting point of a non-market financial system that does not trade with risky assets has prevented scholars from coming to terms with the impact of American finance on banking strategies.

Firstly, the Pfandbrief is seen as a secure, fixed income and long-term financial paper. It is part of so-called “plain-vanilla” finance as the bank lives from the interest difference of its credit which it refinances with the help of this asset-backed security. It is refinanced long-term and cannot be sold before maturity. Most authors use the Pfandbrief as a contrasting device to the short-term speculative practices of contemporary US American RMBS (Mertens and Thiemann, 2018). Indeed, the Pfandbrief has a long-term orientation because it cannot be sold on easily. Banks using it as a security to refinance their mortgage lending are liable to their investors in case of default. Thus, they cannot sell on the risk of this security to an outsourced legal entity. Pfandbriefe represent ‘mutual responsibility’. Neither party can easily walk away from their commitments by selling the security on secondary markets. Additionally, the property that covers the security can only be used up to 60% of its nominal value and this value is calculated more conservatively than for example in the USA. Pfandbriefe are therefore seen as ‘over-collateralised’. This is in stark contrast to contemporary RMBS, which are often outsourced into SPVs and traded on secondary markets. Furthermore, in most other countries the proportion of the value of the asset that serves as collateral is usually higher.

Secondly, the Pfandbrief is tightly regulated through the Pfandbrief Act dating back to 1904. This act has experienced very little change since then. There was a major change only in 2005. However, the debentures given out by the Landschaften under Friedrich II in the 18th century already had similar characteristics to the contemporary Pfandbrief. This provides evidence for the perception that there has been no major change in German finance until the turn of the century (Behr and Schmidt, 2015). Regulation required that only specialised banks, the mortgage banks (Hypothekenbanken), can issue Pfandbriefe. They are organised in the “Verband Deutscher Pfandbriefbanken” (VDP, Association of German Pfandbrief Banks). Banks who want to issue Pfandbriefe have to get permission from BaFin (the federal financial authority). Up to 2005 when the new Pfandbrief Act became law, this was only granted to banks which were registered as doing mortgage business according to the Mortgage Bank Act. Apart from the Landesbanken, there were only a few mixed-mortgage banks (Eurohypo, HRE, and HVB) which were exempt from the Mortgage Bank Act and were allowed to deal with all finance, and thus to issue mortgage covered bonds as well as undertake other security trading. Their parent banks or predecessors were the big banks that existed and issued covered bonds before the Mortgage

Bank Act came into place. They were allowed to continue issuing them and this right was transferred into their subsidiaries (Golin, 2006, p. 134). The specialised banks hold 25% of assets in Germany of which Pfandbriefbanken hold most (Mertens, 2015, p. 166).

Thirdly, the Pfandbrief, the Public Pfandbrief to be precise, has been traditionally used as a tool for refinancing of municipalities' and federal state debt, as well as the debt of public state banks and *Sparkassen* (regional savings banks). Thus, in contrast to their Anglo-Saxon counterparts, German public authorities have not participated in contemporary financial innovations to reduce budgetary debt or attempted to reduce interest payments through variable interest securities and swaps until the 2000s, possibly because public debt was easily financeable for the banks. Variable interest papers are often seen as toxic assets that have thrown public treasuries in Germany into horrendous volumes of debt when interest rose (Hendrikse and Sidaway, 2014).

This brief description shows the crucial differences to US financial innovations for housing finance. The Pfandbrief is indeed often given a core role in the traditional German bank-based financial system, for example through its role in preventing international capital from investing in Germany (Einzig, 1969) or through its role in stable funding (Hardie and Howarth, 2013a). It therefore represents a financial security that can reliably point to the on-going difference between US and German markets.

And yet, its security is often overstated. I will provide a brief example to illustrate this point. Ships were a common cover to back up German banks' lending to the shipping industry. Pfandbrief banks almost went bankrupt during the oil crises in the 1970s. Deutsche's large investment in a ship bank was only saved by a bailout of Deutsche Bank to save its own image. The shipping industry in the post-World War II years benefited substantially from the booming global economy. Influenced by a detrimental war, the six Day War in 1967, there was a massive increase in demand for tankers. More big German tankers shipped oil globally and the corresponding funding needs covered by Pfandbriefe grew. However, with the weight of the oil crisis of 1973, as well as the re-opening of the Suez Canal in 1975, the demand dropped. Globally, this resulted into an oversupply of tankers and trading ships which led to a huge drop in the values of those ships to as little as 10% of their original value (Büschgen, 1995).

This caused a problem for the shipping mortgage banks. The covers for its Pfandbriefe decayed. It was confronted with customers who could not repay their credit any more. Pfandbriefbanken had to significantly downgrade their assets and used up all their reserves. The shipping mortgage banks were able to avoid the kind of larger crisis that hit many shipping covered bond banks

through heavy state involvement and the fact that Deutsche Bank integrated its mortgage bank into its own balance sheet (Büschgen, 1995, p. 719). Thus, the fact that a Pfandbrief has never failed cannot be upheld.

The problems associated with the Pfandbrief in the 1970s and 1980s show that German banks had to contain the 'market-based risk' of Pfandbriefe. German banks were subject to risk of default and they had to deal with the capital positions within their balance sheets. Funding large-scale investments on low profit margins is risky. The history of Pfandbriefe thus shows that German long-term financial relationships can fail. At the same time, they have provided a convenient market-based tool for German banks historically. Why did banks not develop Pfandbriefe further to manage the risk or increase profit margins like the US banks did with respect to MBS? It would seem like the next step. German banks are generally attributed with significant lobbying power to pursue changes which could increase their profitability, but they have not used them with respect to the Pfandbriefe. The next section starts to shed light on that question by looking at the role of Pfandbriefe in the strategies of expansion in retail finance in Germany. This will highlight how Pfandbriefe met the funding needs of German banks in the post-war decades and provided a convenient way to compete with the smaller savings banks and cooperatives in Germany's post-war years. Big banks only lost their interest in Pfandbriefe in the 1980s when their extraverted strategies had already pushed them on a different route to managing their balance sheets.

3.3 Retail finance and mortgage banks: the struggle for deposits

In this section, I analyse Pfandbriefe's role as part of the big banks' strategies in increasing their balance sheets through retail finance in the post-war decades, a period that was crucial in the emergence of the contemporary German political economy. As I established in the previous section, Pfandbriefe provided a convenient tool to manage the risk of new, unknown investments. Retail finance implied a new type of customer for the big banks, though they were initially reluctant to engage with it.

Construction, including private housing and commercial buildings, and public finance are traditionally the core sectors for Pfandbriefe. Mortgage banks, the main banks to deal with the Pfandbrief, are the smaller banks in Germany, holding their unique position in the three-pillar system of the German banking landscape. Their statutory right dates back to the Pfandbrief Act in 1901. However, the mortgage banks were often owned by the big commercial banks or at least they were part of their corporate group (Klein, 1995, p. 9; Wijburg and Aalbers, 2017, p.

980). German mortgage funding is predominantly funded by bank deposits, with capital markets-based funding amounting to less than 20% of outstanding loans (IMF, 2011, p. 5). In contrast, about 66% of American mortgage funding goes through capital markets. As a result, the Pfandbrief does not represent the predominant financial security in German finance. However, scholars often attribute it a 'symbolic' importance (Mertens, 2015). More importantly, demonstrating their role in the strategies German banks used to expand their balance sheets in the post-war years is useful in order to highlight the differences in the competition German banks faced in contrast to US banks. This shows why German banks opted for the Pfandbrief, while US banks started developing the strategies of LM in the 1960s and 1970s.

The big German banks acquired the Pfandbrief institutions in the post-war years (Mülhaupt, 1977, p. 101). In buying those 'Hypothekenbanken' (mortgage banks), the big banks tried capture a growing volume of retail deposits from an increasingly wealthy society. Indeed, household loans increased significantly from the 1960s to the 2000s (Mertens, 2017, p. 6). Saving was promoted via a number of tax benefits and regulatory initiatives. However, the regional networks of the smaller savings and cooperative banks provided tough competition to the big banks. The localised networks of the smaller banks would traditionally engage in retail finance and could thus gain a large share of rising household debt. While the balance sheets of the big banks tripled during the 1960s, their returns stagnated, highlighting the costs of establishing widespread branch networks while competing against decentralised savings and cooperative groups (Ahrens, 2010, p. 75ff). This competition for retail deposits is a continuous challenge for the big banks. However, despite heavy competition, retail deposits for the big banks were growing which they used to extend the maturity of their heretofore short-term credits into long-term credits to manufacturing from the mid-1960s (Büschgen, 1995, pp. 687, 790).

Until the late 1960s, contrary to the popular image of German banks, they were in fact short of long-term funding (Kobrak, 2007, p. 294). In the 1950s, they lost their international networks, their assets and Deutsche Bank for example lost 25% of its branches because the Russian allies confiscated them in East Germany. The big banks were divided into several regional institutions and could only combine again in 1958. While some retail deposit accounts carried over from the war (Frost, 2009), banks were short of capital. Specialised credit institutions such as the Kreditanstalt für Wiederaufbau (KfW, a state owned development bank) alleviated the problem and provided long-term funding for banks, and, particularly if corporations could not repay their credit, the state stepped in (Menzel, 1960). On average 20% of GDP was financed in the first half

of the 1950s (Ronge and Ronge, 1979, p. 63). However, the commercial banks gave out predominantly short-term funding, funded by short-term deposits that they slowly built up again.

The importance of Pfandbriefe was in the diversified portfolio through which the universal banks could rival the smaller banks (Büschgen, 1995). In the 1960s, in addition to the savings power of German citizens, construction increased massively in Germany. Construction financing consisted of 50% of all credit to private persons. Financing home ownership was a new sector that became interesting for Deutsche and the other big banks. However, it was the savings banks and cooperatives that were strong both geographically, due to their regional focus, and in retail finance, a growing financial sector (Deeg, 1999; Mertens, 2015). As is well documented, their regional network of small banks was better placed to capture the growing retail business.

Part of the strategy to increase the balance sheet again was tapping into household savings. This was in fact considered a 'revolutionary' step. Big banks traditionally financed big corporations, indeed, they were founded to do so in the second half of the 19th century. Bankers were traditionally suspicious of retail clients, and giving out credit to them was particularly shunned. When the first 'Kleinkredit' (small credit) was handed out in 1959, a Deutsche Bank employee complained that the "mob of the street" would take over the branch (Frost, 2009, p. 13). However, retail finance was now seen as a strategy to accumulate deposits. In fact, some authors would argue German banks only really became universal banks in the 1950s and 1960s when they expanded massively in the domestic field and captured retail banking (Wixforth, 2010, p. 103).

The big German banks turned to retail finance for two reasons. One is related to the decreasing supply of corporate deposits. The second relates to the housing boom in Germany's post-war reconstruction. Corporate deposits started to stagnate in the 1960s. While banks continued to be responsible for firms' internal debt management, for example through their involvement in corporate finances, including restructuring internal pension funds and how to manage retained earnings for internal funding (Sattler, 2010), banks had to find new sources of funding. They knew they could not rely on growing corporate deposits. Thus, generating private customer deposits became a new strategy for banks' refinancing in the 1960s (Frost, 2009). In fact, it was so new, Deutsche Bank sent one of its board members to London to learn from the Midland Bank how to lend to and borrow from private households. Anglo-Saxon banks had longer experience with this kind of funding which the big German banks before considered beyond their pride.

Apart from changes in funding, a second development caught banks' attention. Private and public construction business increased dramatically in the post-war decades (cf. Kohl, 2017). This provided a growing business sector for all banks but mortgage banks and savings banks, again, were better equipped to tap into lending to households. While the big banks were continuously sceptical against small retail business because it might look like they had degraded themselves to a 'lesser bank', the banks had to approach the 'small customers' for business if they wanted to engage with the rise in construction finance (Frost, 2009).

To address their gaps in retail finance, big German banks started to engage with the Pfandbrief. They bought stakes in the mortgage banks. At the beginning, Deutsche Bank, Commerzbank and Dresdner Bank owned shares of mortgage banks to about 25%, often they were all involved in the same bank (Büschgen, 1995, p. 781). While mortgage banks mostly followed their own re-financing models independently from the big parent bank, the big banks used the expertise of their mortgage banks to change their product portfolio, with different kinds of credit for private customers introduced in 1968. They allowed the big banks to provide a comprehensive portfolio of construction finance because German banks would combine their 'traditional' bank loans with their newly-obtained possibilities to provide covered bond funding.

However, competition against the small banks made this a rather difficult endeavour. While overall numbers increased, the share of big banks' involvement did not increase but continuously declined as the savings and cooperatives captured more. While it was almost 20% in the 1950s, it declined to 11.3% in the 1960s and to 10% in the 1970s (Ahrens 2010: 75). In order to respond to the growing challenges, Deutsche and the other big banks agreed to swap their shareholdings so that Deutsche increased its shares at the Centralbodenbank to 63.7% and Frankfurter Hypothekbank to 75.7%. The German banks' potential to finance construction of buildings exponentially increased from almost nothing in 1965 to about 32 million DM in 1990 (Büschgen, 1995, p. 780).

The focus on the Pfandbrief and other long-term assets and liabilities allowed German banks to withstand international crises such as the Volcker shock in early 1980s (Wixforth, 2010). Funding through covered bonds further meant that lending to the small and medium corporations during the GFC did not cease as one would expect from the severity of the banks' losses (Hardie and Howarth, 2013a). The German banks withstood the Volcker Shock relatively well compared to their peers. Banks often failed in the 1980s because they had to refinance their long-term positions with short-term liabilities. The long-term nature of Pfandbriefe, bonds and specialised bank credit helped to ease the cost pressures of raising short-term securities (Wixforth, 2010).

And yet, as Wijburg and Aalbers (2017) show, Germany has still followed a path to financialisation in housing, albeit a comparatively different one. The existence of Pfandbriefe might not act as a fundamental backstop to 'financialisation'. The question remains, if historically Pfandbriefe have represented a market-based funding tool, why did they not develop into a more dynamic market-based tool that the universal banks would use to advance their goal of becoming a specialised market player for higher profits? In fact, in the 2000s, Deutsche Bank discarded its equity stakes in mortgage banks, selling them to Commerzbank. Commerzbank on the other hand used these mortgage banks to issue mortgages and manage public finances in other European countries.

As most authors would argue, the German banks became investment banks on US financial markets in order to make higher profits. However, why did they not seize more strongly this age-old security? Many would argue that it is institutionally embedded and represents a path-dependent characteristic of the German financial model, representing its long-term orientation and focus on the so-called 'real economy'. However, given banks' power in German finance (Beyer, 2003; Pfeiffer, 1987; Zysman, 1983), and their ability to lobby for financial change (Höpner, 2001), one can reasonably pose the question of why Pfandbriefe have not changed for so long. In order to answer this question, it is important to take on the issues that banks were confronting when using Pfandbriefe and the possibilities they afforded them to tackle those issues.

The way big German banks approached their funding constraints resulting from the decrease in corporate deposits was in stark contrast to US banks. US banks had to start funding on money markets to recover their corporate deposits in the 1960s. As the last chapter has shown, this caused a fundamental transformation in banking. German banks experienced competition from savings and cooperatives, rather than money market funds. Thus, they changed their funding practices to retail funding in a way that did not entail a problem with their assets. Money market funds were non-existent in Germany. Pfandbriefe provided an opportunity to rival Sparkassen and get deposits. However, given the challenge of US banks, German banks started to try to adapt the Pfandbriefe to suit more dynamic funding needs. However, as this was not fruitful, big German banks would reduce their involvement in the Pfandbriefe. While Deutsche discarded its mortgage banks, Commerzbank attempted to expand its mortgage business.

3.4 Conclusion

In this chapter, I have problematised existing accounts about the traditional way that German finance is perceived to have a stable financial system characterised by nonmarket or even “boring” features (cf. Wijburg and Aalbers, 2017, p. 981). I have done so by showing that in the case of a specifically domestic German innovation, the Pfandbrief. German funding mechanisms are perhaps more changeable, risky and market-based than is often acknowledged. In taking this more concrete approach to using financial practices as the core focus of the analysis, I demonstrated how Pfandbriefe and mortgage banks were instead used strategically, albeit to a small extent, according to the balance sheet management needs of the German banks.

These strategies evolved from the concrete historical juncture in which big German banks competed with the smaller savings banks for deposits. Pfandbriefe were one way to capture growing household savings which were needed to replace decreasing corporate deposits and to increase banks’ balance sheet volume in the post-war years. However, in later decades, Pfandbriefe lost their strategic relevance. The fact that German banks did not pursue this strategy more vigorously has several reasons. One of the reasons they did not expand on this is because already in the 1970s, as I will demonstrate in the next two chapters, they needed financial tools to access USD markets, rather than just any ‘market-based’ practices. While German banks have now rediscovered Pfandbriefe after the GFC (Wijburg and Aalbers, 2017, p. 979), they have not been useful in the US American context of LM.

In outlining this domestic funding history, this chapter provides the backdrop for my contribution in reconceptualising the transformation of German banking. I have outlined how market-based practices already existed in Germany but did not develop into financialisation. I thus provided the historical grounding to appreciate more fully the subsequent fundamental changes in funding practices that resulted from their extraverted strategies. German banks have had opportunities to fund themselves on financial markets in Germany. However, what the banks did not have, and what the Pfandbriefe could not give them, were USD to operate on the Eurodollar markets as I will demonstrate in the next chapter.

In the chapters that follow, I will expand on this foundation and highlight how the transformation of German banking is best seen as their adaptation to LM, rather than to markets per se. The following chapters thus show how the transformation of German banking, and German banks’ involvement in US ABS such as RMBS, rather than German ABS, is precipitated by fundamental changes on the liabilities side that were impossible to develop outside US

money markets. It was in the Eurodollar markets that German banks first came into contact with the practices of LM that US banks developed.

4 Euromarkets and the rise of financial capitalism

4.1 Introduction

The previous chapters have established that the development of German finance cannot be adequately characterised with the notion of marketisation. Building on the alternative concept of ‘extraverted financialisation’ outlined in chapter two, the present chapter starts to historicise the specific financial practices of German banks in global markets by example of Commerzbank and Deutsche Bank which I argue is indispensable to understanding the processes of German financialisation. This will highlight the challenges of the Euromarkets in how and why German banks would first engage with US financial practices. The Euromarkets represent a crucial stepping stone in the transformation of German banking. This chapter thus documents how German banks first encountered LM and how that started to impose the challenges of chasing more US dollars.

The existing literature correctly points to the significance of the Euromarkets—not only for financial globalisation in general but also for the US Americanisation of European finance in particular (Schenk, 1998; Battilossi, 2000, 2010; Konings, 2011; Green, 2016; Panitch and Konings, 2008; Gindin and Panitch, 2012). However, its precise influence on German banking is still unclear. CPE scholars have argued that the increased globalisation of finance in the 1960s expanded the “territorial scope of financial activity” (Lütz, 2004, p. 175). This represented tremendous changes in financial activities on the Eurodollar markets (Deeg, 1999, p. 13). However, its precise influence on German banking is never specified. The German banks’ practices are indeed easily overlooked if the process of financialisation is seen as the rise in ABS, such as speculation with mortgages, that German banks increasingly invested in since the late-1990s. As a result, scholars have disregarded market-based practices on global financial markets prior to the 1990s in their conceptualisations of the transformation of German banking. While it is widely acknowledged in the literature that Deutsche slowly went international when the German companies did in the late 1970s and 1980s (Deeg, 1999, 2010b), precisely what that meant for the processes of German financialisation is not analysed.

To bring the importance of the Euromarkets for German banking to the fore, this chapter recasts the impact of the Euromarkets from the perspective of financial practices. This will highlight that German banks played an active part in developing investment and commercial banking practices on the Euromarkets, a dimension of German banking that is under-researched (Ahrens, 2010).

A key objective here is to show that the process of financial globalisation and its impact on German banks' strategies starts before the 1990s and 2000s, two decades most authors identify as the starting point for the radical transformation of German banking. Global financial markets do not unravel German financial institutions (cf. Streeck, 2009), commonly implied by scholars who highlight the influx of US American financial actors and practices in Germany in the 1990s. Instead, I examine how they help to constitute the very making of the German banking model. Relying on the concept of extraverted financialisation, I scrutinise how they represent the beginnings of a broader transformation connected to the rise of LM in the US. This will establish the importance of the extraverted strategies of German banks for how and why they came to participate in financialisation.

In this chapter, I argue that the Euromarkets were crucial for German banking strategies in the early post-WWII decades, but not as conventionally assumed. Through the chapter, I demonstrate that financialisation is a process that was already part of the (re-) making of German finance in the post WWII decades, rather than affecting the German model from the outside. I show that, in many ways, German banks were in fact pioneers on the Euromarkets. For example, Deutsche was involved in one of the first Eurobond issues with Warburg in 1963, which is often described as a key early security that started the Euromarkets (Pohl, 1998, p. 71). Contrary to what is usually believed, German banks fared initially reasonably well. They engaged in European club banks and syndicate loans²² on the Euromarkets which allowed them to pool their limited Eurodollar resources to jointly issue Eurodollar bonds. German banks were initially able to keep up with the US American rivals, financing large corporate projects on the Euromarkets. These strategies only lost out because the rise of LM gave US banks the upper hand in the Euromarkets and German banks had to find better ways to find enough Eurodollar funding to recoup their corporate loans. In that way, the territorial expansion of financial markets was not a problem for the big German banks. The real challenge arose instead from the concrete financial innovations of US banks, LM.

The remainder of the chapter is organised as follows. The second section situates the early challenges of international banking within the early post-war export model to show that big banks had convenient business opportunities in Germany but struggled to provide the funds when German exporting corporations started to go abroad in the 1950s. The third section

²² European club banks represented formal collaborations between several banks that would pool their capital to mutually issue loans on the Euromarkets. The level of collaboration varied between the club banks. A syndicated loan depicts one-off financing from a group of lenders that jointly provide the funds to the borrower.

outlines how Deutsche and Commerzbank unsuccessfully tried to fight off the “American challenge” through cross-border European strategies. In the fourth section, I demonstrate the strategies of Deutsche Bank and Commerzbank as part of the European syndicate loans and illustrate the different roles of Luxembourg and London for the funding strategies of banks. While Luxembourg was a centre for capturing Eurodeposits because it was not yet overrun by Anglo-Saxon banks, London was crucial for developing practices of LM once the syndicates ran out of steam. The fifth section clarifies the demise of the European syndicates as an outcome of the increasing use of LM by US American banks.

4.2 The beginnings of international banking in post-war Germany: funding the export model

This section explores what caused Germany’s big universal banks to enter global US dollar markets during the post-war period of reconstruction. The German economy is generally known to have an international orientation through its export sector (Baccaro and Pontusson, 2016). Any history of international German finance must account for this distinct characteristic of the German model in the post-war years (Deeg, 2001; Neebe, 2004). This section examines the implications of this model for the extraverted strategies of German banks. It highlights that in going abroad, German banks ‘followed’ what is usually seen as the German model in the late 1950s. Instead of simply providing the institutional support for German banks to develop close relationships to corporations, the making of the German export model constituted the initial challenges of the German banks with global finance. Indeed, the reconstruction of the German political economy provided support for German banks domestically, but it offered little support for issuing international loans. German banks had lost their international networks after the Second World War. Under allied restrictions, they had to rely on correspondence banks and their global competitors to obtain US dollars for their German clients. This already set in place some of the tensions with respect to international banking and the need for US dollars that would later surface more profoundly within their practices on the Euromarkets. Having to provide international finance early on meant that the Euromarkets quickly came to be seen as an opportunity by German banks to finance their German customers.

The conditions for the centrality of exports in the German economy were recreated during the early post-war decades during what is sometimes termed the German “economic miracle”. These decades were also a renewed beginning for German banks. After the war, German banks had their international assets and branches confiscated. How then did such an internationally

focused political economy with close bank-corporation ties emerge? The way the export model was institutionalised meant that German industry as well as its banks had to start their international business again, albeit initially being reluctant as the banks had lost their international networks after the war of aggression. As I will show, Herrmann Abs, chairman of Deutsche Bank after Deutsche's reunification, from 1957 until 1967, and central figure in the reconstruction of German banking, was initially very critical of the Euromarkets. It is through this constellation that the Euromarkets as an international financial architecture started to become important.

German industry was in fact not so destroyed as could be expected after the war. Industrial capital stock was relatively intact and at a level comparable to that of the mid-30s. Due to high war time investment by the Nazis its industrial machinery was relatively modern compared to other European nations (Altvater and Hübner, 1988; Carlin, 1996). Because of immigration from the East, German labour had a steady, relatively highly-skilled supply who were ready to work. This dampened any possibility for demands for higher wages. Raw materials and fuel as well as the destroyed train system were the main problem. But the currency and economic reform in 1948 were successful in promoting economic growth because of these favourable pre-conditions. An additional boost came from the funds of the Marshall Plan.

The post-war macro-economic policy favoured quick industrial growth and investment through tax-incentives and a fiscal system that kept the previous wealth distribution in place. The currency reform and the eradication of previous financial savings - but not industrial capital - had two results. Firstly, it meant that previous ownership as well as previous employment under the Nazis continued, which allowed a quick restart of production (Altvater and Hübner, 1988). Secondly, companies had to liquidate their assets to finance everyday business rather than holding them which promoted industrial production rather than financial development (Carlin, 1996). The Marshall Plan provided the capital for growth to a significant extent. It put money into core industries that were destroyed. It financed about 20% from 1952-1956. It played a key role in building up those industries. This also meant that Germany had a very young and modern industry that boosted its productivity and exceptional growth (Carlin, 1996, p. 467).

However, the accompanying macro-economic policy for demand was more restrained. State managers did not promote domestic demand that could match the capacity of the production that was quickly gaining pace. Low demand at home was thus substituted by demand abroad, which started the internationalisation of the German corporate sector (Abelshauser, 1983; Baccaro and Pontusson, 2016; Neebe, 2004). Particularly the Korean War provided a boost in

international demand that Germany could satisfy with its investment goods. Altvater and Hübner (1988, p. 470) call it the black irony of history that another bloody war should have provided the last trigger that has started Germany's economic boom. German brand names did not suffer much from the war; 80% of goods were sold by brands that existed before. Other European countries building up their economies such as France and Italy bought Germany's capital equipment. Demand for German exports was helped by orchestrated wage restraint in Germany, not least because of weak unions and a growing cohesion of business associations. A very favourable exchange rate of the German Mark complemented this institutional focus on its exports (Berghahn and Vitols, 2006; Neebe, 2004). The most dominant sources of funding for business were retained earnings and short-term bank loans.

German banks are commonly seen as close allies to manufacturing, guiding and ultimately benefitting from its growth based on 'diversified quality production' (Streeck, 1991). However, big German banks were initially severely restrained, both internationally and domestically, in the 1950s (Wixforth, 2010). After their involvement with the Nazi regime, the international allies divided the big banks into separate entities and seized their international assets to break their power. More transformative initiatives, such as the attempts to establish a second Glass Steagall Act favoured by the US Americans failed, however, against the resistance of the German authorities (Carlin, 1996, p. 488). Instead, banks could reunite in West Germany in 1958, already, representing the focus of the Allies to build up a functioning German economy at the expense of preventing responsible actors of World War 2 from gaining power again. German banks had to build up their (international) balance sheets again and were up and running by the 1960s.

German exports were initially the biggest driving factor of the accumulation of international assets of banks (Streeck, 2009). Deutsche Bank benefitted particularly well, not least because of the fortunate fact that Herrmann Abs was also head of the German promotional bank Kreditanstalt für Wiederaufbau (KfW). This ensured a close relationship to acquiring credit business from the public funds for post-War reconstruction (Kobrak, 2007, p. 293). In 1957, Deutsche acquired 30% of all export financing which only declined slightly to 20-25% in later years. This was a growing proportion of assets because the German export sector share of GDP grew from 8.5% in 1950 to 18.5% in 1970 (Büschgen, 1995, p. 726), or a bit over €4 billion to 64 billion²³ (Statistisches Bundesamt, 2019).

²³ In 2018, it was just under 1,317 billion, just to compare.

Banks benefitted from several funding possibilities. A crucial source was the Marshall Plan which is commonly known to have provided US American capital to reconstruct Europe. While some authors maintain that it did not have a huge influence on German reconstruction (Altvater and Hübner, 1988; Carlin, 1996), it was crucial for German banking because it provided funds to refinance their loans. The Marshall Plan provided funds for the KfW. This bank passed on many 'transfer credits' to the German universal banks that they channelled to corporations. While German banks carried the risk of these loans, they had easy access to refinancing (Vitols, 1998, p. 85).

The KfW was founded in 1947 to provide capital for reconstruction. The Marshall Plan provided a significant amount of its equity. By 1953, it had received EUR 1.89 billion. KfW used the capital of this so-called 'internal' Marshall Plan to lend to the economy. The Marshall Fund had to be repaid in parts. However, the federal government repaid directly to the US so that the Marshall Fund continued to be equity for KfW, up until today (KfW, n.d.). Since 1951, export finance has been one of its core promotional tasks. The KfW was crucial because capital markets until the late 1950s were basically non-existent in Germany (Büschgen, 1995, p. 559). With the help of the KfW (and other special credit institutions), however, credits became increasingly long-term. Special banks have remained important and provided about 25% of long-term refinancing up until unification. It was this easy access to long-term finance that enabled a large extent of long-term loans, rather than the "tutelage" between German banks and corporations (Vitols, 1998, p. 85).

Additionally, banks were able to capture a growing volume of retail deposits from an increasingly wealthy society to refinance themselves – as demonstrated in the previous chapter. Furthermore, long-term finance was provided by Pfandbriefe as highlighted in the previous chapter and by long-term bank bonds, another type of market-based security. The capital markets were growing again since the late 1950s²⁴. The Central Capital Market Committee (Zentraler Kapitalmarktausschuss) is dominated by banks and gave banks privileged access to these markets since 1957²⁵ (Vitols, 1998, p. 85). However, what is also important, is that banks were also given preferential access in how they could refinance as well. Through the bond markets, banks were able to generate long-term capital which was mainly provided by the insurance companies. Bank bonds account for about half of the German insurance companies'

²⁴ In 1948, Deutsche Bank group could only issue Pfandbriefe worth DM 4 million but has built on its Pfandbrief business since.

²⁵ Joint-stock banks directly issued bonds on the markets, cooperatives and saving banks issued their bonds through the regional and national institutions which then re-finance the local banks.

investments and provided banks with large amounts of funds. Until unification, two thirds of publicly traded bonds were bank bonds, one third public and industrial bonds negligible (Vitols, 1998, p. 85). This was a second route through which they had easy access to funding and were able to capture German retail savings that were increasingly invested in insurance companies.

The distinct socio-economic organisation of the German model meant that banks accumulated (short-term) capital quickly during the 'economic miracle' but did not have USD capital they needed internationally. Having convenient access to both corporate finance and refinance, they could have had an easy life. However, the growing exports in fact posed a specific challenge for the banks as there was a USD shortage in the German model. For international finance was not similarly supported by the public authorities. Big German banks had lost their international networks after World War II and Herrmann Abs had to give up disappointedly after several attempts to get them back (Kobrak, 2007, p. 264). German banks were initially reluctant to engage with international finance again in the 1950s and 1960s. They watched the growing Euromarkets with suspicion but did not want to expand again. Having lost their global networks twice, they wanted to stay in Germany. German banks had trouble providing the international services, such as USD funding and currency exchange, these corporations required (Pohl, 1998, p. 80). They went as far as advising their customers to get funding from foreign local banks because they were not able to provide the capital themselves. Deutsche encouraged its MNC clients to seek funding in host countries of their operations (Kobrak, 2007, p. 294; Pohl, 1998).

The restrictions on their liabilities side were slowly being accommodated by bank bonds and public funding in Germany that matched long-term credit. However, financing the export model that required funding abroad was not equally supported by funding possibilities in their home markets. Their international assets became a problem due to their lack of foreign capital and foreign networks in the 1950s. This problem became increasingly aggravated by a very specific challenge in Europe that arose in the 1960s. Anglo-Saxon banks were lead managing European syndicated loans and German banks could only watch them snatch away their German customers. This highlights a specific challenge of establishing new debt relations abroad. Because European banks were unable to control their home markets, I will show, they had to embrace the Euromarkets instead. Thus, the revived German export model helped to set in place some of the stepping stones for the extraverted strategies of German banks. However, the way these were shaped, was crucially impacted by the rise of US American finance that started to impact Europe through the Euromarkets.

4.3 The rise of the US American challenge

A very brief introduction to the Euromarkets

A simple description of the Euromarkets is simply that Eurodollar markets are large wholesale markets that have issued large volumes of US dollars outside the US. Any US dollar that was booked outside the US was called a Eurodollar. Thus, when either a foreign bank or a foreign affiliate of a US bank issued or lent US dollars, they were called Eurodollars. They were most famously proliferating in London since the 1960s, but also in Luxemburg and other offshore centres such as the Cayman Islands, which became crucial in subsequent decades. A Eurodollar is a time deposit with a 30-, 90- or 180-day duration and has been used to finance sovereign, corporate and bank debt (Stigum, 1990, p. 68).

The Euromarkets played a defining role in the construction of financial globalisation since the 1960s. It is commonly seen as an outgrowth of the financial politics of the Anglo-Saxon countries. Scholars have focused on the combined interdependent role of the UK and the US in constructing them (Green, 2016), on their development as an outward expansion of the United States in establishing their global (financial) imperialism (Gindin and Panitch, 2012; Strange, 1987) or on their role in British politics, most notably in allowing the UK to finance its trade deficit and keeping some of its importance in world affairs through its financial role (Burn, 1999; Norfield, 2017). The ambiguity over who exactly regulated the markets meant that they are sometimes understood as a genuinely deregulated space in which financial markets and innovations could flourish. The early Euromarkets are therefore often seen as the predecessor of today's global offshore markets (Palan and Nesvetailova, 2014). This chapter does not engage with those debates but recognises the importance of the Eurodollar markets for allowing the US American banks to start building their international financial power, establishing their European outposts to finance European corporations and sovereign borrowers (Engelen and Konings, 2010; Hartkopf, 2000; Konings, 2008). I focus here on the imperatives and constraints the financial practices on the Euromarkets provided for German banks.

As I have outlined in chapter one, US American banks had to start to fund themselves on USD money markets when corporations started to deposit their cash with money market funds. The fact that they could raise funds quickly also had a downside. It was expensive for them. Thus, they needed to either issue longer-term loans and other kinds of securities with higher yields or start trading to shorten expensive capital positions of their securities within their balance sheets. When regulation in the US prevented them from investing into foreign long-term securities, they

increasingly went on the Eurodollar markets. Additionally, US dollar deposits from the Soviet Union and other foreign USD liabilities were given to the US banks and UK merchant banks in London as several foreign investors were shy to deposit them in the US directly, lest they were confiscated because of the cold war (Schenk, 2002, 1998). That way, American banks increasingly grew their capacity to control debt issuance to all kinds of US and European borrowers.

The failure of a pan-European strategy

This section documents how already in the 1950s and 1960s German banks started to slowly represent strategies of extraverted financialisation as they had to counter the US American challenge through the Euromarkets. This troubles common assumptions about a shift from national banking to global banking for the German banks in the 1990s and 2000s. Missing these links firstly underplays how much German banks already engaged with international finance early on and during the rise, rather than demise, of Germany's coordinated market economy. Secondly, it is often overlooked that several banks only reluctantly embraced the Euromarkets after they had tried in vain to meet the "American challenge" (Battilossi and Cassis, 2002) through other means. Indeed, Abs of Deutsche Bank was initially very critical of the Eurodollar markets as a vehicle to allocate funding to corporations. They seemed to threaten Deutsche's credit relations in Europe (Kobrak, 2007, p. 297). He went so far as to claim that they would put in danger Germany's national interests as a whole (Roberts, 2001, p. 19).

This section will examine the different strategies and conflicting intentions of European banks to regain control of international assets. The German banks initially favoured a pan-European capital market strategy to compete against the rising dominance of the US banks. However, their strategies were not equally met by the French banks so that they had to discard them. The failure to provide a joint European force meant that German banks had to start cooperating with European banks on the Euromarkets, syndicating loans using US dollars instead of relying on European capital markets that would allow them to use their DM and other European currencies to an extent.

The problem was that US American banks were better placed to provide funding for German, and indeed European, corporations. They swarmed Europe to not only finance American MNCs but also European companies and quickly dominated the Eurodollar markets (Panitch and Gindin, 2005). Because of the rise of CDs and time deposits connected to the strategies of LM, and increased demand from American MNCs, liabilities of UK merchant banks and US banks

exploded. The corresponding need for liquidity to meet their cash flows became possible with the rise of the money markets in the United States (Baker and Collins 2005: 255). As Ost (1970) from the associations of German banks recalls, they were concerned about the foreign networks that US American banks created in Europe. Through these networks, US banks were able to capture all kinds of sovereign, bank and corporate debt.

The German banks watched with great unease that the lending syndicates to the German and other European companies were dominated by the Anglo-Saxon banks in US dollars. German and other European banks barely served as underwriters of new issues in the 1960s (Bussière, 2005, p. 271ff). They complained bitterly about this disregard of their position. They thought they should be the leading banks. It was almost considered as “evil” (Roberts, 2001, p. 19). The leading European banks aimed to challenge this takeover.

As initial strategy, Deutsche Bank attempted to organise a European counter-strategy against both US American and UK merchant banks that were lead managing European deals. With Abs taking up a leading role amongst European bankers, the European banks responded with joint strategies in order to defend their markets (Bussière, 2005, p. 271). They attempted to create a European capital market. Joint German, Belgian, Dutch and Swiss investment funds were to increase foreign investment in all European bourses. The German, French and Swiss banks thereby wanted to increase their placement capacity in their home markets. And indeed, international issues on the German market increased in the mid-1960s. However, foreign investment in the continental bourses such as in Paris and Germany remained marginal (Feiertag, 2005, p. 233f).

The French financial market was more restricted internationally so that French banks had less interest in this particular European strategy. While the German banks promoted a continental strategy, the French banks were split with the merchant banks favouring Anglo-Saxon links for financial engineering. But the deposit banks leaned towards a continental strategy which was better suited to their wide spectrum of clientele and large capital base for syndicated loans. When Deutsche was at the forefront of criticising the Anglo-Saxon banks and refusing to participate in syndicates that only featured American banks as underwriters, the French banks such as Paribas backed down and acted as capital provider in a European investment that was managed by American specialists. The French banks were able to quickly join American alliances and therefore had less interest in pursuing pan-European strategies (Bussière, 2005, pp. 265–272). Deutsche declared in 1967 that “it was disagreeable to see two great European companies entrusting their transactions to New York houses” (Bussière, 2005, p. 273).

This left the Swiss and German banks on their own in their rejection. As a result, the initial attempts to counter the Anglo-Saxon influx failed. While Abs initially claimed that the Eurodollar market “was transitory and would go away” (Roberts, 2001, p. 19), they had to finally start embracing it. They had to build their international networks again to be able to provide adequate loans. The joint ventures they built on the Eurodollar markets were still mainly a defensive strategy against the “forceful and hardly ethical” aggressive strategies of American banks pushing into German banking, as Abs had complained in 1966 (quoted in Ross, 1998, p. 355). As I will show in the next section, these joint ventures allowed them to fund the internationalising German corporations on the already developing Eurodollar markets. It was only after this failed counter-strategy against the US Americans that Deutsche Bank unexpectedly started to lead the assault of the German banks in the Euromarkets (Battilossi, 2002). It is here that their first extraverted strategies of financialisation were forged.

4.4 Embracing the challenge: the shift from Luxemburg to London

In this section, I highlight the different roles of the financial centres of Luxemburg and London for the strategies of German banks. In tracing their practices in those places, I illustrate the shift in global strategies of the German banks. Luxemburg was crucial in how German banks financed their activities within the European clubs and syndicates. This was a preferred German strategy initially to operate on the Euromarkets and allowed the banks to cope with the challenge of raising enough US dollars to finance Eurodollar loans and securities. Luxemburg was the preferred centre for that because it was not yet overrun by Anglo-Saxon banks. London on the other hand became crucial in developing practices of LM once the syndicates ran out of steam. In historicising these practices, I highlight that once established, German banks also targeted other assets apart from their original German corporations to operate on the Eurodollar markets. The initial goal to finance German corporations, the attempt to defend their assets, quickly aligned them with the broader operations of the Eurodollar markets.

Club banking from Luxemburg

The main way to compete in the initial rise of the Euromarkets and to challenge the Americans were consortia and club banking (Ross, 1998). Apart from the KfW, all big German banks, including the public states bank WestLB, were organised in the specific club banks as their main strategy to cope with the rise of the Eurodollar markets. Those joint ventures allowed the German universal banks to participate in underwriting and international financing of Eurodollar loans given their restricted funds (Pohl, 1998; Roberts, 2001). These collaborations had to be

financed with dollars. This, they did from Luxembourg. Thus, in the following I will first outline their practices on the Euromarkets and secondly describe the role of Luxembourg for funding. In many ways, the current role of Luxembourg as a financial centre could be seen as a legacy of this failed strategy of the syndicate loans of the European banks. Indeed, currently, the foreign affiliates of the German banks in Luxembourg fund their parent banks with just under €20,000 billion in lending (aggregate net borrowing). London and the US in contrast are net borrowers of their German parent banks (Düwel, 2013, p. 35).

European banks were all in a similar position in the Eurodollar markets. They did not have dollars as their home deposit base and therefore lacked reliable funds to operate on the Eurodollar markets. Syndication allowed them to pool their limited capital resources and share the risk of large loans denominated in US dollars. Consortium banks not only provided European banks with opportunities to expand on the Euromarkets, also Anglo-Saxon banks used them to conquer the dramatic rise of global MNCs and turbulences such as the oil crises in the 1970s. Given that liability management on US money markets was only in its beginnings in the 1960s, syndicated loans were still a common way for banks to hedge their bets.

Few European banks had experience in global finance or understood precisely what was going on. In addition to pooling capital, the consortium banks were a way through which both European and Anglo-Saxon banks tried to make sense of the new practices (Roberts, 2001, p. 24). The initial phase in the 1960s was marked by confusion even amongst the banks themselves. “No one knew what they [Consortium Banks] were for except that everyone else was doing it” (Roberts, 2001, p. 35). But the consortium banks enabled banks to experiment with currency swaps and early forms of global securitisations in a more risk secure way. German banks with their constrained international capital resources, and embryonic domestic capital markets, were able to participate in risky and complicated financing operations which they could have otherwise not managed (Klein, 1995).

Initially, these partnerships were heralded as a “new epoch of international activities” by German bankers (Wixforth, 2010, p. 109). Since the late 1960s, the Euromarkets grew so rapidly that joint managers from at least two different countries were needed for any new floated issue. Through these joint ventures, European banks gained a remarkable influence in US corporate financing (Lockhart, 1969, p. 128). Consortium banks raised Eurodeposits but also had a larger pool of capital from their parent banks’ so that they extended credits far beyond of the sum that the individual banks could fund (Roberts, 2001). German banks were able to issue huge volumes

in the 60s and 70s through these strategies and expanded foreign business (Büschgen, 1995, p. 864).

Deutsche was in fact amongst the leading banks in issuing American securities in Europe. Much of the listing did not require much capital of Deutsche itself (Kobrak 2007: 295). But it was also only a mediatory role. Given that the initial impetus was US banks lead-managing syndicated loans, Deutsche tried to rival them on this turf that it thought should be its own position. It was indeed amongst the first to be part of the banking clubs in 1959, Club des celibataires. Together with Banque de la Societe Generale de Beligique, S.A. and the Amsterdamsche Bank N.V. Midland joined in 1963, by which time it was renamed into European Advisory Committee (EAC) was made public (Ross 1998:354). EAC became one of the leading Eurocurrency consortium banks in 1967 when the EAC banks announced the creation of European Banks International Company (EBIC).

EBIC was a very cooperative group. Ulrich, Chairman of Deutsche, stressed their loyalty to their EBIC partners. Deutsche Bank and the other European banks had an explicit focus on joint learning on investment banking from each other and from Euromarkets. They founded “study groups” that met regularly to make sense of the Eurodollar markets (Ross, 1998, p. 365). Together, they started to develop their networks to engage on the Euromarkets to increase their capacity to engage with Eurocurrencies. These included further international subsidiaries such as the European American Banking Corporation and the European American Bank & Trust Company (the EAB-Banks) in the US. Particularly its purchase of Franklin National Bank in New York allowed them to access USD deposits in 1974. The purchase was enabled by Franklin’s bankruptcy during the crisis in 1973/74 due to losses in its foreign exchange trading. The EAB Banks thus became one of the 25 biggest banks in the US. However, it lost its US American foothold quickly and they had to significantly decrease the operations of Franklin. As Luxemburg was still an easier place for European banks to get Eurocurrency (see below), EBIC established a subsidiary there to expand its access to Eurodollars (Büschgen, 1995, p. 832f).

Commerzbank followed a similar line to Deutsche to counter the US American threat, albeit less forcefully and indeed later. Commerzbank tried longer to follow its pan-European strategy. Commerzbank attempted unsuccessfully, for example, to be listed in Paris in 1962, the first German bank to do so. However, German banks were confused when they found out that the French finance minister declined the listing (Feiertag, 2005, p. 238). Deutsche on the other hand was hesitant to commit to any formal partnership with French banks after Deutsche’s disappointment about the failed strategy to shun the American banks in a pan-European

alliance. No French bank was part of the group EAC and Crédit Lyonnais was disappointed when the EAC banks took the next step without it to form EBIC, despite initial exploratory discussions with Deutsche (Bussière, 2005, p. 167).

The individual strategies of German banks already started to diverge on the Euromarkets. This was mainly due to their differential balance sheet capacity. Being the smaller bank, Commerzbank had less resources to spend on the Euromarkets amidst its strategies to expand retail finance in Germany. But this also owed to their different strategic foci: whereas Deutsche was more globally oriented, Commerzbank was more 'European' (Wixforth, 2010, p. 116). It attempted to engage mainly in cross-border lending and a pan-European strategy to counter the US American threat. It repeatedly tried to gain access to the Paris bourse and attempted to join up with the French banks for joint credit initiatives. Commerzbank started a partnership with Crédit Lyonnais (publicly owned) in 1970 and was the first bank to be allowed on the Paris stock market in 1971 (Feiertag, 2005, p. 238f).

Nonetheless, Commerzbank formed a consortium called Europartners together with Crédit Lyonnais, Banco di Roma and Banco Hispano Americano (now part of the Santander Group). It was only signed into an official partnership in 1970 / 71 (Wixforth, 2010, p. 109). Its Europartners group was more integrated than EAC / EBIC and its main focus was European monetary integration and therefore focused its operation there (Ross, 1998, p. 355). It constituted one of those banking clubs that aimed at preparing and pushing for the European economic and currency union.

The club banking operations were often conducted from Luxembourg. Luxembourg was a convenient and close offshore centre for the German banks that they used in order to participate on a significant level at the Euromarkets (Stigum, 1983, p. 180). It was indeed the international subsidiaries, mainly working from Luxembourg, which captured the growing international demand from German corporations (Büschgen, 1995, p. 739). The importance of the role of Luxembourg for the strategies of club banking is often overlooked when authors highlight key international affiliates of the German banks but omit their Luxembourg activity (see for example Wixforth, 2010, p. 106). Of 13 foreign subsidiaries of German banks, 10 were in Luxembourg in 1972 (Kobrak, 2007, p. 289). German banks' assets in Luxembourg tripled from 2-6 billion in the early 1970s. Given tighter limits of the Bundesbank for selling German securities abroad and holding USD deposits (Germann, 2013), German banks had to clear their Eurodollar transactions outside Germany. Luxembourg allowed German banks to breach their limits of exposure they were allowed to have towards foreign exchange markets, despite attempts to tighten credit laws

(Story, 1996, p. 382), allowing German banks to finance increasingly globalising German companies abroad.

Luxemburg as a financial centre gained momentum in the 1960s as the Euromarkets' stock market. An important security in Luxembourg was Eurobonds, issued by corporate and sovereign borrowers, reflecting the prominence of financing international corporations through jointly managed lending initiatives (Battilossi, 2000). The world's first Eurobond was issued and listed in Luxembourg in 1963. It was issued by Warburg, a London-based investment bank, with the help of Deutsche Bank (Burk, 1992; Pohl, 1998, p. 71). Eurobonds enabled MNCs and sovereigns to sell their debts denominated in dollars. Their large issues were predominantly handled by syndicates of the European banks because they had the advantage of being able to issue multi-currency bonds more easily. Each parent bank of the syndicate could do its own currency part. Pooling resources in Luxembourg thus allowed them to exploit currency differentials and circumvent any capital controls (Battilossi, 2000)²⁶. Luxembourg was particularly attractive for German banks at first because it was not so overrun by Anglo-Saxon banks and German banks were able to dominate the Luxembourg centre to a large extent (Dörny, 2014).

These activities had to be financed somehow. The second importance of Luxembourg was its role as the centre of Eurocurrency management (Dörny, 2014). The German foreign affiliates in Luxembourg were financing a large share of their parent banks' Euromarket activities (Büschgen, 1995, p. 737). US dollar funding was a difficult issue, particularly for German banks as they lost their international outposts. As a result, they had to rely on international emissions through consortiums and international networks that granted German banks some access to USD to lend to corporations. Their partner banks subsequently demanded access to DM which internationalised DM bonds, helping to form the EuroDM currency in the 1960s (Büschgen, 1995, p. 746). Deutsche Bank indeed pushed for a EuroDM market so that it could reduce the need to swap Eurodollars into DM for its German clients (Büschgen, 1995, p. 738). The dominance of German banks meant that Luxembourg developed into a centre for Euro-Deutschmark positions (Dörny, 2014, p. 229). According to a Euromarket banker at the time, each time the dollar fell out of favour because of stark fluctuations, financiers sought EuroDM which allowed Deutsche to establish its lead (Burk, 1992, p. 83). However, while the DM did become the second reserve currency, it only represented a minor share compared to the use of US dollars.

²⁶ Eurobonds received an even larger comeback in the 1980s, when different risk techniques allowed single banks to underwrite and sell bonds more easily.

Commerzbank and Deutsche Bank both used Luxemburg as their first physical establishment of foreign affiliates on their own. Commerzbank used it to enhance Eurocredits mainly to its German clients. Deutsche on the other hand did significant currency operations in Luxemburg to manage syndicated loans and other large-scale sovereign loans, for example to Latin America. It established a subsidiary in 1968 already for exactly that purpose (Büschgen, 1995, p. 373).

Thus, another vanguard for Deutsche's international banking next to the EAC bank was *Compagnie Financière de la Deutsche Bank Luxemburg*, founded in 1970 to exploit Luxemburg's sources of Eurodollars and – marks more systematically (Büschgen, 1995, p. 864). Deutsche was able to generate billions in Luxemburg, making it a crucial centre next to London and New York (Kobrak, 2007, p. 297). Thus, Deutsche Bank was increasingly able to rival its US American counterparts. The increasing access to USD deposits, coupled with its management of EuroDM, meant it was slowly able to manage syndicated loans on its own because it could finance its temporary commitments by the Euromarkets (Einzig, 1965) and even underwrite large fixed rate Eurobond issues for sovereign borrowers (Roberts, 2001, p. 182).

Luxemburg further developed into a crucial place for recycling the petrodollars. It was the European banks in Luxemburg, rather than New York, that recycled the large amount of the money produced during the oil crisis years (Kobrak, 2007, p. 316). The petrodollars were important in increasing the funds available for the European banks and gave the Eurodollar markets a huge push in the mid-70s (Altamura, 2016, p. 32). As a result, Deutsche Bank's balance sheet volume grew exponentially to DM 9 billion in 1975 and 15.5 billion in 1979 (Büschgen, 1995, p. 739). Petrodollars were commonly used for credits in the Global South and Deutsche was no exception. It extended the monies to Mexico and Argentina, providing the grounds for the detrimental debt crisis in the Global South in the 1980s. Deutsche Bank for example coordinated a syndicated loan of USD 1.2 billion including 68 participants in the loan. To account for the risk, Deutsche had to repeatedly increase Luxemburg's equity in 1973, 1975, 1977 and 1979 (Ibid.).

Luxemburg was a key stage within the extraverted strategies of German banks to respond to the impact of US American finance. It was a centre for different Eurocurrencies, mainly other than the dollar initially (Dörry, 2016), and therefore German banks initially sought to establish it as a power base. Non-dollar currency rose from 15% in 1969 to 35% in 1970s. Many European banks used it as a strategy to expand on the Euromarkets (Baker and Collins, 2005, p. 258). German banks participated well into this (Altvater and Hübner, 1988). The growing EuroDM business highlights the increasing control they sought to regain over their international financial

practices. Luxemburg thus reflects the initial resolution to the struggle of recouping lending to globalising corporations. It was a financial centre for German banks to gain both Eurocurrency liabilities as well as assets – Eurobonds – in a way that accommodated their syndicate strategies with the other European banks.

However, the club banks and syndicate loans hit their limits relatively soon in the 1970s and early 1980s because they predominantly relied on traditional lending and funding methods. The club banks allowed European banks to pool their limited Eurodollar resources, and adjust relatively successfully to the challenges of the Euromarkets. However, these joint ventures had little chance against the flexibility of LM on US money markets, as I will further specify in section 4.5. Thus, to gain more control over their own refinancing, they realised they needed more Eurodollars. Consequently, in the 1970s already, German banks started to initiate their own strategies in London to establish alternative practices to operate on the Euromarkets as I will show in the next section.

The importance of London in the shift to LM

The extraverted strategies meant that German banks increasingly had to look for USD deposits to fund their global networks. The extent of their practices was rather small compared to their German volumes of credit and compared to the volumes US American and British merchant banks channelled through the Euromarkets. However, by the 1970s, 30% of their income came from international finance (Ramm, 2002). It is difficult to get precise numbers for their Euromarket activities. However, a testament to their growing success is that the Bundesbank became increasingly concerned about the inflationary pressures that their Eurodollar flows caused (Germann, 2013; Story, 1996). The Bundesbank increasingly tightened foreign capital restrictions. What was important about going to London, however, was that it brought the German banks more directly in contact with LM. Their extraverted strategies on the Euromarkets in the 1960s and 1970s reflect the challenges that acquiring USD imposed on them.

Originally, capturing assets in London was tackled by their club banks which had their headquarters there (Büschgen, 1995, p. 831). However, by the mid-1970s already, the increasing sophistication of US and British merchant banks meant the European club banks seemed increasingly slow in capturing Eurobonds. London rapidly developed as the Eurodollar market since the 1960s which meant that German banks also had to go there (Dörry, 2014, p. 229). Anglo-Saxon banks were increasingly developing their financial muscles to do large and risky projects on their own. Thus, in many ways, Luxemburg as a financial centre can be seen as

an episode (and its current position as a legacy) of a failed response to the impact of US finance. London, by contrast, reflects the importance of the need to establish stronger connections to the US wholesale markets to acquire Eurodollars. Deutsche Bank as the biggest banks came to be amongst the first to mediate between foreign borrowers and US banks (Battilossi, 2002, p. 16).

Deutsche Bank set up its first representative office in London in 1972. The London office first served only as an extended arm to the Luxemburg subsidiary of Deutsche from where it raised Eurodeposits. The office was opened only a few months after Ulrich, the bank's board spokesperson, claimed that they were not planning to do that because their international strategy is through partnerships in syndicates. In order to appease the EBIC partners, it was agreed to deal with German clients only (Pohl, 1998, p. 75). This highlighted the early tensions of the syndicates. Club banks allowed global banks to pool their resources to capture larger assets which were more difficult to fund. However, it did not allow them to increase their capacity to capture them on their own.

The main problem for the London office was subsequently that its status as representative office prevented the bank from doing banking services, something the other German banks such as Dresdner Bank and WestLB were already doing. It needed to become a branch to conduct financial transactions such as foreign exchange, deposit taking and lending to capture Eurodollars. Doing these new practices would be crucial to be able to fund its growing international network.

However, acquiring new customers was not easy. German corporate subsidiaries in the UK as well as British companies were already dealing with local banks and were not really interested in the German branch of Deutsche. While the opening of its new branch in 1976, the first under the actual name of Deutsche Bank, was celebrated as a new dawn in Deutsche's international business (Pohl 1998: 83), the former representative office and now the branch had troubles because of restrictions on sterling lending the British authorities implemented. It could only work with clients that needed international currencies such as dollars and DM. As swaps were also affected by tight government restrictions, it had to rely on its international Euro-deposits for international clients. It had to rely on lending to local corporations as part of syndicates that Deutsche did not lead. To its luck, its triple-A rating of Deutsche made it a welcomed capital provider within those syndicates as British banks grew wary of the so-called secondary banks that ran into huge troubles during the 1973-1974 crisis (Pohl, 1998, p. 87ff).

Eventually, the London branch helped to conduct most Euromarket business from London. Deutsche Bank grew to be amongst the leading banks in the Euromarkets and was able to lead manage debt securities placement (see Büschgen, 1995, p. 856). It was from London that Deutsche expanded its Eurobusiness, export and import finance. Crucially, it established its foreign currency business, swapping its DM deposits and creating a niche it could control against the US American banks. Indeed, Deutsche was able to take Eurodeposits through its own branch in London in order to finance its international lending, channelling capital to the parent bank as well (Pohl, 1998, p. 81)²⁷.

Commerzbank was not restricted in expanding its own branch network in London through their banking club in contrast to Deutsche (Ross, 1998, p. 364). However, its pan-European strategies also determined the resources it placed into London. In contrast to Deutsche, it integrated more closely with its Europartners and bought for example the Dutch affiliation of the Europartners, rather than expanding more resources in London. Nonetheless, also Commerzbank engaged in Euromarket activities from London. It started to rival Deutsche Bank in issuing Eurobonds, partnering for example with Warburg to issue mix-currency Eurobonds in sterling and DM (Burk, 1992; Singleton, 2009).

Through syndications, Eurocurrencies and Eurobond placements, German banks were crucially involved in participating in the structures of the Eurodollar markets in London. They re-established their international networks and benefitted from the large loan demands of MNCs and sovereign borrowers. It is a common concern amongst the German finance literature that corporations started to finance themselves abroad in the 1970s and banks lost their credit business (Vitols, 2003b). However, in the 1970s, MNCs and sovereign borrowers still funded themselves through syndicated, hence more traditionally funded loans (Stigum, 1990, p. 233). It is partly through the European syndicates but also their own activities in London that these corporations gained foreign funding. While American banks managed to capture a large chunk, big German banks recouped some of that business. Some big German banks were even able to rival some of the US banks in the 70s (Battilossi, 2002, p. 18). Deutsche Bank was indeed leading amongst the European banks.

²⁷ Unfortunately, it has not been possible to gather precise data on the exact amount of capital channelled back to Germany from the Euromarkets. Tilly (1995) argues that we cannot do more than suspect that Deutsche's affiliates were important in London. Ahrens (2010) argues that we do not know enough about the initial strategies of German banks but also suspects they were crucial. While Kobrak (2007, p. 297) states that the overall impact of the Euromarkets on Deutsche Bank is unclear, I argue that its most profound effect is that the competition on the Euromarkets meant that German banks had to find better ways to access Euro- or US dollars.

London was indeed a strategic location in the development of the Eurodollar markets (Gindin and Panitch, 2012; Konings, 2008). It enabled the US banks to finance their own internationalising conglomerates that restrictions in the US prevented in many ways while giving the UK strategic anchor point within the processes of global financialisation. However, it also presented a crucial platform for the extraverted strategies of the German banks. London was a key anchor point in how German banks developed their initial attempts to connect more directly to US wholesale markets and channel USD deposits through their global funding mechanism back to the parent banks. In contrast to Luxemburg, US banks were present in London and the practices of LM were developing there. However, developing LM on their own was difficult for the German banks. By the end of the 1980s, as I will demonstrate in the next chapter, the foreign affiliates they had established in London to capture Eurodollars had to be 'updated' with a British merchant bank, Morgan Grenfell, that had tighter connections and more expertise in accessing USD money markets in the US. For despite the innovative strategies of the club banks, it became apparent that what German banks did not have was LM and reliable access to US dollars. They therefore had to develop new strategies to be able to operate on the Euromarkets which would eventually change their entire business model. Why the strategies of syndicates were not a suitable response to the rise of US finance is the subject of the next section.

4.5 The limits of the European syndicates

According to *The Economist* of 1976, the Consortium banks were "the most important banking development for a generation" (quoted in Roberts, 2001, p. 38). Indeed, in the beginning of the 70s the consortium banks were celebrated as innovative initiatives that could conquer the Euromarkets. However, already in the mid-1970s, they were 'Dinosaurs' given the innovations coming from the US markets (Ross, 1998, p. 354). Within a decade, these initiatives had declined in their importance. While it was probably cumbersome to negotiate amongst several banks in different countries and interests would diverge over time, it was a specific financial technology that meant that syndicated loans became unnecessary to manage large volumes of debt.

The Economist in 1976 underestimated the transformative impact of USD LM. Essentially, American banks had pushed USD LM so far that consortium banks had lost their advantages on the Eurodollar markets. In the 1970s, with increased sophistication of risk management techniques, syndicates were replaced by increasingly smaller groups, with members acting on secondary markets at the same time. The capacity to manage the corresponding risk was only

possible through asset and liability management, “an innovative technique that marked the most important structural change in the recent history of banking” (Battilossi, 2000, p. 169).

Originally, consortium banks had allowed European, but also Anglo-Saxon banks, to pool their resources to issue syndicated loans and Eurobonds more easily. This allowed them to share the risk and costs of going to foreign markets, particularly important as the US was almost impossible to access. However, given the new risk management techniques of American banks, they were able to extend loans to large projects and manage the risk themselves by selling parts of the loans. Given the increasing volume and sophistication of the USD money markets in the US, they had ample resources to provide short-term funding to manage these loans.

The development of the money markets in the US propelled the demise of syndicated loans on several levels. The first is the increasing funding possibilities for US American banks through which they dominated the Euromarkets (Stigum, 1990). The main currency was US dollars which the European banks could not access directly. They were basically banned from issuing securities on Wall Street as European financial authorities complained (Feiertag, 2005, p. 242). Particularly the increase of new financial relations on the US money markets with other financial actors such as mutual funds and radical new practices in placing securities established incredible funding flexibility for the American banks (Kobrak, 2007, p. 298). They were tough competition for the European banks attempting to gain deals on the Euromarkets. While the increase in volume of Euro-DM in the 1970s made the ‘home currency’ of German banks the second reserve currency globally, dollars remained the main Euromarket currency.

That is why the European club banks started to establish US American subsidiaries in the 1970s when regulation in the US markets became more relaxed. Deutsche Bank operated two subsidiaries together with its EAB / EBIC consortium. Their original goal was twofold: on the one hand they aimed to provide services to the corporations of the home countries of the respective banks that went abroad to the United States. On the other hand, they aimed to provide consultancy to US American business wanting to go to Europe (Büschgen, 1995, p. 755). In that sense, they had modest aims: financing of their traditional clients and attempting to align themselves with the US American companies where they hoped to be able to apply their European expertise of funding their production.

They had to start innovating to combine their universal banking nature to get access to the US market and to be able to start experimenting with those financial papers that the US banks used to snatch away their clients. The structure they came up with was interesting. EBIC established

two institutions. They established the European American Bank and Trust (EABTC) as a bank to take deposits and hold securities. To overcome the lending limits placed on the bank, they established a second financial house, the European American bank Corporation (EABC). This was not able to take deposits but had higher lending limits as a result. This allowed the EAB to have a foreign presence with which they could do both, taking cheap deposits as well as lending them out with few restrictions at much higher rates. This structure meant that EAB could even rival Chase and Citibank on relatively equal terms at the time (Kobrak, 2007, p. 313). In 1973, EAB was worth USD 1.7 billion in assets.

However, the ability of the EABTC and the EABC to fully satisfy their parents was limited. EAB bought the Franklin National Bank, a New York retail bank, in order to acquire cheaper USD funding (Kobrak, 2007, p. 315). But the foreign banks still drained valuable resources from the parent banks who had to supply them with Eurodollars. Consortium banks indeed struggled with a particularly vulnerable balance sheet that juggled various foreign currencies and maturities transformations. While all banks borrow short and lend long, the various currency transformations to gain dollars made the USD fluctuations in the 1970s particularly difficult for them. Consortium banks had to fund themselves to 81% on expensive inter-banking currency markets in comparison to 46% for American banks (Ross, 1998, p. 183). Continuous rejections of Eurodollars by the parent banks was not appreciated because being non-US banks themselves, they also had to get dollars on the expensive Eurocurrency markets. Given advanced securitisation expertise was increasingly more common in the US, it was difficult to get enough USD to rival US American banks, even by pooling capital.

The rise of the money markets and LM also meant that corporations increasingly funded through commercial papers, a short-term, non-collateralised IOU. They were issued on money markets, originally only by US American banks and corporations. Indeed, German banks seemed to do well with the EuroDM as they were able to offer niche products. However, with US American money markets maturing, more and more US American banks started to learn how to do foreign currency. Banks such as Goldman Sachs eventually offered to swap USD CPs into the local currency for US corporations on the US money markets (Stigum, 1990). Money market funds, too, invested in foreign commercial paper in the 1980s (Baba et al., 2009). While MNCs often funded themselves through syndicated loans in the 1970s, by the 1980s, they started to issue their own securities (Stigum, 1990, p. 233). Thus, demand for syndicated loans decreased significantly by the 1980s as a result.

One of the biggest strengths of the joint ventures was pooling capital to fund large-scale projects, reducing the risk of its participants. However, in an age when the need for USD dollars could equally be met on the US dollar money and Eurodollar markets, syndication lost its advantages. Given the fact that US American banks had sophisticated risk management and securitisation techniques, including dynamic funding networks by the 1980s, they could shoulder these projects on their own. Club banks could not provide the same leverage that apparently the securitisation practices of US American banks could provide.

Thus, the core business model of club banks became obsolete. LM led to the rise of securitisation (see chapter one) which meant that loans were increasingly traded on developing secondary markets. Illiquid loans had become more liquid. The strategy of the club banks and syndicates was to disperse the loan to share the risk of holding them on your balance sheet. However, this way of financing was increasingly replaced by devising new ways to trade securities and banks had to transform the way they conducted their assets. As it became obvious for the German banks, a Pan-European, purely defensive strategy was not very successful and German banks started to embrace banking on its own on the Euromarkets instead. Crucial, however, was the limited capacity of the club banks to raise enough Eurodollars. They relied on their parent banks for capital injections and therefore did little to connect more institutionally to the USD wholesale markets. They were required, however, to gain sufficient amounts of US dollars, as I will develop in the next chapter.

4.6 Conclusion

LM allowed US banks to dominate global financial markets which raised the imperative of other banks to get US dollars. Historicising the extraverted strategies of German banks in how they have sought to counter the US American challenge brings out the importance of the early Euromarkets for the transformation of German banking—not as an early proxy for rapidly globalising markets, but as the terrain in which particular financial innovations posed challenges. The significance of this history is easily overlooked if Germany's path to financialisation is conceptualised as marketisation. If market-based finance, such as the Euromarkets, is conceptualised as opposed to Germany's bank-based system, German banks' early practices in the Euromarkets become easily side-lined. This has led scholars to underplay the role of these practices in the trajectory of German financialisation. This chapter instead traced German banking to highlight how different locations and practices of the Euromarkets represented key

steps in how German banks sought to address the challenges of gaining US dollars. This chapter thus placed the Euromarkets as fundamental to the early connections of German banks with LM.

I have argued that German banks went to the Euromarkets to regain control over their assets in the 1960s. The way the early German export model was structured meant that international funding was difficult to get in Germany and was obtained from the Eurodollar markets instead. In that way, financialisation is a process that was already part of the (re-) making of German finance in the post WWII decades. I have shown that German banks firstly engaged with European syndicate lending. This meant that they had to start buying US dollars which they mainly did from their subsidiaries in Luxemburg. Initially fruitful because large corporations were often financed by syndicated loans, their success was slowly overtaken by US banks' use of LM in the 1970s. As a result, German banks aimed to enhance their capacity to access USD liabilities more systematically to improve their management of large structure financing projects. They thus started to establish international subsidiaries in London which promised tighter connections to the practices of LM. The growing dominance of US banks, coupled with tight monetary regulations in Germany, intensified their need to rely on their international subsidiaries on the Euromarkets for their US dollar funding and for developing the practices of LM. While Deutsche Bank developed more global links to the Euromarket practices, Commerzbank was more cautious and relied on cross-country partnerships.

In that way, this chapter has documented how the development of the Euromarkets represented the initial stage in the transformations of German banking. I highlighted how the rise of LM imposed the need to get US dollars, the second feature of the concept of extraverted financialisation. LM started to play a crucial role in the German banks' international strategies. This chapter thus provided the historical grounding for the German banks' subsequent strategies in the US. The following chapters build on this history to demonstrate how German banks addressed the imperative to get US dollars by focusing more systematically on US domestic financial markets to get the dollars at their source. For this, as I will show, they needed to adopt more and more the practices of LM to enhance their institutional connections to the US money markets. This process had crucial implications for the banks' asset management and eventually necessitated a change in their lending practices, not only in US wholesale markets but also in Germany. It led them to increase their investment in 'speculative' practices at the expense of accumulating loans in the 1990s and 2000s. This played out in fundamentally different ways at Deutsche Bank compared to Commerzbank, challenging the notion of a uniform German banking model. However, as this chapter has started to establish, the fundamental financial

transformation that precipitated the change on the asset side were the attempts to capture USD liabilities for which they needed to change towards practices of LM.

5 Liability management and the transformation of German banking

5.1 Introduction

In the early 2000s, Ackermann, CEO of Deutsche, was accused by *The Economist* of having turned Deutsche Bank into a giant hedge fund, doing risky speculation instead of handing out loans as it once did. Refuting such claims Ackermann proudly declared that on the contrary he had fundamentally reduced the risk exposure of his bank. He had dropped Deutsche's equity exposure in the German economy by 27% in 2004 to below USD 5 billion. Ackermann thus suggested that the bank's equity investment represented a 'cluster risk'. Reducing the equity exposure, he claimed, had made the bank safer in the past few years, rather than more fragile as *The Economist* claimed (Nolmans, 2006, p. 142f).

The profoundness of this shift becomes apparent if we recall the importance that the scholarly literature attributed to the equity stakes banks held. Equity stakes were considered paramount in manifesting banks' close relations to the German corporations which gave them 'voice' in directing their credit business. This was in fact envied by US banks because, so they thought, it afforded German banks significant control over their assets. By contrast, US regulation did not allow US banks to have similar involvement with corporations (Kobrak, 2007). In the early 2000s, however, Ackermann suggested that large equity stakes were in fact a risk for the bank. As a result, Deutsche started to dismantle its 'equity empire' (cf. Pfeiffer, 1987) in the late 1990s to the early 2000s, as did the other big German banks.

The fact that German banks reduced their equity investments in the early 2000s is well recognised in the literature (Ahrens et al., 2013; Berghahn and Vitols, 2006; Cioffi and Höpner, 2006; Lane, 2003; Streeck and Höpner, 2003). Scholars often explain this shift by the pressures of rising securities markets that led to Germany's convergence to US American financial metrics. This is often seen as a top-down process where the Securities and Exchange Commission was able to impose US American market-based standards on global financial governance. If non-US corporations wanted to be listed on the US stock exchange, they had to adopt 'transparent' standards which meant they had to reduce their personal 'insider' relationships between banks and corporations which implied a shift from relationship banking to transactional banking (Lütz, 2005a; Röper, 2018; Vitols, 2005). From that perspective, German finance would converge to US American standards because corporations would finance themselves on financial markets. As a

result, German banks' (traditional) practices became more superfluous. While it is recognised that banks are still centrally involved in credit allocation (Hardie and Howarth, 2013a; Hardie and Macartney, 2016), they are now caught within decentralised market forces that determine the allocation of credit. From that perspective, however, it is unclear why German banks would come to see their corporate relations as 'risky' and their practices of LM as the more secure alternative, as Ackermann suggests.

To understand why Deutsche Bank would pursue dismantling this previously important source of power so rigorously, this chapter delves into the transformation that German banking underwent before they were changing their asset-related strategies. This chapter thus examines the third feature of the concept of extraverted financialisation. To recall, this feature suggests that the need for US dollars to operate on global financial markets meant that German banks had to root themselves in the US. I thus examine how big German banks addressed the implications of the rise of LM since the 1980s until the GFC, and how the banks changed their strategies with respect to their assets as a result. As the previous chapter demonstrated, the rise of US finance meant that German banks had to go to the Euromarkets to recoup their business. This brought them into their first contact with LM. The chapter showed that, as their pan-European strategies failed, Commerzbank and Deutsche embraced strategies of their own in London. This meant that they needed more US dollars to work effectively on the Euromarkets. This chapter builds on that history to document how German banks attempted to address their need for US dollars by more directly anchoring themselves on the US money markets to access USD at their source. Continuing to centre the analysis on financial practices, I examine the various resources and strategies they employed to do so. I thus address the question of how the rise of US finance caused a transformation of German banking that would integrally connect the German banks' practices to the USD money markets.

This chapter argues that German financialisation is the outcome of a fundamental shift in the funding practices of the German banks. As managing liquidity requirements of LM from the headquarters in Frankfurt was difficult, they would build elaborate global funding networks to institutionalise better access to US dollars. Consequently, as I argue, the transformation of German banking took a specifically US form to address their dependence on USD liquidity. As such, the strategies they devised and the practices they borrowed from US banks were a form of empowerment in their attempts to cope with their US dollar dependency. I show that German banks initially attempted to address their USD funding needs through foreign subsidiaries in the US and offshore centres that they managed from London and Frankfurt, relying on the

Euromarkets as a USD recycling mechanism. Historicising the extraverted strategies of Deutsche Bank, I demonstrate that it realised in the late 1980s that it had to adjust its banking strategies more systematically to sustain its global USD funding needs. As a result, Deutsche Bank, in contrast to Commerzbank, adopted practices of LM, albeit not necessarily as previously desired. It bought a London merchant bank with better connections to US money markets. Its final step in transitioning to LM was to buy a US American institution, Bankers Trust, to adjust its asset side to be able to gain enough returns to finance the expensive practices of LM.

By outlining Commerzbank's practices as a comparative foil to put Deutsche's transformation into perspective, I show that it refrained from buying a foreign institution to implement strategies of LM more fully. As a result, it tried but failed to establish itself on US financial markets to invest more systematically in high yielding assets. This suggests that the practices of LM are a core factor in how the processes of financialisation play out. Investing into higher yielding assets in US financial markets is not easily done without having developed sophisticated practices of LM that are institutionally connected to USD money markets.

This chapter is divided into three further sections. In the next, second section, I highlight the institutional connections of the Eurodollar markets to US money markets to flesh out how the dollars were ultimately located in the US. I show how the practices of LM were thus uniquely supported by US financial institutions and therefore primarily empowered US banks. The third section traces Deutsche Bank's various strategies to build its global funding mechanism that could connect the bank more systematically to US wholesale markets. The fourth section documents Commerzbank's different approach to global banking and how its different approach to LM meant that it would not systematically sustain financial practices in US money markets.

5.2 The connections of the Euromarkets to New York: Locating US dollars

This section documents that the Eurodollar market is essentially an extension of the US dollar markets in the US. They provide a globalised financial market that is populated by various different agents outside the US that can use US dollars for their operations, even if they have nothing to do with the US. In the end, however, US global dollars on the Euromarkets are accounted for in US banks' balance sheets (at least initially until non-US banks acquired banking licenses in the US) and US Fed Funds. This can explain why non-US banks were drawn to establish their subsidiaries there and why US banks have a unique institutional advantage over non-US

banks on global financial markets. The second part of this section outlines more clearly how these institutional differences presented novel constraints for the German banks. It therefore highlights how unlikely it was initially for German banks to go to US wholesale markets, re-emphasising the argument that US dependence drove German banks' extraverted strategies, rather than 'market pressures' for higher profits.

The obvious reason for US banks' advantages on the Euromarkets was that it was in their home currency and that multinational corporations (MNC) used dollars to fund their operations. It was therefore easier for US banks and corporations to account for USD in their own books, and the tools to manage the various mismatches and risks of balance sheets were also predominantly in USD. But their advantages go beyond that. US American banks were better at capturing the Eurodollars because LM provided them with the capacity to manage and raise funding much more dynamically and sell their securities on both markets and arbitrage between them. In that way, LM allowed US banks a lot more leverage than the European banks could ever get with their syndicates. Establishing themselves in the US was therefore necessary if German banks wanted to rival the US banks on global markets.

US banks could combine their USD money market operations in the US with their Eurodollar market securities. In that way, the financial practices through which US banks bought and sold dollars were starting to connect various kinds of financial markets and LM gave US banks a unique way of exploiting the connections. US banks could combine different kinds of short-term paper to sell in those different markets according to their liquidity needs. This gave them ample opportunities for international arbitrage as well as an enlarged pool of USD funding for their financial activities at home and internationally. Their ability to do this was unique because despite the offshore and global nature of the Eurodollar markets, the dollars in fact never really left the United States and were cleared on US American soil. The difficulties of German banks to access USD to establish their LM practices thus arose out of very specific US American institutions and regulations that I will outline in the following.

The Eurodollar operations were what Marcia Stigum (1990, p. 209) calls a "merry-go-round" system centred on Fed reserves. The US dollars chase had to eventually end up in the US. Despite the fact that billions of dollars circled the world through the channels of the Eurodollar markets, they were booked on US banks' balance sheets. Even though the centre of the Eurodollar markets was in London and all major European banks booked plenty of Eurodollars on their own balance sheets, US dollars had to be cleared in the US. While the petrodollars were invested by the oil rich countries and recycled through London to the debtor countries in the Global South

by European banks, and thus never seemingly set foot onto the United States, it was US American banks that had to shift their deposits and reserves with the Fed to make these transactions possible.

Making this work, European banks were required to hold their dollars in an account with a correspondent bank in the US. Regulations in the US meant that dollars had to pass through US American banks. This was until the 1978 International Banking Act that allowed foreign branches to hold a reserves account with the Fed. However, the Fed applied tight restrictions on the volume of their reserves accounts. Thus, even when major European banks had branches in the US, they kept depositing with US American banks because they could hold more US dollars that way. This meant that if a non-US bank moved US dollars, it was its US correspondent bank who cleared the deposits with the US counterparty in the US.

Stigum (1990, p. 206)²⁸ has an illustrative example: if Deutsche Bank received a loan of USD 10, let us say from Chase London, Deutsche's partner in the US increased its deposit account by USD 10 and therefore had to hold 10 more in reserves with the Fed. The partner US bank of the creditor, Chase New York, decreased the deposit account that Chase London held with it by 10 and therefore decreased its Fed reserves by 10. This was simply done by a transfer of reserves from Chase to Deutsche Bank's partner bank in New York²⁹.

This practice had two implications. The first is that US banks had clear advantages over non-US banks. The above described connections meant that Eurodollar rates followed the US dollar 'domestic' rates closely (Stigum, 1990, p. 254ff). Because US banks were involved in both ends of the system, they had preferential access to information that they could pass on between their onshore and offshore entities. US banks could talk to their branches overseas over the phone whereas German banks had to read about price movements in the newspaper the next day. They could thus compare movements within both markets, exploiting price differentials between them, and complement their funding and investment of domestic dollars with Eurodollars and vice versa.

Secondly, this meant that the Eurodollar markets institutionalised a global clearing system that allowed the whole world to trade in US dollars, onshore and offshore, including trade between non-US banks. Within this, however, non-US banks were dependent on their US American

²⁸ See Stigum (1990, p. 199ff) for a more detailed and illustrative account of the different lending and investment practices. She explains the corresponding mechanisms of the changes on US balance sheets for the interested reader.

²⁹ In million would make this example more realistic but I stick with simplicity.

counterparts and a clearing system in the US whose mechanism was mystifying to the European banks. While US American banks could enhance or offset their risk on the Eurodollar market as they wished, the Euromarkets mostly represented an additional currency and funding risk for German banks. If Eurodollars would dry up, they could not easily access dollars in their home markets to make up for the loss. USD deposits that their own central banks had were only a fraction of those that they were accustomed to access on the Eurodollar markets. That way, they had to operate costly USD standby lines with US banks. In case of crisis, US banks only faced the price of additional Fed reserve costs, whereas German banks had difficulties accessing USD even in normal times (Stigum, 1990, p. 286f). Indeed, central banks were increasingly worried about USD flows on their domestic banks' balance sheets since the late 1960s (Schenk, 2005, 2002).

In addition to their unique connections to the Eurodollar markets, US American banks have a long history of institutional innovations that established deep and liquid wholesale markets in the US. US banks could use a lot of institutional and political resources to engineer financial innovations that would expand financial markets and connect them to socio-economic life (Konings, 2011; Krippner, 2011). The US had several laws and tax incentives that supported the use of debt and private financial actors in social welfare such as housing for example (Roberts, 2013), the provision of pensions (Kobrak, 2007), but also in personal consumption (Montgomerie, 2006) or junk bonds and hostile takeovers within corporate governance (Knafo and Dutta, 2016). That way, banks found many opportunities to access funding needed for LM and accommodate the higher funding costs of short-term funding with innovative assets that carried higher yields. While commercial banks initially had a funding crisis in the 1970s as I outlined in the beginning, the use of LM to benefit from the rise of the money markets turned this obstacle into a source of power (Beck and Knafo, forthcoming; Knafo, 2018). The institutional set up of US finance was a uniquely complex network of financial markets that would provide both funding and investment opportunities for the practices of LM that non-US banks could not find in their home markets.

In a financial architecture in which banking became slowly but firmly centred on USD, German banks could reduce the advantages that US banks were having by establishing themselves firmly on USD wholesale markets. As I show, the Eurodollar markets provided them with vast amounts of Eurodollars. However, in order to increase their capacity to engineer enough USD debt, they realised that they had to go to the source. Next to London, New York thus became a crucial target in the 1970s. US American banks had developed their Euromarket practices here and the city was established as a central hub for global financial activity. By the 1980s, all major

international banks had opened branches in New York (Stigum, 1990, p. 215). This, however, was not easy for German banks. US financial institutions were relatively protected against foreign banks. As much as US financial institutions supported a unique power position for US banks, they posed several regulatory restrictions for non-US banks up until the 1990s, as will be the subject of the next section.

Ring-fencing US dollars

In this section, I will outline some of these regulatory and operational restrictions that German banks had to overcome to root themselves in US money markets. I highlight the restrictions to put weight to the point that German banks rooted themselves into the US money markets to gain institutionalised access to USD as a priority, despite the fact that the institutional complexity and politics of financial markets in the US provided fundamental disadvantages for non-US banks. In contrast to the general perception of the USA as a liberal financial system, it was on the contrary highly regulated and closed its financial borders – at least initially (Konings, 2010). The strategies to overcome those hurdles shaped the German banks' strategies of building global funding networks on the Eurodollar markets because the direct access in US money markets was more restricted.

The SEC regulations were very restrictive in the post-war decades, up until the 1990s, about who can sell what in the US. The SEC posed several limits on universal banks' lending and profits capacity which severely restricting their access to USD as a whole (Kobrak, 2007). According to a Deutsche Banker who was in the US in the 1980s, Deutsche's goal in US markets was to sell Eurobonds initially. However, they had to be "seasoned"³⁰. Deutsche could only trade them on secondary markets, rather than originate them. This meant they had to buy them from other financial institutions which requires more USD funding than brokering them to other investors. Thus, Deutsche had trouble to acquire new customers or even keep funding their old clientele. This was worsened because German banks were also prevented from accessing several (semi-) public capital such as the pension funds, a large pool of capital US banks used for leverage. The SEC restricted who can act as brokers for pension funds under the Employee Retirement Income Securities Act (ERISA) in 1974. As a result, German banks were prevented from using ERISA funds. Deutsche Bank was lucky to operate at all as a universal bank. It received an exception to operate as a commercial and investment bank at the same time because it acquired its investment bank before Congress had passed a law subjecting foreign banks to the same laws

³⁰ Personal conversation with upper – middle manager.

as local banks. However, Deutsche was under constant threat of violating US requirements because of its corporate entanglements as a universal bank (Kobrak, 2007).

The 'ring-fencing' of US domestic financial markets was slowly relaxed in the 1970s. As French and German banks complained, selling foreign securities on Wall Street was virtually impossible before the mid-1970s (Feiertag, 2005, p. 240). But in the 1970s, the SEC detonated a 'big bang' which removed many restrictions for investment banks in the US (Gindin and Panitch, 2012, p. 122). This was coupled with an ease in regulatory restrictions for foreign banks such as allowing foreign banks to seek federal licenses and acquiring national banks with the International Banking Act in 1978. The US could no longer refrain from allowing some reciprocity that the European countries demanded for the liberal handling of the American banks in Europe (Abdelal, 2006). However, because of the significant number of regulatory hurdles until the 1990s, such as the Glass-Steagall Act, European banks had to innovate with their institutional and legal forms that they could establish in the United States. The turn to USD money markets as a way to fund their increasingly global business was thus initially fraught with obstacles.

It was thus in the 1970s that the German banks attempted to expand their access to USD beyond the Euromarkets on US domestic financial markets. However, while being legally allowed on US markets, German banks had to overcome their 'practical barriers'. US American financial practices operated on different patterns and performance indicators. Speaking the same language and having rating agencies that rate and validate your products is a vital part of increasing the volume of financial transactions (Knafo, 2013b). It was difficult for German banks to adopt those kinds of 'transparent' and standardised financial practices which were needed to tap into US dollar markets (Lütz, 2005a, p. 148). They operated on "insider trading" meaning that large shareholdings, information about them, and metrics of firms' debt were not published in a standardised way, visible for everyone. Information about firms' performance were traditionally passed on between economic and financial elites of the Deutschland AG instead of through open market metrics (Hassel, 2003).

Thus, the big German banks traditionally employed fundamentally different strategies to empower themselves. It is one thing to bank on Euromarkets as part of a club while maintaining your own traditional rationale of doing business. It is a significantly different challenge to set up financial subsidiaries in a new environment that seemed to be at odds with their previous financial practices. As it is well established, big German banks had a stable source of German DM deposits that ensured cheap and secure refinancing of their assets. In contrast, the funding practices on USD money markets were relatively expensive and not well known to the German

banks. German banks' international subsidiaries indeed left behind a 'cosy relationship' in Germany.

Ironically, the US American banks in fact envied German banks' lending practices with corporations in Germany. Deutsche Bank, Commerzbank and Dresdner Bank³¹ were commonly seen as the "three rich powerful banks [that] dominate the market", jealously admired for their near monopoly position and their large scale of investments into the German industry (Kobrak, 2007, pp. 290, 443). Their position within the German economy seems to have placed them at an unfair advantage in banking because they were able to sell securities, hold large corporate stakes and lending regulation incorporated only a few restrictions for the universal banks (Höpner and Krempel, 2004; Schmidt and Tyrell, 2004). Additionally, German banks' public support was extensive. Public financial institutions absorbed their lending risk of patient capital (Vitols, 1998). This gave German banks many opportunities to capture corporate finance. While German finance is very competitive because of its vast numbers of banks, this also served as a protection against the entry of foreign finance, as Kopper, head of Deutsche's management board, thankfully observed (Fallon, 1994). From these characteristics, German banks seemed to be better placed initially to provide financial services for growing and internationalising German conglomerates.

The fact that they abandoned their 'safe haven' of German financial practices (Lütz, 2000) that afforded them useful resources can only be explained by looking at the specific challenges that the rise of LM posed for the German banks. Similarly to establishing themselves on the Euromarkets, German banks did not just go to the US to capture any resources in the 1970s, they had plenty at home. It is about capturing specific resources that they did not have: US dollars.

To recall, the Euromarkets were useful to capture Eurodollars as I demonstrated in the last chapter. However, funding the club banks on the Euromarkets was expensive and difficult as the last chapter showed. US dollars were also difficult to account for in their own European accounting books. Currency derivatives were not yet a profitable tool to exploit currency mismatches. The Euromarkets were thus a mixed blessing for the banks. After the mid-70s, foreign commercial business made up 30% of total earnings of the big German banks (Ramm, 2002, p. 190). However, even though the syndicates allowed them to capture USD business, participate in the rise of the petrodollar recycling mechanism, learn financial innovations from

³¹ Dresdner Bank used to be the second biggest bank of the German big banks. During the GFC, it was acquired by Commerzbank as I will show below.

the US American banks and reduced the risk of their loans, they were not competing on a level playing field with the US American banks. While German banks could rely on the advantages of having EuroDM as a secondary global reserve currency and a large deposit base at home, it was necessary to go to the US to participate in the rise of the money markets. US American banks managed to raise funds quickly on the USD money markets as I outlined above.

This highlights how the concept of extraverted financialisation provides an interesting new avenue to understand the implications of US American finance. German banks enjoyed the significant advantage of trading EuroDM and supported a large export sector that was actively growing and in demand of overseas investment and financing. However, embracing the Eurodollar markets meant that they had to start following US American banks to their home markets, representing the extraverted nature of financialisation. The impact of US finance is often tracked the other way around. Lütz (1998), for example, argues that it was the power of the Securities and Exchange Commission (SEC) and US American institutional investors that were able to spread US American financial interests globally. Instead, I look at the German responses to US American financial innovations to capture better how German banks build up their global institutional capacity to trade and speculate to such high amounts. I maintain that the impact of US American finance is not best captured by deregulation but instead about building complex institutional capacity to do LM which resulted from their US dollar dependency. As accessing US dollars was initially difficult, due to various regulatory constraints, German banks started to embrace their London base more systematically to establish a global funding mechanism. The next section traces Deutsche's way from London to US money markets. The section afterwards will contrast Commerzbank's practices. Both kinds of strategies reflect three distinct attempts within their strategies to access USD money markets.

5.3 Chasing the dollars: from the Euromarkets to the USD money markets

This section examines how Deutsche Bank transformed the nature of its own banking in order to better access US money markets. As I have established, money markets in the United States were difficult to access and money market practices were difficult to manage from far away in Frankfurt. German banks did not have the financial technologies to sustain access to short-term USD debt in large quantities. As a result, the German banks needed to make a "qualitative leap" (Deeg, 2001, p. 30). They went on a "much-publicised shopping spree, buying investment banks and bankers in London and New York" (Deeg, 1997, p. 64).

Deutsche's transformation developed in three stages that I will examine below. Firstly, it attempted to set foot in the US through international subsidiaries to gain better access to the source of USD funding. However, at the beginning, the US affiliates were not independent yet and had to be funded by a global network of subsidiaries to access different locations of Eurodollars. Deutsche could not sufficiently develop its own capacity to find sufficient USD liabilities. The second stage concerns a more systematic attempt to gain new technologies from other banks in order to enhance access to US money markets via the indirect route of funding in the Euromarkets. It acquired the British merchant bank Morgan Grenfell that had a more established business in the Eurodollar markets, as well as in US money markets. As a result, Deutsche started to adopt the strategies of LM within its own institution. The third stage represents Deutsche's most radical transformation that reflected its need to have a US institution that would root Deutsche more directly in US money markets. Morgan Grenfell's links in the US were not enough. Deutsche Bank needed to have better connections to US securities houses to sustain short-term funding on US money markets and to be able to invest into assets that can accommodate the higher costs of LM.

The making of a global funding mechanism

The first stage concerns Deutsche's practices to activate its US business with the help of foreign subsidiaries. As those subsidiaries initially really struggled to get business, not to speak of rivalling US American banks, Deutsche built a global funding mechanism through various global subsidiaries at the same time to meet its growing need of US dollars. Even the traditional clients of the German banks, the German corporations, preferred banking with US banks given their access to the US money markets and their large distribution networks. As a result, the difference in banking strategies between US American banks and European banks was striking throughout the 1970s and early 1980s. US banks were already adjusting to new techniques of LM (see chapter two) and were slowly shrinking their loan books. European banks instead first had to chase assets to gain any business at all. The new foreign branches found that making money in New York was difficult. European banks ended up in the second row, buying corporate loans from the US American banks. US banks sold corporate loans to decrease the capital these loans absorbed on their balance sheets. In contrast, European banks needed to expand their balance sheets (Stigum, 1990, p. 301). The European banks initially had to get what they could with their limited resources and connections in the US.

Deutsche is often seen as the only successful German bank to participate in these developments (Beyer, 2003; Beyer and Hassel, 2002; Höpner, 2001). But it had a slow start. German banks had

to build up their capacity for US dollar management, which they did not possess before. Next to its EAB alliance documented in the last chapter, Deutsche bought into UBS Corporation in 1971 for 4million USD to establish the now called UBS-DB Corporation to attempt to tackle the USD markets together (Büschgen, 1995, p. 846). However, in 1978 with the change in banking laws, Deutsche wanted to attract and service foreign capital on its own terms. It bought the entire corporation from UBS, renaming it Atlantic Capital Corporation, which operated as a subsidiary. In addition, Deutsche opened a branch in the US (Kobrak, 2007, p. 317). The structure was similar to Deutsche's subsidiary in London. The legal form of a subsidiary meant that Deutsche could operate in the US as an investment bank as well as a commercial bank with its branches for deposit banking (Büschgen, 1995, p. 858). This was important to gain US dollars in the form of deposits as well as ascertain new financial assets needed to fund its increasingly costly Euromarket operations.

Yet, despite Deutsche's close relationships to German corporations, the bank experienced similar problems as with its London branch. Deutsche's previous German customers preferred the full-service of the EAB, not Deutsche's limited services (Kobrak, 2007, p. 318). While Deutsche's international strength was traditionally trade financing, it lacked the capacity to structure corporate financing needs on the money markets. It was only in the 1980s that another subsidiary, Deutsche Bank Capital Corporation (DBCC), managed to become interesting for large German companies. However, while DBCC was leading amongst non-American banks, Deutsche was not able to achieve much in comparison to US banks such as Goldman Sachs and Morgan Stanley (Büschgen, 1995, pp. 846, 766). With the help of LM, US banks had already established better means to finance German banks' previous customers. US banks were able to manage large amounts of money market securities for themselves, but also structured money market papers for corporations to fund their investments. German banks had little capacity to expand on an exponential scale like the US banks. Given the declining importance of Deutsche's syndicates, Deutsche Bank needed to find another way to gain US dollar funding both on the Euromarkets as well as in the US.

In order to tackle the growing need for US dollar funding, Deutsche established Capital Management International GmbH (CMI) in 1983. CMI was established as an independent asset and money manager to exploit the growing pool of pension funds to circumvent the SEC ban on foreign banks to access ERISA funds. The late 1980s also saw the sale of the EAB shares and the moving of its clients and credit lines to the New York branch. With this added capital and new clients, and the new technology systems in place, Deutsche was able to offer money market

financing, including commercial papers which were a crucial funding security on the money markets.

To complement their activities in the US, Deutsche gradually built its global network for USD funding. Deutsche founded various entities such as Deutsche Bank Financial Inc., Dover/USA, in 1985, to participate significantly on the commercial paper market for short-term funding to finance the subsidiaries of Deutsche in the US. It established independent subsidiaries other places to gain better access of Eurodollars, as in Luxemburg and London. But Deutsche had to supplement them with an independent offshore centre Deutsche Bank Finance N.C. in Curacao (Büschgen, 1995, p. 854) or in the Cayman Islands in 1983, for example (Oerman 2006) to capitalise on short-term funding opportunities on the Euromarkets. The goal was to have representatives of this securities house in all major financial centres.

As a result of an increasingly complex global funding mechanism based on US dollars, exchange rate concerns became more central. Given higher volatility of the dollar against the DM since the 1970s, Deutsche had to increasingly manage its exchange rate exposure, which made its Eurodollar market funding more difficult. In the 1980s, the bank started to make use of the growing derivatives markets with its Luxemburg subsidiary. Deutsche bought its first currency swaps from Morgan Guaranty in 1982 to transform its long-term USD bond issues into a variable London Inter-Bank Offer Rate (LIBOR)³² position. At first, Deutsche did not know how to structure exchange rate derivatives. However, its global liquidity management skills improved in the 1980s. Its Luxemburg subsidiary, being in the centre for Eurocurrencies, helped to improve Deutsche's skills to do interest swaps to manage the costs and volatility of the 1980s (Büschgen, 1995, p. 767).

Initially a vital need to manage the adverse effects of unstable currency mismatches connected to its funding strategies, swaps and derivatives would subsequently grow into a crucial asset of Deutsche Bank. Currency speculation was already an international practice in the 1960s that allowed Deutsche to benefit from movements with the dollar against the DM, as I showed in the last chapter. However, it is no coincidence that derivatives would become a core business for Deutsche. Currency swaps allowed non-US banks to swap their Eurodollars into their own currencies and vice versa. Deutsche would eventually rise amongst the five leading swap-banks in 1990. 99% of their swap deals were traded on their own books, rather than using them to

³² Libor is the Eurodollar rate banks charge to lend to each other.

hedge currency risk mismatches (Büschgen, 1995, p. 768). Its success with swaps were born out of their original need of accessing the USD.

And yet, despite these various changes, Deutsche's attempts to consolidate its efforts to institutionalise US dollar funding remained of limited success. While the global expansion of Deutsche's subsidiary network went ahead in the 1980s, it struggled to implement the new financial technologies of LM needed to survive the rapid transformations in US American finance in the 1980s. Deutsche increasingly relied on funding in US wholesale markets and in contrast to relying on its traditional DM deposits, it needed better technologies to manage that transformation. Compared to the flexibility of the US banks, its asset manager CMI, for example, only acquired a few investors. CMI still used different performance measurements and found it difficult to innovate new mathematical models. It was rather shunned by investors operating on different metrics that were hard to manage from Frankfurt (Büschgen, 1995, p. 762; Kobrak, 2007, p. 299). It took until 1987 when Deutsche had its first own influential large syndicate project where they managed to pass on parts of their loan exposure (Büschgen, 1995, p. 766). It was only in the late 1980s that German banks embarked on a larger mission to adjust their performance and clearing systems in Germany (Lütz, 1998, p. 162).

The operational systems in Frankfurt were thus transformed to help German banks compete in US markets, an outcome of their extraverted strategies. However, its US outposts could not survive on their own yet. Given the trouble to attract customers and gaining sufficient access to US dollars, the subsidiaries still needed support from their parent bank. Similarly to the syndicate strategies, Deutsche had to find ways to provide capital for its international endeavours. The increasing network of US affiliates was an attempt to establish better access routes to US dollars on the money markets. However, there thus was a growing concern at Deutsche in the 1980s to learn the "Anglo-Saxon way of money management" (Herrhause, chairman of Deutsche from 85-89, quoted in Kobrak, 2007, p. 307). Deutsche had to improve its strategies within the institution to be able to pursue its strategies of extraversion. It needed to find better ways to manage the increasing costs of banking in the US and managing short-term money market funds as well as its (longer-term) Eurodollar deposits.

While the increasing bank failures and the concentration of the industry showed a general turmoil of finance in the 1980s, it seems that capital and money markets in the United States were particularly difficult to access for European banks. The Euromarkets provided an easier way for European banks to access US dollars, at least in the 1990s. London, the financial hub of the Euromarkets, was therefore a crucial next step to overcome the limitations of managing USD

funding from Frankfurt. Instead, Deutsche started to conduct its international strategies from London to get closer to the roots of where US dollars were created in the first place, the US, as I will demonstrate in the next section.

Morgan Grenfell: LM in London and the Euromarkets

The merger with Morgan Grenfell represents the second stage in Deutsche's extraverted strategies to integrate itself in the rise of US finance. Morgan Grenfell was important for Deutsche for two reasons. Firstly, Morgan Grenfell had a strong position in London. This was essential for banking in the Euromarkets. In the 1980s and 1990s, as I will show in more detail in chapter six, Deutsche still severely struggled to implement the operational and managerial requirements to accommodate the strategies of LM in US money markets. In comparison, Eurodollars in London were a preferred strategy for Deutsche's global funding needs. London was indeed a crucial platform where many US American financial technologies were proliferating (Konings, 2008). It was thus a strategic hub for European banks to connect to new practices they needed to survive in global financial markets. Secondly, Morgan Grenfell could connect Deutsche Bank more systematically with the US money markets, albeit indirectly via the route of London. Given Morgan Grenfell's long-standing links with the US, it promised to provide crucial experience of financial practices that could manage funding from US money markets. This section thus sets out how Morgan Grenfell helped Deutsche Bank to expand its foreign network in the US. I will firstly give a very brief description of the British merchant bank and highlight its importance for the extraverted strategies of Deutsche to access US financial markets. In a second step, I will highlight how this changed both Deutsche's strategies of investment as well as its funding strategies.

Morgan Grenfell was a traditional British merchant bank founded in 1838, leading in London in corporate and advisory finance. It was at the forefront of mergers and acquisitions business in the 1980s. It became involved in securities trading business since 1984 and Deutsche Bank became one of the new shareholders of just under 5%, financing this expansion in business. Morgan Grenfell was also a leading asset manager for international assets of US pension funds. It was long closely related to the JPMorgan banks in its various legal forms, but had to divest from 1933 and sold its last shares in 1982 because of US regulatory constraints on operating as an investment bank while holding stakes in a commercial bank. The market crash of 1987 caused heavy losses for Morgan Grenfell, including a scandal over insider trading (Burk, 1989). While Morgan Grenfell had since recovered, a reason why Deutsche was able to buy it in 1990 was

that Morgan Grenfell's position weakened as a result. Deutsche Bank bought it for USD 1.48 billion in what both banks claimed as a "friendly takeover" (Prokesch, 1989).

Morgan Grenfell, renamed Deutsche Morgan Grenfell (DMG) was an important strategic step to institutionalise Eurodollar practices. To recall, the Euromarkets provided the initial contact of LM for the European banks that they aimed to exploit for US dollars to finance their globalising home country customers. When the increasing challenges of the rise of the USD money markets could not be addressed through their syndicate lending, German banks went to London to integrate themselves more closely with US financial innovations to access USD funding. While Luxemburg was crucial for the management of Eurocurrencies, London was crucial to develop the practices of LM that could obtain US dollars directly.

Deutsche's wider empire relied on DMG as a central outpost to manage its internal distribution of Eurodollars. In the 1980s, much of the Eurodollars (but also the EuroDM) were passed on into the European interbanking market to fund banks' operations in Europe. This direction of Eurodollar flows remained more or less the same until the mid-90s, when the end points of the Eurodollars switched from the London inter-banking market to non-bank financial institutions in the US (McGuire, 2004). To explain this reverse of USD flows, however, I will first establish how DMG was crucial for Deutsche's strategies in the US. As I show, the need to establish practices of LM in the US, the third feature of extraverted financialisation, can account for why US dollars were routed towards non-bank institutions in the US since the end of the 90s. The changing direction of US dollars reflects Deutsche's changing strategies to accommodate the need to develop practices of LM.

DMG had several links with US wholesale markets. Because of Morgan Grenfell's capacity to fund in US money markets, the merger with the British merchant bank presented a significant change in the operations of Deutsche. This was crucial because money market trading "had leapt in importance" during the 1980s and early 1990s (Burk, 1998, p. 136). In 1994, DMG's investment banking business was fully integrated into Deutsche's global operations (Burk 1998:136), after the promised period of 4 years to keep Morgan Grenfell independent after the merger. But Deutsche still gave DMG autonomy from Frankfurt, a freedom they much appreciated and that they exploited for their investments in the US. This independence initially was important because these practices did not yet work smoothly at Deutsche Bank because their systems did not match up to the practices of LM, as I detail more closely in chapter six.

Deutsche thus transferred its whole investment banking division into DMG to be better equipped for the US markets. Deutsche reorganised its banking subsidiaries under one holding that managed the entire US banking with a balance volume of 14 billion USD in 1992 (Büschgen, 1995, p. 859). This was largely managed from London and by newly hired people with experiences on money markets. Deutsche's hands-off approach was fundamentally different from UBS, its main European competitor, where the head office in Zurich decides almost all deals (Celarier, 1996). The fact that it embarked on a rapid and fundamental transformation with its restructuring of the US operations that it managed from London was perhaps demonstrated by McClelland's claim that it will take Deutsche Bank five years to turn itself around into an investment bank. This is quite ambitious as JP Morgan, previously a prime US commercial bank, took 10 years, similar to Bankers Trust as I have shown in the first chapter. McClelland came from Morgan Stanley and became CEO of Deutsche's US securities business (Celarier, 1996).

Deutsche pushed their access to USD wholesale markets. DMG had a stake in the investment firm CJ Lawrence that traded with securities and brought in new experts from other banks (Kobrak 2007: 329). It brought the securitisation team as well as software systems from Daiwa Securities when Daiwa left in 1994 but it did not want Andy Stone, the head figure of the mortgage-backed securities who was too much of a 'star' for Deutsche's business culture at the time (Kantrow 1994). While Dresdner Bank had to leave the coordination of capital increase on USD markets to Merrill Lynch, with CJL, Deutsche could join forces with Goldman Sachs and Merrill Lynch to place its own equity stake on the New York Stock Exchange (Euroweek, 1995). Deutsche was also accepted as a primary dealer by the Federal Reserve Bank of New York (Kantrow 1994). This would prove vital in circumventing the restrictions the SEC places on Deutsche's dealings, particularly on the profit volumes that Deutsche could make with its investment firm CJ Lawrence / Deutsche Bank Securities Corporation (CBSC). CBSC became a single section 20 subsidiary after the Fed ruled that Deutsche Bank Capital Corporation could not share its resources with the other investment bank CJ Lawrence, operated by Deutsche under section 20 of the Glass Steagall Act. The government securities dealings made sure the 10% revenue limit of section 20 subsidiaries allowed for high absolute volumes. These deals highlight Deutsche's growing attempts to institutionalise US practices to address the USD funding constraints of LM.

Challenges of LM and the changing loan portfolio of Deutsche Bank

Establishing securities houses in the US had larger implications for the rest of Deutsche's operations and would lead to a far reaching transformation of the whole bank. I will highlight

these firstly, in this section, at the level of assets, and, secondly, at the level of its funding strategies on the Euromarkets in the next section.

With the increasing trading and funding with short-term securities, traditional risk measurements did not work anymore. Krumnow, Deutsche's head of risk management, changed the risk management in the late 1980s and early 1990s as I will show in more detail in chapter six. Originally focused on regional risk exposures, it adopted risk assessment methods that calculated risk exposure for the whole institution. This reflected the increased need to account for the expenditures of US dollars for the whole bank as I outlined in chapter two. The bank it copied from was no less than Bankers Trust, the bank who initially developed the risk management strategy of RAROC as I showed in chapter two. Bankers Trust would later become the successful target for Deutsche's merger. Through RAROC, Deutsche found out that 80% of its credit risk exposure lies with new customers, newer than five years (The Economist, 1993, p. 25). Riskier assets reflect the fact that Deutsche needed higher yields to make up for their growing funding costs. Deutsche's changes in risk management practices demonstrate clearly how Deutsche had to embark on a transformation of its entire bank given its entanglement with the Eurodollar and money markets.

To recall briefly from chapter two, Bankers Trust pioneered RAROC to price and measure the performance of traditional lending practices by taking into account the risk of the individual positions in order to evaluate whether it was an efficient use of the bank's capital. That way, it could start measuring the risk of holding a loan on the portfolio, exposing the costs of corporate loans that were traditionally ignored. RAROC exposed a fundamental insight into lending: corporate loans were highly risky. If things go wrong, getting rid of a loan is usually much more difficult than selling a security. Thus, it started to question the viability of one of the core functions of a bank: holding loans – the risk of credit – on its own books³³.

A crucial imperative of LM on US money markets is the need to address the rising costs of expensive US dollar funding. To earn more than the costs of USD capital on Deutsche's balance sheet, it came increasingly under pressure to adopt even more US practices to accommodate their USD funding. They had to increasingly invest in practices on capital markets to gain assets with higher yields. This eventually started to affect their core business, corporate finance. Thus, the increasing attempts to develop LM as strategies to get USD funding meant that they had to start transforming their traditional nature as a bank. This meant that banks would start to reduce

³³ VaR (Value at Risk) is another commonly used indicator to estimate the risk of the trading book.

their loans, something they previously aimed to increase, because they calculated the use of banking capital differently.

Deutsche had to change its traditional corporate loan portfolio management in response to LM. An unusual banker as head of North-American capital operations, Ronaldo Schmitz, who also joined Deutsche's management board, came to the rescue. He started to transform Deutsche's approach in the way it was structuring its loan portfolio. Previously CFO at BASF, he understood the workings of corporate finance and particularly what Deutsche lacked: "The bank had its traditional competence as a lender, but for more sophisticated products I found that my American colleagues turned to American banks" (Schmitz quoted in New York Times, Quint, 1992; cf. Lee, 1998). Schmitz started to develop Deutsche's expertise to offer securities for firm finance. Having personally experienced the limits of Deutsche's financing as a commercial bank for large corporations such as BASF, he wanted to turn around the New York branch, planning a listing on the New York Stock Exchange in 1992. He already contemplated the acquisition of a major American bank or securities firm. His role models were Bankers Trust and J.P. Morgan (Quint, 1992), both key players in the derivatives markets. He shared the fascination for Bankers Trust operations with Kopper, head of Deutsche at the time. But Kopper denied that Deutsche would in any way resemble Bankers Trust's approach (Fallon, 1994), which Deutsche could later not help but emulate.

John Rolls was another new employee who in contrast to most German bankers was eager to push for money market activities. He also came from corporate financing, CFO of Monsanto Europe. Interestingly, the same as Schmitz, he had expertise of structuring corporate finance. Rolls was hired to restructure North America Holding Corporation (DBNA) in order to expand its merchant banking activities, particularly corporate finance and money market activities (Kobrak, 2007, p. 32). Rolls struck a fee-sharing deal with Gleacher&Co., which was an investment bank, focusing on mergers and acquisition. Its founding partner, Eric Gleacher, was involved in the leveraged buyouts of the 1980s from the middle of the decade with Morgan Stanley until he founded his own firm. CJL aimed to jointly build another junk-bond business (Kantrow, 1994). In equities, an initial weakness of DMG (Fallon, 1994, p. 34), Michael Phillipps, who came with Ed Mitchell to DMG, bought NatWest's equity derivatives group in 1997. This team, initially recruited from Morgan Stanley by NatWest, brought along systems that enabled Deutsche to treble its daily trading volume and catapulted it to a state-of-the-art trading firm on the New York Stock Exchange (Lee, 1998).

These are the beginnings of how DMG established US securities houses in order to accommodate the higher costs related to the funding needs of LM. Initially, investment banking was supposed to be an independent operation. However, the challenges of implementing practices of LM crept across the institution. The increasingly big and complex balance sheet was difficult to manage solely through DMG. Deutsche could not afford to keep it separate. It had to start turning the whole bank around if it wanted to stay in investment banking.

A crucial development representing this transformation was the reduction of German banks' loan portfolios in the 1990s and the 2000s. Deutsche's adjustment to LM resulted in a radical cut of its loans as share of its assets from about 60% in 1993 to 20% in 2003 (Janssen, 2009, p. 108). With the rise of securitisation that was spurred by the rise of LM, banks increasingly started to sell off their loans to go on underwriting more as I outlined in chapter two. There were no official figures in 1993 according to *The Economist* (The Economist, 1993), but the market for loans was growing. To further this development, Citicorp developed a loan index in 1993 so that banks and investors could assess their loans more precisely. The aim was to get pension funds involved to draw more liquidity into the market. Since the mid-1980s, pioneered by Bankers Trust, the securitisation of loans had increased exponentially. Customers would eagerly buy the safe assets that banks securitise. But banks could not sell the high-risk assets (Ibid. 1993, p. 30).

Indeed, German banks suffered increasingly from non-performing loans (NPLs) in the 1990s and early 2000s. While many NPLs were connected to increasing corporate insolvencies in Germany, particularly in the wake of the dotcom crisis and the fall of *Neuer Markt* (New Economy), German banks experienced a wider crisis of banking in the 1990s. Breuer, the chairman of Deutsche's supervisory board and president of the German private banking association at the time, admitted a crisis in Germany's banking sector (Hackethal, 2004, p. 101). Income from interest was still very high in German banking. However, net income (interest minus costs) decreased dramatically and went negative in 2000 for all the big banks (Commerzbank, Dresdner Bank, Deutsche Bank). This "profitability crisis" is often used to explain the changes in lending. Also Breuer used it as an excuse for Deutsche's reduction of branches and corporate loans (Hackethal, 2004, p. 101; Pauli, 1999). Indeed, interest income was 60% in 1993 and declined to 27% in 2003 (Janssen, 2009, p. 96). However, reducing loans to reduce costs did not work. The problem loans did not decline proportionally to all the loans which made the overall loan portfolio riskier. This was further aggravated by its strategies to gain US dollars. When Deutsche switched to US accounting standards in 2001, its NPLs weighted stronger on its balance sheet (Janssen 2009: 106). Breuer, head of Deutsche Bank at the time, was dismayed at the 76% cost

to income ratio. Notwithstanding his promise to reduce it, it stood at 86% in 2002 (Janssen, 2009, p. 86). The profitability crisis was thus foremost related to the high costs of investment banking (Vitols, 2009). Deutsche needed to find better ways for its USD wholesale banking. The practices of LM it had been engaged with so far were simply too expensive to be sustainable.

Eurodollars and the global funding mechanism

Apart from changes on the asset side, DMG was crucial in developing new technologies for its global funding network as the building of a financial network in the US required changes in Deutsche's global USD funding strategies. This is the second crucial outcome of the merger with Morgan Grenfell. DMG was crucial because London presented the central location to manage and direct global Eurodollar flows. As mentioned, it was a principal hub for European banks to connect to the financial innovations of powerful US banks so that European banks could start to learn about the practices of LM. But in order to build up an institutional network of US subsidiaries that could develop the practices of LM on US money markets, a large volume of USD flows was needed. Eurodollars accommodate the gap in USD liabilities in the US. From London, Deutsche rerouted its funding strategies in the Eurodollar markets to fund its various extraverted strategies in the US. These strategies are representative of the dynamics in the Eurodollar markets as well as in the rise of the repo markets in the US which I will explain in turn in this section.

The transformation of Deutsche to connect better to the sources of US dollars was represented in the wider dynamics of the Euromarkets, highlighting the importance of the Euromarkets as an indirect or supporting route to the US money markets. In the 1980s, much of the Eurodollars (and EuroDM) were channelled into the European inter-banking markets, reflecting strategies of banks to gain US dollars for the global operations of the parent banks, often themselves in the Euromarkets. What changed in the 1990s was the ratio of those capital flows to non-bank financial institutions in contrast to banks. The interbank markets received relatively fewer capital flows from the Eurobanks than the non-bank sector (McGuire, 2004, p. 70). Consequently, the recycling ratio for the share of the funds available to the banks in London through the inter-banking market dropped. By mid-2002, interbank lending dropped to 50% of the Eurodollar flows into London's banks from roughly two thirds in the 1970s and 1980s. London increasingly channelled the Eurodollars towards non-bank institutions in the US representing the fact that most European banks increasingly addressed their needs of LM on US American financial markets.

McGuire from the Bank for International Settlements (BIS) explains this change with the help of two incidents. One was the introduction of the Euro which decreased foreign exchange (FX) trading which was a crucial business for the European banks. As FX trading was often hedged in dollars, it increased the interbanking transactions and consequently the Eurodollar volumes. US dollar business after the introduction of the Euro fell 15% from 1998 to 2001 according to BIS numbers (McGuire *Ibid*: 73). The second important shift was the consolidation process of the banks located in London. This resulted in a reduction of the inter-dealer transactions which implied an increase in the relative size of transactions with non-bank financial institutions.

The turn of Eurodollars is represented in Deutsche's extraverted strategies through which it built its foreign network in the US. Having concentrated all investment banking practices with DMG, it increasingly used Eurodollars to finance US non-bank institutions. It operated 600 legal entities in the US, held together in the holding Taunus Corporation (Kobrak, 2007, p. 361). By 2002, one fourth of its assets and revenue came from North America (Kobrak, 2007, p. 14). In order to accommodate the various acquisitions of these subsidiaries, large banks restructured themselves in a way that had one crucial branch in a financial centre that centralises all the operations of the bank, including the deposits collected by the branches within other countries (McGuire, 2004, p. 75f). These funds were then mostly passed on to non-bank institutions in the US, amounting to almost two-thirds of all funds to non-bank financials. These non-bank borrowers are mostly securities houses, hedge funds and other non-bank financials that take positions in fixed-income positions. The shift from placing dollars within the inter-banking market to non-banks has been mainly orchestrated by the UK, German and Swiss banks. That way, European banks, such as Deutsche, increasingly finance their own and other investment institutions through Eurodollars that flow through London. What this shift represents is the increasing reliance of Eurodollars to fund their extraverted expansions in the US.

The third feature of extraverted financialisation emphasises the need for banks to establish themselves in the US because they uniquely accommodate the requirements of LM. This can account for the changes in the role and dynamics of the Eurodollar markets for the German banks. The growing integration of non-US banks into the financial institutions of the US is reflected in their use of the Euromarkets. The Euromarkets supported their limited possibilities to access USD in the US in the 1980s and 1990s, and provided a key resource for leverage to accommodate their limited US dollars.

The reasons for this change in dollar flows reflects Deutsche's changing strategy of acquiring US dollars. First, it gained Eurodollars in London to fund its Eurobond and other banking activities.

However, with the expertise and capacity of DMG, it was also able to enhance its operations directly in the US, buying and building securities houses. Those practices in the US were supported by its global USD funding network built around the Eurodollar markets.

The growing acquisitions of non-bank securities had a second implication for Deutsche's funding strategy. Given its growing network in the US, it had more and more financial securities that it could use for the repo markets in the US, which provided a second crucial funding avenue for Deutsche Bank. A repurchase agreement (repo) is a collateralised IOU. It represents a contract in which the seller of a repo agrees to repurchase it from the buyer for a given price on a given date³⁴. That way, Deutsche could use the newly acquired capacity of its securities houses to obtain US dollars in the repo markets.

The shift of the European banks towards acquiring securities houses in the US is associated with the increase in the repo markets in the US. It significantly accelerated at the turn of the century (McGuire, 2004, p. 76). The repo market has been important to get USD for US-based foreign banks' offices which only have limited capacity to finance by US deposits. They thus acquired a crucial role for non-US banks that has become even more important after the GFC (Baklanova et al., 2015). German banks' repo funding has increased from 7% in 2002 to about 17% of total funding in 2007 for German banks, which amounted to 15% to just under 30% of total short-term wholesale funding (calculated based on monthly reports to Deutsche Bundesbank, Düwel, 2013, p. 30). It declined during the crisis but since then has risen again. Repos developed into a crucial resource to overcome the limits of USD deposits.

DMG was important to develop this strategy. In the 2000s, it was easier to finance through repo in London than in the US. In the US, repeated repo collateralisation with the same collateral was restricted to 140% of the collateral being passed on. In the UK, there were no such restrictions. Banks used the same collateral over and over again. The volume of repeated use of repo collateralisation reached up to 400% of the underlying collateral (Tooze, 2018, p. 82). This provided banks with a platform for leveraging that was not possible in the US. The most aggressive European banks had a leverage ratio from 40: 1 whereas in the US it was only 20:1 (Tooze, 2018, p. 90). They became a core source for parent banks to manage the funding to their foreign subsidiaries (Düwel, 2013). Before the GFC, German banks relied particularly strongly on

³⁴ See Gabor (2016) for an analysis of the repo markets and Baklanova et al (2015) for an overview of the US repo markets. Gabor connects the rise of repo markets to policies introduced after the Russian crises in 1998 that were supposed to ensure financial stability again. This is another reason for why repo markets would have surged in the turn of the millennium.

their foreign affiliates to distribute their financial activities, more so than other European or US banks (Düwel, 2013). Their foreign subsidiaries were crucial in anchoring themselves on US financial markets. Before the crisis, their subsidiaries provided net funds to their German parent banks, acting as outposts to access USD in the US. However, during the GFC, they were also a core reason why big German banks were severely affected when the debt markets refused their securities to refinance through repo.

Thus, repos developed into an important short-term resource to manage the implications of LM and fund the US strategies Deutsche Bank was developing. DMG, or the second stage in the transformation of Deutsche Bank to root itself in US money markets, thus represented the strategy to access global USD funds that could help to finance its US related expansion. They were vital in accommodating USD liabilities when Deutsche did not have the capacity to do this more systematically in the US. DMG allowed Deutsche to manage the global flows necessary for such an expansion. This connected the parent bank to its US subsidiaries via the Eurodollar markets, which improved the capacity to leverage their limited USD resources. However, in order to fully account for Deutsche's transformation towards LM, I need to present the third stage in the next section.

Bankers Trust: LM and banking in the US

The acquisition of Bankers Trust was surprising to many and reflects the strong imperative that LM exerts on banks. Once engaged in US money market funding, accommodated by a sophisticated USD recycling mechanism, banks had to address the new constraints and imperatives quickly. Kopper, chairman of Deutsche from 1989 – 1997, was adamant in 1994 that Deutsche Bank would never replicate a bank such as Bankers Trust. In a *Euromoney* interview, just four years before this acquisition, Kopper claimed that he admired Sanford, CEO of Bankers Trust, but such an approach would not suit the German lender (Fallon, 1994). To recall from chapter two, Sanford pioneered RAROC, which changed Bankers Trust to one of the most aggressive banks in the 1990s. Despite Kopper's aims, however, even the 'stodgy' German giant Deutsche Bank could not escape the implications of Bankers Trust's revolution in risk management and the subsequent developments of LM.

Deutsche Bank thus embarked on a fundamental transition if it wanted to sustain itself on global financial markets. Breuer, chairman of Deutsche after Kopper admits during an interview with *Euromoney* (1999):

Bankers Trust is more than just an acquisition. I think it forces us more than ever to reinvent the bank, and that is a crucial turning point, because there will be people who say "if that is what you have decided to do we have to part ways". After Bankers Trust, Deutsche Bank cannot and will not be the same.

The gradual integration to use LM to access USD money markets that DMG fostered had already changed asset management strategies at Deutsche. However, in the 1990s, it was running severe losses connected to the costs of constructing US investment banking practices (Vitols, 2009). The growing expenses and risk of its US money markets practices, and the growing costs of US traders (see next chapter for more details) meant that Deutsche had to embark on a more radical transformation to accommodate the implication of LM. It needed a new type of asset, high yielding securities that would not take up much of its money market funding for too long.

Unfortunately, DMG did not live up to the promises of its long-standing links with the US and Deutsche needed another acquisition. Deutsche's famous deal with Bankers Trust was a solution to the need to enhance its US money market practices. Firstly, it provided the operational capacities such as new IT technologies and expertise in risk management and high-speed trading. Secondly, it provided the expertise and connections to either buy assets that carry higher yields to finance Deutsche's expensive global funding mechanism, or to structure assets in a way that would allow Deutsche to sell them off quickly to reduce capital requirements for them. When Deutsche realised it had to purchase a US American institution, Bankers Trust scored highly in its screening of potential candidates. Bankers Trust originally pioneered many practices of LM (see chapter two). Deutsche thus hoped that this US bank would enhance Deutsche's wholesale banking (Wieandt and Moral y Santiago, 2006, p. 87).

Bankers Trust was bought by Deutsche in 1997 for USD 9.7 billion. The acquisition seemed to be orchestrated by Edson Mitchel, who came from Merrill Lynch heading Deutsche's global market division. It was him who mainly provided the tools for Deutsche to takeover this institution. The merger made Deutsche Bank the biggest bank in assets in the world, surpassing Citibank and UBS A.G. (Andrews, 1998) and the 4th largest asset manager (Janssen, 2009). Deutsche Bank became a mega bank of 1.3 trillion DM. Investment banking leapt in importance, it became 56% of Deutsche's operating income before tax, a huge jump from just 28%.

There is some irony involved when a bank that pioneered a fundamental financial technology disappears as the result of another bank's struggles to adapt to that innovation. This merger represents most interestingly the impact of American finance on German banking. Particularly its risk management systems that supported RAROC, such as a large derivative program, enabled

Deutsche's path to ramp up its balance sheet. It implemented RAROC in 1997 already but Bankers Trust brought the systems and bankers to push it to a new level.

Bankers Trust brought US American businesses with it that Deutsche used in the 2000s to leverage to the extreme and profitably sustain its US funding in US markets. After the merger, Deutsche would develop from the "stodgy commercial bank" to the "best derivative house of the year" in 2003, according to the Risk Magazine, which made Deutsche enemy number one for JPMorgan (Tett, 2012, p. 109; cf. Partnoy, 2009, p. 92). Financial institutions do not need to own the underlying assets anymore in order to place bets. By constructing a derivative, they can simply bet on a price movement of any security, index or value, rather than having to hold a specific asset.

The notional value of derivatives (futures and options) traded on organized exchanges rose from \$730 billion in 1987 to \$7.8 trillion in 1993, and to \$87 trillion as of early 2007; derivatives traded in the much larger (and less regulated) over-the-counter (OTC) market grew even greater, rising from \$80.3 trillion in 1998 to \$415 trillion (notional value) in 2006 (Deeg, 2010b, p. 482f).

Bankers Trust was one of the leading banks that pushed over the counter trading (OTC), particularly with currency options (Partnoy, 2009, p. 87). Bankers Trust had also excelled in proprietary trading, making huge profits from cashing in on hidden upfront fees, beyond what was normal at the time (Partnoy, 2009, p. 53).

In the following I will highlight two developments at Deutsche that demonstrate the significance of the purchase of this huge 100-year old US American institution for how it transformed in response to the rise of US American finance. These are the changes in its corporate loan portfolio, mentioned in the introduction. Secondly, its investment into toxic MBS that brought about the defaults, bailouts and crisis in the German banking system.

LM and corporate governance

The most crucial and perhaps most widely debated transformation in German banking is the dissolution of Germany Inc., the close network of German corporations based on interlocking directorates and cross-shareholdings (Streeck and Höpner, 2003). German banks both reduced their corporate holdings and, additionally, lent less to those corporations, as already exposed above. I argue that these changes are integrally linked to the changes Deutsche Bank had to implement because of its strategies of LM. The implementation of an integrated risk management approach that Krumnow, head of risk management, pushed for delivered an astonishing revelation for Deutsche in the 1990s: its previous close relationships with the

German economic network provided the biggest threat to the bank (Janssen, 2009, p. 110). Previously seen as an asset for the German banks, Deutsche's equity stakes had turned into a problem for them as Ackermann's response to *The Economist* indicated.

The dissolution of its large equity holdings is often associated with the abolishment of the capital gains tax by SPD finance minister Hans Eichel in 2000 (effective in 2002) that allowed corporations to sell their holdings easily without paying large amounts of taxes (Beyer and Höpner, 2003; Lütz, 2005a, p. 147). The tax stood at 50%. Their share of ownership in publicly traded companies decreased from 12% in 1998 to 9% in 2003 (Vitols, 2005, p. 391). However, the ending of the tax only represented a final straw in a longer-term process (Höpner and Krempel, 2004; Lane, 2003, p. 92). The big banks attempted to get rid of their holdings since 1979 because they represented too much risk exposure (Deeg, 2001, p. 28). Using the tax law to explain the sale of equity holdings leaves unanswered why it took the banks 20 years to wait for a tax law change.

The sale indeed represents somewhat of a paradox. In 2002 when the tax was abandoned, share value was generally low after the crisis of the new economy (Vitols, 2001). Even with Eichel's gift to the banks, it was an unfortunate time for them to sell. The necessity of the sale can be more usefully explained with the growing liquidity requirements connected to USD funding. The pressures of banking on wholesale markets would make long-term holdings of low yielding securities unbearable (Wieandt and Moral y Santiago, 2006, p. 91). During the phase of building up its investment banking capacities Deutsche had a cost-income ratio as high as 82% in 2002 (Janssen, 2009, p. 105). It not only had to bolster its balance sheet with the sale of its holdings (Janssen, 2009, p. 219), it needed the money to pay expensive traders and pay for its US acquisitions.

New risk calculations and the imperatives of LM can indeed usefully explain this shift in corporate governance. Deutsche started to construct innovative financial mechanisms to get rid of corporate stakes in its balance sheet in the late 1990s. Deutsche came up with a convertible bond structure connected to its Daimler stake for example to shrink the position of the stake within its balance sheet (Lütz, 2005a, p. 148). Additionally, Deutsche created a separate subsidiary, DB Investor, to manage its corporate holdings in 1998 much more dynamically (Deeg, 2001, p. 28). It was the first time the extent of its industrial holdings became visible to externals. They represented 45% of its market value (Nolmans, 2006, p. 157). The new kinds of risk calculations as represented by RAROC had exposed its shareholdings as "risk exposure" rather than a source of power. As a result, in 2000, Deutsche started a renewed attempt to improve its

balance sheet management (Wieandt and Moral y Santiago 2006: 91). This highlighted that Deutsche's corporate investment portfolio comprised of only 8% of risk weighted assets but it held 21% of Deutsche's average shareholders' equity. In the age of liability management it is particularly crucial which kind of assets are under management and its portfolio absorbed too much of its valuable equity. That way, the adoption of LM had crucial implications for the transformation of its traditional asset management. The USD dependency engrained in global banking with the rise of LM meant that Deutsche now sought to get rid of its corporate equities, a previous source of their power. Indeed, the 2000s until the GFC would represent the most successful phase of Deutsche's post-war history in terms of the profits it made.

What did Deutsche Bank, and indeed many European banks buy in exchange for shedding their loans and equity stakes? With the systems, expertise and connections of Bankers Trust, Deutsche ramped up its balance sheet, investing in all sorts of so-called toxic securities, often the most risky type (Tooze, 2018, p. 74). In 2001, Deutsche swapped with Zurich Financial Services to gain the US asset manager Scudder for its insurance activities with Herold. The acquisition of Scudder, commented to be the 'deal of the year', made Deutsche the 4th largest asset management player. In 2002, Deutsche also bought RoPro US holding for real estate. RREEF, a leading real investment manager in the US, made Deutsche the world's largest real estate investment manager in 2002. This pushed Deutsche towards a number one position in combined real estate property and real estate equity securities. It now managed more than USD 36 billion in assets. In 2004, it acquired Berkshire Mortgage Finance, despite being a market leader already in commercial real estate (including trading, structuring, originating, securitising) in order to find higher yielding assets for its balance sheet management. Deutsche ranked first in the US in high-yield and second in asset backed securities and third in US debt, fourth in USD clearing services (Wieandt and Moral y Santiago, 2006, pp. 89–94). It seemingly firmly established itself on global financial markets, winning several awards as already mentioned. Deutsche had changed its assets, running a RoAE of 30% and represented what many would call a "successful" investment bank.

Deutsche was able to run on high leverage while the access to USD was easy in the late 1990s until the GFC. But when that access was restricted, the way it constructed its global funding mechanism to sustain high leverage started to become a problem as I examine in more detail in the next chapter.

German banks rely particularly strongly on their foreign affiliates to distribute their financial activities, more so than other European or US banks until the GFC (Düwel, 2013). Their foreign

subsidiaries were crucial in anchoring themselves on US financial markets in order to transform to LM. Before the GFC, their subsidiaries provided net funds to their German parent banks, acting as outpost to access USD in the US as well as providing the necessary assets that could sustain the global USD funding mechanism.

The practices I have outlined represent Deutsche's strategies to institutionalise its US dollar funding requirements to compete on global financial markets. Deutsche's extraverted strategies firmly rooted it on the Eurodollar and repo markets to sustain its USD funding needs. This required, however, that it integrated itself more fully into the US money markets because they provided more suitably the requirements of LM. Thus, the third stage required a US financial institution that would finally allow Deutsche Bank to leverage to the extreme.

Thus, the transformation of Deutsche Bank towards the strategies of LM can be accounted for by the concept of extraverted financialisation. While the internal tensions already became visible in the stages outlined here, the next chapter is going to focus more closely on the fourth feature of the concept of extraverted financialisation. I will examine more closely the internal controversies that Deutsche Bank had to address during this transition. This helps to highlight the deep contradictions of the current financial architecture that has resulted from the banking practices of LM to exploit US wholesale markets. This is going to explain why Deutsche cannot easily solve the crisis it is currently in, despite the leverage it has created by anchoring itself in US money markets. In the next section, I will trace Commerzbank's extraverted strategies to account for how they reflect the constraints and imperatives of LM. They will highlight that the process of extraverted financialisation is uneven. While the concept highlights that the rise of US finance imposed new constraints and imperatives on non-US banks in how they can compete of global markets, they have not responded in the same ways.

5.4 Commerzbank

This section sketches Commerzbank's extraverted strategies to provide a comparative foil to put Deutsche Bank into perspective. This will highlight that Commerzbank responded differently to the imperatives of LM than Deutsche Bank did. Commerzbank's alternative focus of how it did market-based banking meant that Commerzbank focused its efforts in investment banking relatively more on Europe. Consequently, it was under less pressure to adopt the strategies of LM that were needed of US money markets.

Commerzbank was previously the smallest bank amongst the three big German banks (Dresdner ceased to exist in 2008), and is seen to focus on the German Mittelstand (SMEs) and more 'cautious' in US wholesale markets than Deutsche Bank (Behr and Schmidt, 2015; Hardie and Howarth, 2009, p. 1023). However, the rise of US finance drove Commerzbank onto US wholesale markets, similarly to Deutsche Bank, at least initially. Nonetheless, it did not – or could not – make the US a central strategy of its international expansion. As a result, Commerzbank experienced more severe failures than Deutsche did in US wholesale markets, which ultimately led to a public bailout from the German state. During the GFC, Commerzbank tried to takeover the second biggest private bank at the time, Dresdner Bank. However, because of its lack of experience in LM, it underestimated the level of toxic and failing assets at Dresdner Bank. In the following, I will outline how Commerzbank dealt with the three stages of the process of financialisation that I established for Deutsche Bank in the previous section.

The initial strategy of Commerzbank to bank in the US was similarly to Deutsche's first stage of US banking as highlighted above. It established its international subsidiaries early on in the 1970s. Commerzbank was in fact one of the twenty top underwriting firms of Eurobonds in the late 1970s and early 1980s, ranging from rank seven to rank twenty (Levich, 1984, p. 30), highlighting its initial large-scale involvement with global finance. Consequently, similarly to Deutsche, it had to aim at accessing USD at their source. In fact, it established its first international representative office in the US in 1967, earlier than Deutsche did, and transformed it into a branch in 1971 in order to get USD deposits. This was also before its EuroPartners group established the EuroPartners Securities Corporation to foster investment banking in 1972 (Ramm, 2002, p. 191).

Commerzbank's US outposts were dealing with a wide range of products, doing foreign-exchange, investment banking and corporate finance, private and government finance (Commerzbank AG, 1994; Ramm, 2002, p. 191). It targeted both US corporations going to Europe as well as German clients in the US, establishing itself as a global bank. Its initially successful integration in US financial markets is demonstrated by the fact that by 1986, 60% of the overall business volume of the New York branch was generated by US customers. Only twenty per cent came from German clients and another twenty per cent from international transactions (Ramm, 2002, p. 192) (Ramm 2002: 192). While German banks repeatedly claimed to go abroad to follow their German clients, their US-based branches financed and managed debt of international MNCs and other clients. Thus, the international practices of Commerzbank substantiate the argument that German banks went to US dollar markets to participate in the rise of financial

capitalism rather than simply following their traditional German customers in the export sector. Rather than strictly representing intermediaries to the German industrial sector, they had interests on their own terms that cannot easily be deduced from their relations to Germany Inc.

As its position in the Euromarket's ranks highlight, it was building its global network, building its capacity to do foreign exchange currency and other financial techniques (Commerzbank AG, 1994; cf. Singleton, 2009) needed to manage USD funding and its US-based activities from its headquarters in Frankfurt. To focus more systematically on US wholesale markets, similarly to Deutsche, it bought the US affiliate of its Europartner club banks and renamed it Commerzbank Capital Markets Corporation (CCMC) in 1988 (Ramm, 2002). The level of its involvement in Euromarket activities in the 1970s can be highlighted by an observation that Ramm (2002), chief macro economist of Commerzbank at the time, made. He argues that the monetary domain does not provide 'auxiliary functions' anymore since the 1970s, highlighting that the focus of banks shifted from primarily providing loans for the so-called real economy to providing financial products on the Euromarkets.

However, despite its pioneering character in the first stage of the transformation towards US-style banking, Commerzbank's initial advance did not last long. In contrast to Deutsche Bank, Commerzbank did not engage with innovations to start developing securities to access US money markets in the 1980s. Instead, it dealt with other pending issues such as the large foreign loan losses it experienced in the 1980s (Tagliabue, 1986). The 1980s posed a decade of troubles to access USD funding for Commerzbank (Ahrens and Wixforth, 2010).

As a result, Commerzbank's gaze became more centred on European and German markets to rival German banks rather than the US banks. It divested from its large shareholdings at the end of the 1970s and 1980s already (Janssen, 2009, p. 130) to finance the purchase of its Pfandbrief bank that would enable it to diversify its practices to tap the volume of growing German savings in the 1980s (see chapter two). This however meant that its overall share value was rather small and it had less 'protection' of the German interlocking corporate network. The tight interlocking directorates of long-term cross-shareholdings usually meant that they changed hands less than in Anglo-Saxon equity markets and thus the danger of hostile takeovers was smaller (cf. Höpner and Jackson, 2006; Höpner and Krempel, 2004). Commerzbank reduced its integration to DM 5.7 billion worth of equity capital in 1993 already (Janssen, 2009, p. 131)³⁵. The failure to expand was problematic for Commerzbank if it wanted to compete in US wholesale markets and in a

³⁵ It reduced them further around the turn of the century, similarly to the other big German banks.

financial environment that rapidly developed the means for banks to take over its competitors. Commerzbank's smaller size meant that it was repeatedly subject to hostile takeover threats throughout the 80s and 90s (Ahrens, 2010). Thus, rather than expanding its capacities to access dynamic funding possibilities in the US, it was busy fighting them off.

Instead of US wholesale markets, Commerzbank thus focused on banking on European financial markets. As will become apparent, this is an insurmountable difference to the strategies of Deutsche in how both banks would be able to compete on US financial markets. Commerzbank's European strategies were rather successful. Its involvement in wholesale and investment banking ranked its capital allocation to those areas 4th among European universal banks in 1999 (Hackethal, 2004, p. 77). The big German banks all expanded into Europe's periphery in the 1990s (Mertens, 2017, p. 12). However, Commerzbank had its strategic focus on Europe whereas Deutsche Bank saw it as one part of its global strategy. Deutsche's efforts were instead concentrated to rival US banks (Wixforth, 2010, p. 112). The importance of Europe is demonstrated by the fact that 24% of total revenues are from Europe, 30% of total revenues are international. After the fall of communism and the efforts of the Western allies to establish capitalist financial markets, Commerzbank was quick to seize those financial markets. It acquired stakes in several banks, mostly for about 20% but also a stake of up to 72% in the former state-owned Polish export development bank. It also used the integration of Eastern Germany to attempt to compete with Deutsche and Dresdner Bank (Janssen, 2009, p. 133f).

It is thus in Europe that Commerzbank developed its "market-based" activities, which is less financialised according to Hardie and Howarth (Hardie and Howarth, 2009, p. 1026). Crucially, Commerzbank's investment banking activities were in the form of bond underwriting and equity (Janssen, 2009, p. 142f), that is on capital markets, rather than funding and trading on USD money markets. Thus, focusing on a branch network in Europe instead was a viable strategy for Commerzbank to fund these rather 'traditional' investment banking activities. Thus, Commerzbank was less integrated in the USD markets *and* less reliant on a short-term financing scheme that would necessitate building the whole bank around LM. While money market funding increased, it still relied on (bank) deposits mostly.

This had two results that are strikingly different to Deutsche's initiatives. Firstly, Commerzbank's transformation in how it approached its risk management was less profound. Because it focused more on European capital markets, it needed fewer new methods to change its practices, as it had a long history with banking on European capital markets (Commerzbank AG, 1994). To recall, market-based banking per se is nothing new in Germany and the universal big banks' peculiar

capacity had traditionally been in combining securities trading with deposit banking (Fohlin, 2007). Commerzbank adopted RAROC in 1993, the new risk management technique pioneered by Bankers Trust, a few years later than Deutsche Bank. Commerzbank had a review of its risk management approach, as did most of the bigger banks in the 1990s (The Economist, 1993). However, in contrast to Deutsche, Commerzbank did apply the whole implications of it (Janssen, 2009, p. 141). Commerzbank did not have a systemic strategy of how it approached capital markets. Commerzbank neglected to focus on the costs of capital as a primary indicator for its investment and funding decisions, one of the core features of this “risk management revolution” (Sanford, 1996). Commerzbank did not have to, as European capital markets work on less short-term and less-expensive funding practices compared to US money markets.

A second striking difference to Deutsche’s strategies, and following on from adopting RAROC in a less radical manner, was Commerzbank’s management of its assets. Commerzbank’s loan portfolio increased during the 1990s. Commerzbank also experienced rising costs and German bankruptcies that led to higher loan loss provisions in the 1990s and the early 2000s (Vitols, 2009, p. 143). And yet, Commerzbank’s loan portfolio increased with an average of 15% from 1993 – 2000 (Janssen, 2009, p. 142). Commerzbank evidently continued to predominantly increase its European branch network and focus on holding loans rather than decreasing them. While Commerzbank did experience a change in funding practices in the 1990s, the decline in customer deposits relative to total liability and equity happened across the board in Germany. However, Commerzbank compensated for the loss primarily by financing through bank deposits (Janssen, 2009, p. 142), whereas Deutsche was increasingly involved in US money markets. As Commerzbank focused on less expensive funding in Europe in contrast to US money markets, loans to European companies were still a viable strategy for Commerzbank. Without the increase in costs of novel systems, it did not need to radically change its asset side either.

However, the lack of focusing on LM later meant that Commerzbank’s US strategies could not become one of its major business foci but rather turned into problems for the bank. When it tried to merge onto US markets directly in the late 1990s, it could not sustain its US operations, contrary to Deutsche in its third stage of the transformation of banking. It was its success in Europe that led to the management’s decision to attempt a new round of banking in the US (Janssen, 2009, p. 130). In the time of the booming equity markets, Commerzbank bought asset managers, Montgomery Asset Management and Jupiter International in the US in the late 1990s. Deutsche hired Mehmet Dalman who previously worked at Deutsche. He was the first non-German in Commerzbank’s board and supposed to build Commerzbank’s investment banking

division (The Banker, 2001). The importance Commerzbank gave its global securities business in the US at the time is perhaps demonstrated by the fact that Dalman became member of Commerzbank's board within only 4 years. Dalman managed to build up the securities business at Commerzbank almost from scratch within a few years. He became head of investment banking in 1999, only two years after he joined. He attempted to combine corporate and investment banking, which he succeeded in doing in 2000 (Janssen, 2009). He aimed to gain access to the SME customers at Commerzbank, the biggest groups of clients and bring together equities and derivatives to manage Commerzbank funding much more dynamically. This represented to date the biggest effort to turn around the nature of banking at Commerzbank to be able to connect it more systematically to US wholesale markets.

As a result of its efforts, Commerzbank's cost-to-income ratio rose to almost 90% in 2002 (Janssen, 2009, p. 139)³⁶. As I have argued above, the increased costs on USD funding has to be matched with changes in assets. During 2000-2003, Commerzbank fundamentally reduced its loan portfolio with the help of securitisation of risks and the deconsolidation of Rheinhyp in 2002 (Janssen, 2009, p. 142).

But the biggest obstacle for Commerzbank this time round was sustaining USD funding. It became apparent quickly that Commerzbank lacked the infrastructure to sustain banking in USD. When the euphoria on the equities markets in the 90s stopped, the fact that Commerzbank had not built a distribution network in the US was detrimental. Commerzbank's asset managers lost in equity. Jupiter International could not attract the necessary funds and declined by 2 billion within the first few years from USD 9.5 to 7.5 billion in 2001. As a result, Commerzbank stopped its efforts to gain access to the US. In order to compensate for the net loss of EUR 39 million in 2000 and 165 million in 2001 for a portfolio of EUR 140 Billion (loss of 1%) Commerzbank sacked one-third of its investment staff and by 2003 it had sold its major stakes in the US (Janssen, 2009, pp. 134–136). Trading in assets had a short-lived focus of Commerzbank. It peaked in 2004, but fell again thereafter (Hardie and Howarth, 2009, p. 1024).

The failures on USD markets led Commerzbank to a renewed focus on the German Mittelstand, usually closely associated with the public banks (Vitols, 1995; Deeg, 1999; Krahnen and Schmidt, 2004). It was with the German Mittelstand and in the European area that Commerzbank developed its investment banking capacity again. For example it restructured its organisation to put corporate finance and capital market finance together to try to bring medium-sized firms

³⁶ However, part of that was related to the high failures of Commerzbank's SME loans due to the recession in Germany in 2002/2003.

onto international markets (Bowman, 2017). However, it provided syndicated loans, rather than structured securitised assets that Commerzbank could sell on quickly. Thus, its market-based challenges in how it wanted to structure its assets were fundamentally different from those that Deutsche has tried to create.

Nonetheless, also Commerzbank is crucially involved with USD money markets in this third stage. However, Commerzbank's exposure to US money markets has largely to do with one single transaction that reflects its focus to rival German banks, rather than US banks. In 2008, Commerzbank bought Dresdner Bank and this takeover continues to haunt Commerzbank until today. Commerzbank has had profitability struggles and could not reverse their misfortune that entered its balance sheets through Dresdner Bank (Wixforth, 2017). Dresdner was hugely invested into ABCP conduits that could not roll over its debt during the GFC. Commerzbank, possibly lacking the technical expertise to assess Dresdner's investments and the implications of its connections to USD money markets, bought the bank without realising the extent of Dresdner's problems with its assets. Dresdner was exposed to assets financed by offshore ABCP SIVs and conduits to 364% of its own capital according to Fitch Ratings (cited in Hüfner, 2010, p. 5). In comparison, Commerzbank's 85% was significantly lower. However, resulting of the acquisition, Commerzbank ranked eleventh (Deutsche sixth, Bank of America first) amongst the largest borrowers of the Federal Reserve from December 2007 – July 2010 (Thompson, 2016, p. 226). It was Dresdner Kleinwort, previously a middle-sized traditional British merchant bank that goes back to the 18th century, as well as US-Investment Bank Wasserstein Perella that had catapulted Commerzbank there.

Bowman (2017) in a *Euromoney* article sums up the general development of Commerzbank: "Ever since its catastrophically ill-timed purchase of Dresdner Bank in 2008, Commerzbank has struggled to convince the market that it has clear purpose and momentum, overshadowed as it is by compatriot Deutsche." Therefore, Commerzbank tried to consistently scale down its structured financing products and its activities related to the USD markets. In the same year as it bought Dresdner, it had to access the public bailout fund. SoFFin (Sonderfonds Finanzmarktstabilisierung) was a German public fund from 2008-2015 that transferred public funds to the banks that could not sustain their own speculation. Commerzbank accessed Euro 18.2 billion in total. The state, amongst others, received a 25% plus one share stake in Commerzbank. In 2013, the state reduced its share to 17.3% which diminished its veto power. According to Michael Reuthers, member of the board of managing directors at Commerzbank, the challenge for Commerzbank is "to lay a stronger emphasis on increasing the profitability of

risk-weighted assets that we are employing” (Bowman, 2017). Having to roll over Dresdner Banks’ debts meant that also deposit-rich Commerzbank, mainly funding through bonds rather than money market papers has had to shift its risk management and focus of banking. Its strategy since the takeover, however, has been trying to reduce exposure to Dresdner’s previous banking activities in the US and sold as much as possible (Commerzbank AG, 2018).

Commerzbank thus represents an example of a bank that has been impacted by US American finance similarly to the other German banks, as is evidenced by its initial reactions to embrace USD markets. As financial globalisation drew banks to New York, Commerzbank joined. However, given its higher emphasis on the German and European investment markets, it did not develop the strategies of LM. While the continuous imperative of USD continued throughout its history, it reacted in a fundamentally different way than Deutsche. However, it meant that when Commerzbank tried to gain more access to higher yielding assets, such as an asset manager in the US or the investment banking divisions at Dresdner Bank, Commerzbank severely struggled. Its funding costs shot up hugely, but without having the expertise and financial operational systems in place, it could not sustain banking on US wholesale markets. Ironically, Commerzbank’s *German* purchase, Dresdner Bank, connected it most closely to the volatilities of the USD money markets, highlighting how far USD LM has been institutionalised around it. Because of its current troubles with its US exposure, it is again in danger of a takeover (Storbeck and Morris, 2019).

5.5 Conclusion

The reduction of the loan portfolio and the former equity stakes in German companies are often seen as explanatory variables that can expose the extent of the financialisation of German banks. For many scholars of German finance, the traditional close relationships between banks and corporations have dissolved because banks changed their asset side. From that perspective, the core transformation in the era of financialisation is the shift of banks from corporate lending to speculate on US financial markets. In contrast to the existing literature, I used the concept of extraverted financialisation to shift the gaze to LM and to historicise the changing liability side. From that perspective, this chapter queried how the banks’ USD funding constraints led them to build a global financial network to access US money markets or to find alternative USD resources when they could not. I thus outlined a more fundamental transformation at the level of funding practices connected to US money markets that precipitated the change in assets. This cannot be explained with the rise of market-based practices. The notion of marketisation misses

the fact that German banks had no choice but to establish themselves more fully in US money markets to sustain the practices of LM. Thus, the third feature of extraverted financialisation, the need to adapt to US money markets to accommodate the liquidity requirements of LM, can account for why German banks would start the transformation of their assets in the first place – to be able to adopt the US American funding practices on US money markets.

I have argued that the requirements of the liquidity needs of LM drove German banks onto US wholesale markets. The transformation of German banking thus took a specifically American form. German banks had to address their dependence on US dollars in ways that cannot be explained with the rise of market-based banking. Rather than representing a US American imposition, the transformation is reflective of the extraverted strategies of German banks to capture US dollars in US financial markets. Once in the US, German banks had to transform their assets according to the needs of LM to be able to manage funding with expensive dollars. The strategies of LM resulted in a global financial infrastructure that is inherently dependent on sustaining short-term USD liabilities. These cannot simply be captured anywhere but banks need to exploit US wholesale markets to get them. In that sense, the global network Deutsche Bank built on the Euromarkets can be seen as an elaborate funding mechanism to help establish its US subsidiaries. Financialisation thus means for non-US banks that they need to systematically innovate to access US wholesale markets and to leverage their limited USD resources.

The importance of LM and building global funding mechanisms becomes apparent when comparing the financial practices of Commerzbank with Deutsche Bank. In contrast to Deutsche, Commerzbank has neglected to introduce LM more fully into its own operations and has built looser connections to US wholesale markets. Lacking a USD funding network in the US, Commerzbank could not sustain high leverage and speculation with high yielding assets. Its current larger US exposure only came from the takeover of the German Dresdner Bank. This demonstrates the need of banks to integrate themselves into US money markets to sustain high leverage and trading with speculative assets in contemporary financialisation, making LM one of the central banking practices of financialisation.

The previous chapter on the Euromarkets documented the initial connections of German banks with LM on the Euromarkets. Attempting to build their capacity to bank on the Euromarkets entrenched the need to sustain US dollar funding within their everyday banking practices. This chapter has built on that history and demonstrated that this need triggered a broader change in the nature of German banking. That way, this chapter has explained why and how banking in US domestic financial markets became such a crucial concern for non-US banks. As the GFC has

shown, the capacity to sustain USD debt represents a core issue within contemporary financialisation and has the potential to cause bankruptcies and bring down large segments of financial markets. Thus, in order to better control their financial practices, banks need to improve their institutional connections on US wholesale markets. The process of integrating into a new banking environment has resulted in several controversies within the institutional management of these banks. To these, I will turn in the next chapter to expose the fundamental contradictions for non-US banks at the heart of processes of financialisation.

6 Adjusting to the new financial world

6.1 Introduction

This chapter delves into the consequences of adopting LM for contemporary banking in Germany. I continue to demonstrate that the institutionalisation of liability management had a profound effect in shaping the ways in which German banks competed in global financial markets. While the last chapter documented the shift of German banks towards practices of LM, this chapter turns to the internal controversies and contradictions German banks confronted when adjusting to those practices. Firstly, I expose the power struggles within Deutsche Bank over the conflicting goals of the bank in adjusting its financial practices to LM. Secondly, I look at the external power relations embedded in the contemporary global financial architecture that has been created as the result of the extraverted strategies of German banks. As such, this final chapter speaks to the fourth feature of extraverted financialisation: the tensions and contradictions of USD dependency, and offers answers as to why German banks are caught in their current financial predicament. It highlights the importance of focusing on LM to grasp the imperatives and contradictions financialisation has created for non-US banks.

Highlighting these problems is a crucial intervention because the concept of market-based banking cannot explain why commercial banks ended up doing market-based banking in the US. The shift of big German banks to US finance is often explained as an inevitable result of the search for profits when interest margins were declining in the 1990s (Lütz, 2000, 2005b; Beyer, 2003; Streeck, 2009, 2014). From this perspective, German banks were attracted by the higher profits achievable on global capital markets. At the same time, growing competition due to financial liberalisation made banks more attuned to specific cost calculations. Both developments meant that big German banks, both public and private, were no longer willing to accept low yielding corporate holdings or loans on their balance sheets and turned towards global investment banking instead. The literature thus paints a rather linear transition of commercial banking to investment banking based on the irresistible pull of prospective profits. The risk here is to present this shift as a straightforward switchover and downplay the difficulties encountered by banks.

As I have argued throughout the thesis, the existing literature is too steeped in the conception of financialisation as marketisation to account for the US Americanisation of German banking. The fact that the impact of US finance meant that German banks adopted US financial practices

to such an extent was far more contingent than existing accounts imply, even for Deutsche Bank. It is true that the German banking landscape was geared towards traditional commercial banking. One illustration of this is that markets for secondary trading were missing. In the 1990s, retail banking and wholesale banking in Germany would not offer the same returns as investment banking in the US potentially could (Deeg, 1999; Lee, 1998). Banking competition was fierce in Germany and according to people interviewed by economist Janssen (2009, p. 112), Deutsche itself did not think that it could change the German banking landscape. It was fragmented and dominated by cooperatives and savings banks that offered cheap credits and therefore kept profit margins low (Deeg, 1999; Krahnen and Schmidt, 2004; Röper, 2018). However, this did not necessarily imply a shift to USD wholesale markets.

Indeed, there were alternative possibilities for profiteering than investing in toxic securities in US capital markets. For example, German banks were rather successful in capturing European markets. Deutsche has a long history of buying European commercial banks, for example in both Spain and Italy since the 1980s (Frost, 2009, p. 142ff). In the 1990s, Commerzbank and Deutsche Bank were both able to capture the opening markets in Eastern Europe and East Germany (Mertens, 2017; Story, 1997). Deutsche also massively invested in the housing boom in the European periphery in the 2000s (Storm and Naastepad, 2015, p. 26f). In contrast, its projects to build up its securitisation capacities in the US often ran into losses³⁷ (Celarier, 1996). Indeed, in 1997, Deutsche even contemplated exiting investment banking as some of the British banks did (Lee, 1998). The Asian crisis and the failures of the dotcom bubble, for example, produced heavy losses for Deutsche (Schmidt and Tyrell, 2004).

In examining the various struggles and tensions that arose as the German banks addressed the impact of US finance, I argue that the impact is best understood as a dynamic shaped by social struggles between and within the banks in their attempts to institutionalise LM, in order to access US money markets. As I have established throughout the thesis, addressing their need for US dollars was a core imperative for German banks. Establishing LM to access those dollars necessarily caused frictions with their traditional banking practices. I show that the rise of LM and the USD dependency it created meant that Deutsche Bank had to adopt the strategies of LM across the whole institution, despite resistance from its own bankers. The resulting problems of management and financial performance highlight that the imperatives and constraints of LM have been the stronger ‘pull’ to US markets, rather than simply higher profits. This final chapter

³⁷ It was not alone here. For example UBS, its biggest rival at the time in the 1990s, had similar problems with its investments.

thus explains why banks cannot simply reduce their loss-making US practices. The past decades of banking have created a global financial architecture in which accessing USD money markets became a central issue in the everyday operations of the big German banks. USD liabilities are vital in ensuring banks' capacity to act within global banking.

The chapter is structured as follows. The second section analyses the internal controversies, the ultimately unsuccessful resistance and the conflicting goals of the managerial strategies of Deutsche while transitioning to LM. It highlights the strong imperatives that the rise of LM exerted on how Deutsche Bank transformed its banking practices. The third section documents the contemporary challenges resulting from the USD dependency for non-US banks since the GFC to examine the sources of the current crisis of German banking.

6.2 Controlling dollars or controlling LM? Deutsche's management controversies in its shift to LM

The process of financialisation was difficult to control for Deutsche Bank. The concept of extraverted financialisation suggests that one of banks' primary concern is their own empowerment, that is, to create the capacity to act for themselves. The experience with LM in that regard was a controversial one. On the one hand, LM was needed to be able to sustain banking on US wholesale markets. On the other hand, LM had several systemic requirements that were incompatible with German banks' traditional practices and their financial relationships in Germany. The shift to LM thus created a fundamental tension in the management of Deutsche Bank as it adopted more and more new financial practices. As a result, Deutsche's operational systems and management strategies were less and less conducive to its practices in Germany. All big German banks made significant investments in new technology, management and personnel to address the need to trade securities (Deeg, 1999, p. 90), but they struggled to fully manage the transition to LM.

This section examines the internal controversies Deutsche experienced during the shift to LM to highlight the necessity to introduce LM across the whole bank if Deutsche wanted to continue banking in US wholesale markets. This section thus outlines, firstly, the clashes that emerged between its own traditional German bankers and the new US American bankers, and the resistance that these German bankers put up against the new US practices. Secondly, it explains how and why Deutsche nonetheless had to change its internal systems and central management strategies to meet the liquidity requirements of LM.

Deutsche bankers' resistance against US financial practices

The shift to US financial practices created “psychic costs” and many internal disagreements (Deeg, 2001, p. 30). There was a ‘culture clash’ between US American and German banking (Deeg, 2005, p. 192) and many German employees suffered from disorientation during the transition phase (Janssen, 2009, p. 110; Nolmans, 2006; Schwarz, 2003). The way the US bankers thought about banking in contrast to the ‘traditional’ bankers was not necessarily compatible. The German managers “had little feeling for the American problems and facilities, which were beginning to emerge in the 1980s” (Kobrak, 2007, p. 320). As I established in the last chapter, a significant volume of Deutsche’s practices were conducted by its subsidiaries in London and the US from DMG, rather than the parent bank in Frankfurt. The communication and understanding between them could not easily be bridged.

According to Staecker, who was sent to head the branch in New York (interviewed by Kobrak, 2007, p. 320), the board in Frankfurt did not understand LM, which was so crucial for banking in New York. Kobrak’s interviews with key figures who were involved in managing the branch in New York suggest that Frankfurt did not really know where to go with its branch and struggled to define long-term objectives (Kobrak 2007:349). Indeed, the German banks tracked the developments from afar in Frankfurt but did not have a full understanding of what was going on in New York. This confusion was deeply resented, particularly by the US American bankers employed in the German subsidiaries as late as the mid-1990s. According to the perceptions of US American bankers, German bankers were rather ‘stupid’ (Lewis, 2011) or at least confused (Kobrak, 2007) about how US wholesale banking works. While some people called Deutsche “stodgy” (Tett, 2012), the bankers and specifically traders who were trying to keep up with the increasingly speedy transactions on the USD money markets were harsher. They complained that Deutsche did not let them do their business, albeit the fact that their way of conducting financial transactions was needed for banking in the US (Kobrak, 2007). This is perhaps a factor that has led US American bankers to constantly quit after a short while at Deutsche (Deeg, 2001, p. 30).

German bankers on the other hand did not think they were stupid but wanted to continue doing the financial practices they were used to and good at. They put up a lot of resistance to the process of adjusting to the impact of US finance, even amongst the higher management ranks (Nolmans, 2006). The fact that traditional financial practices, such as long-term loans or large equity stakes in German corporations, became incompatible with LM caused power struggles over resources. Deutsche Bank hired a lot of new people to implement the changes and others

had to go. Huge layoffs were particularly experienced in corporate banking (Hackethal, 2004, p. 101). Previously, seniority and loyalty were highly valued in German companies and were preconditions to become CEO. Internal managers were favoured over external ones (Freye, 2015). With the growing business in the US in the 1980s and 1990s, new and young traders entered forcefully into the management ranks. Older 'traditional' bankers did not necessarily see the benefits of changing their practices so radically.

These tensions within Deutsche Bank, between the new type of banking and the old, started perhaps with the acquisition of Morgen Grenfell but are ongoing through the merger with Bankers Trust. Employees weren't necessarily happy about the general trend of Deutsche (Rodgers, 2016). Particularly the acquisition of Bankers Trust caused many sceptics to speak out. On the one hand they criticised the fact that the integration of Bankers Trust would be too difficult and costly (Kobrak, 2007, p. 454). On the other hand, many criticised the US banking culture as too speculative or, on the contrary, as too "notoriously provincial" as a German newspaper claimed (Kobrak, 2007, p. 345). Deutsche ruthlessly fired German bankers in order to keep Bankers Trust people (Salama et al., 2003, p. 316). As *The Economist* (1999) observes:

It would be hard to find two financial-services firms with more different approaches: buzzy deal makers and traders at Bankers, stodgy commercial bankers at Deutsche. The German bank has a sorry record of trying to succeed in the racier field of investment banking; its prospects with Bankers look little better.

The acquisition of Bankers Trust was allegedly predominantly orchestrated by Edson Mitchell, the US American star trader of DMG (Kobrak, 2007, p. 334)³⁸. He represented the stereotypical 'arrogant' banker speculating with 'other people's money'. There was a huge difference in the pay of the US American investment bankers and the German bankers. Even Kopper, chairman of Deutsche from 1989 to 1997, who employed many of them told *Euromoney* that the US investment bankers are rather overpaid (Fallon, 1994). For example, Deutsche Bank committed USD 10 million each to some managers of Bankers Trust to stay at Deutsche after the merger (Andrews, 1998). Some would earn or receive a severance pay that was higher than Deutsche board members' salaries all together.

These increased costs of USD investment banking led to the fact that the German banks' profits declined in the 1990s (Janssen, 2009, pp. 105, 144). It is often argued that the decline in profits resulted from the erosion of interest margins in corporate lending. However, the profitability

³⁸ A personal conversation with the upper middle manager at Deutsche Bank.

issues Deutsche experienced in the 1990s were the result of the high costs of developing its capacities as an investment bank to such a large extent (Vitols 2009: 145). Indeed, the rising net cost per employee was a concern for Deutsche's management. Because of the high costs of new traders, the profitability per employee declined (Janssen, 2009, pp. 105, 144). It was a struggle to keep expensive traders in the US on the payroll.

One of the most revealing changes in personnel was perhaps Krumnow, the risk manager of Deutsche at its management board. His story demonstrates the fact that Deutsche Bank took an unexpected and even undesired turn because of LM. Krumnow originally pushed for integrating the risk management approach of RAROC (see last chapter) within Deutsche Bank relatively early on, compared to other non-US banks (The Economist, 1993). Krumnow occupied a central position for the direction of the transformation of Deutsche Bank. He pushed for an implementation of IAS (International Accounting Standards) which is seen as only the first step to US accounting standards US-GAAP³⁹. However, he failed to register Deutsche's shares on Wall Street, something Schmitz advocated for in the early 1990s (see last chapter). This was problematic according to Krumnow's critics. It meant that Deutsche could not engage in share swaps and had to raise the USD 9 billion for the acquisition of Deutsche Bank in cash (Shirreff, 1999). In fact, he disapproved of joining Bankers Trust, the bank who had developed the risk management technology of RAROC in the first place. He had severe criticisms of paying such a high amount of money. As a result, he had to leave during the acquisition of Bankers Trust (Garfield, 1998; Pauli, 1999)⁴⁰.

New financial speculative practices did not only alienate Deutsche Bankers but also the general public. The shift to LM caused public outrage and resistance by Deutsche Bank's customers. For example, the Mannesmann Takeover, and the court hearing that followed (Höpner and Jackson, 2006; Nolmans, 2006); the losses of Metallgesellschaft or Long-Term Capital Management (LTCM), the derivatives crises (Nesvetailova, 2006) that were disasters for Deutsche (Lütz, 2005a); and of course the GFC were crucial incidents where the new financial developments were heavily criticised. These incidents are well documented, and I will therefore not deal with them here.

³⁹ For a more in-depth political economy analysis of the different accounting standards and their changes in Germany and Europe see Perry and Nölke (2006).

⁴⁰ See Nolmans (2006, albeit in German) for further intra-institutional disputes. He documents for example the dispute between Deutsche's board and Cartellieri or Mader who both initially promoted Deutsche Bank's integration into USD money markets since the 1980s, similarly to Krumnow, but then became critical of the subsequent turns to establish the practices of securitisation and trading of debt. Both had left by the early 2000s.

This is representative of the struggles that Deutsche Bank experienced in its transition to LM. The process produced imperatives that were difficult to keep at bay and necessitated innovations that had to do with accessing USD markets, rather than simply conducting US financial practices for the sake of higher profits. Implementing LM across the whole institution, which necessarily made its traditional practices redundant, was neither initially planned nor welcomed by all. A *Euromoney* article documents the problems with keeping control of the tensions at Deutsche Bank. It states after the acquisition of Bankers Trust (Shirreff, 1998):

The sad outcome of this expensive exercise was that top Deutsche Bank management lost its way. It could shackle or alienate these highly paid recruits in a heavy-handed way, but it couldn't control them effectively in their own language. The adventure begun by legendary speaker Alfred Herrhausen in 1989 was in danger of running into the sand.

In order to keep its head above water, Deutsche had to consistently adapt its internal operations systems and management strategies. The irresistible pull to its internal management systems is the subject of the next section. Examining the precise institutional systems and technological changes, I will demonstrate that Deutsche could not keep its investment banking operations separate as initially planned. It had to progressively transform the whole institution to meet the liquidity requirements of LM, in spite of the resistance which wanted Deutsche Bank to go elsewhere.

The transition to LM: managerial control and the connections to US money markets

As demonstrated in the last chapter, Deutsche Bank needed to build a global recycling mechanism for its practices in the US. As the last chapter argued, to systematically buy USD assets, banks had to sustain expensive financial subsidiaries to get on-balance and offshore US dollars, engage with complex financial practices such as repos, as well as foreign exchange swaps to turn their Euros into dollars. dollars had to be transferred within the bank via internal capital markets (Düwel, 2013). The initial attempts to create that internal capital management were rather slow and fraught with difficulties for the German banks. While all major banks made significant investments in new technology, management and personnel to address the need to trade securities (Deeg, 1999, p. 90) and to overcome their 'confusion' about what was going on in New York, they struggled to fully manage that transition.

Deutsche Bank could not keep its investment banking operations separated with DMG while the 'parent bank' would engage with commercial banking in Europe, as initially planned. New risk management practices and operational procedures to control the global funding mechanism of

Deutsche Bank had to be applied across the board. This influenced the metrics of traditional lending practices. As I documented in the last chapter, corporate loans and equity, the previous flagship of Deutsche, were suddenly seen as too risky. The changes in risk management that Bankers Trust pioneered in the 1980s, and Deutsche started to apply in the 1990s, started to affect the central management of the bank.

Despite the changes in risk management in the late 1980s, and the increasing importance of its US operations, Deutsche's board put heavy restrictions on the volumes for the deals its foreign subsidiaries and branches could do. The branch was limited to credit lines of USD 2 million that it could conduct independently. This was a tiny amount for New York (Kobrak, 2007, p. 118). Other foreign banks were not so stingy. To put the limitation of this volume into perspective, a banker from a different foreign bank, quoted in Stigum (1990, p. 303), boasts about his liability management where he funds his long-term asset side with short-term cash. He takes out as much as USD 100 million of cash at once to have liquidity and hedges interest rate risks through Eurodollar futures. Having more severe restrictions in place, Deutsche bankers could not play the game of (mis-) matching their books to such an extent.

This has little to do with the German regulatory constraints but perhaps more with the managerial capacity and institutional control Deutsche's board members tried to keep. The clashes in understanding of, or willingness to follow, modern banking became visible in the structure of Deutsche's management of New York from the Frankfurt offices. According to Staecker (Kobrak, 2007, p. 323), adapting the trading system to the United States was a real nightmare. Deutsche hired IBM in the mid-1980s to come up with a system for the whole of Deutsche. In 1992, Staecker hired John Ross from Bank of New York where he served as head of global asset and liability management. Ross was supposed to advance the systems at the branch to be able to manage liabilities better. With derivatives being more and more crucial for liabilities management, traders in New York needed to make decisions in split seconds. Ross went on to restructure the treasury operations at Deutsche in Frankfurt to improve the communication between the continents. That way, the operations based on the liquidity needs of LM spread across the institution.

Despite its hunger for Anglo-Saxon know-how of securities trading to access dollars, Deutsche's management seemed to want to continue to control the operations in the US. The transition to LM internally caused many power struggles over resources. Indeed, Deutsche Bankers in Frankfurt loathed to hand over too much control, even though they tasked their foreign subsidiaries with hunting for US dollars. Deutsche's central office tried to keep control in the

1990s over crucial areas such as securities clearing, performance measurement and accounting (Lee, 1998). But they would not let the traders make the split-second decisions they needed to on the USD money markets. This quote from *Euromoney* highlights the different management style of Deutsche's board (Shirreff, 1998):

'Breuer [...] wants accurate forecasts,' says a former Deutsche Bank interest-rate risk-taker. Volatile earnings are not welcome in a universal banking culture. 'Universal banking is all about stability,' says an investment banker working in Germany. 'Investment banking is about change'.

A crucial struggle over how to create the capacity to act in the new financial world of LM was the integration of new risk management approaches, as I have established in chapter two and five. RAROC provided the impetus for the shift from 'originate to hold' to 'originate to trade' or simply 'to trade'⁴¹. As RAROC required the consideration of the cost of the corresponding capital locked in on the balance sheet of a bank, it made sense for the bank to quickly sell on the product. Today, it seems like a normal thing to estimate a risk-adjusted return on capital of a loan and even an entire portfolio. So why did banks not do this earlier? The managerial and technological innovation of RAROC implied a change in power structures and some bankers did not want to lose control.

As Krumnow (The Economist, 1993, p. 25), risk manager from Deutsche explains, it took a couple of years until the board was convinced that there should be an overall risk assessment in 1988. At first, the members of the board were dubious of the central oversight that they previously were not exposed to. Indeed, banks were organised into regional centres and managers would only be concerned about the local risk of their specific positions. It was only when RAROC centralised control that they started monitoring correlations of lending exposures.

Thereby, RAROC promoted changes in banks that meant that previous lending practices had to stop. Financial securities had to be constructed in a way that allowed bankers to trade the securities so that it would not use up too much expensive capital. Compared to issuing loans, holding them in banks' books and earning interest for keeping them, this new way of doing financial practices was a radically new practice. Originating and trading securities became close operations and integrated strategies. The radicality of RAROC lay in the fact that a trader can now be compared to a loan officer for management and profitability purposes (Partnoy, 2009). RAROC can even reward the loan officer for a less profitable loan (because it used up less

⁴¹ Note the decisive difference to Commerzbank. As I demonstrated in the last chapter, Commerzbank did not seriously implement RAROC in its operational systems.

underlying risk-adjusted capital). “Try explain that at most other banks, where subduing a traditional credit or trading culture is today’s challenge”, marvels the Economist (1993, p. 19).

Prime dealings and secondary market operations were indeed separated operations at Deutsche until the early 90s. Both fields were individually dealt with up until the board level. Kopper (Fallon, 1994, p. 34) explains the transformative impact at Deutsche in a *Euromoney* interview that highlights the resistance that Krumnow also got initially:

Primary is much closer to trading and sales than before. But there used to be a taboo in Deutsche Bank that the two could not be put together. Yet we make most of the money by selling the paper, not from the fees on the primary side. As a result, there was always a perception that we did not make a lot of money from capital markets. The primary guys had some good years, they had very poor years, but consistently a lot of money was made. We push the two together and we now have a structure that I think is state of the art, and we left behind a cherished Deutsche Bank holy cow that was there as long as I can remember. There were big fights at the top of this: turf battles, someone saying: “these are my people, young people are not supposed to yell at mine.” We lost market opportunities by handling it that way. I respect my colleagues involved for seeing it, and agreeing without hesitation to change it.

It is interesting to note that, apparently, Deutsche did not make that much money on fees – a commonly used objective of banks that supposedly indicates their ambition for becoming investment banks. Crucially, this shift demonstrates that Deutsche could not sustain its initially partial shift to LM. Having started to engage with Euromarkets and US money markets, the rest of the institution had to change as well. As I argued before, given the fundamental implications of LM, the asset side had to accommodate this transformation. As a result, Deutsche had to change this separation.

These examples of Deutsche’s operational and strategic changes serve to show that Deutsche Bank needed to construct new ways of controlling its new financial environment. In order to create the capacity to act when LM radically changed the way banks had to fund themselves, a fundamentally different way of managing the banks was required. This subsequently not only affected their funding strategies to create a global funding network, but it affected their traditional lending practices and the entire managerial strategy as well. As I showed, the need to restructure its managerial systems to regain control on global markets outweighed the resistance of ‘traditional’ bankers. The impact of US finance in the 1990s is not best conceptualised as a global imposition. Instead, the transition of German banks was shaped by social struggles between and within the banks that arose out of the need to institutionalise USD funding in response to the rise of US finance.

This however has resulted in a second issue. While the progressive institutionalisation of LM allowed Deutsche Bank to keep up with the changes in global finance, the need to sustain USD funding is difficult for non-US banks. Non-US banks always have to fight with a power imbalance to accessing US dollars, particularly Fed funds. However, funding a global network such as Deutsche's became particularly controversial when USD funding became severely constrained in the post-GFC decade, as I will highlight in the next section.

6.3 Banking on the USD funding gap

This section thus outlines the fundamental contradictions that the rise of LM has created for German banks. While adopting LM allowed Deutsche Bank to integrate itself in US investment banking, as I exposed in the last section, the need to sustain USD banking that this transition has created has turned into one of its biggest problems now. As I have established, to be able to buy USD assets and liabilities, non-US banks had to build expensive foreign financial subsidiaries to get on-balance and offshore US dollars. The costs of LM were not only in initially buying institutions and expensive traders but in systematically sustaining access to USD money markets, which is an ongoing issue not only for the German banks but for non-US banks in general. Being located in Germany and having deposits denominated in euros, rather than in US dollars, means that German banks have to consistently find ways to leverage their limited USD resources. This capacity has in fact worsened since the GFC, despite the efforts in updating their operational systems to manage the intricacies of LM. This chapter shows that the problems in meeting the USD liquidity requirements of LM are a continuous issue. I argue that German banks have tried to reduce their costly exposure to them, but that they were not able to. I thus document the ongoing financial practices through which they try to overcome their USD funding gap and highlight how the impact of US American finance continues to influence the global financial architecture and the way German banks can and have acted within it.

As I have established throughout the thesis, the engine of the global financial infrastructure is short-term USD debt. The GFC has exposed that the global financial infrastructure is hugely volatile and prone to crisis with problematic implications for non-US banks. This thesis has argued that one of the major problems is access to and leverage of US dollars. As numerous researchers of the crisis have shown (Shin, 2012; Tooze, 2018), European banks in general and German banks in particular (Thompson, 2016) were heavily exposed to the USD money markets which led to their bankruptcies. In fact, European banks were even more highly leveraged compared to the US banks. On average, non-deposit liabilities were larger than customer

deposits, at least since the end of the 1990s (Noeth and Sengupta, 2012, p. 465). While German banks have traditionally been less exposed to costly lengthening intermediation chains and non-bank funding through securities (Schmidt et al., 1999), they too have been severely hit by the crisis.

As the crisis showed, USD money markets can dry up very quickly. This problem goes beyond the volume of the losses German banks experienced with their toxic USD mortgage-backed securities during the GFC, as detrimental as they were for German banks and the tax payers. In the wake of the GFC, money market funds – as the main provider for short-term funding for non-US banks – withdrew their funding (Baba et al., 2009). The systemic problem that arises is the fact that banks could not roll over their debt without that funding. As I showed in the last chapter, both Deutsche and Commerzbank (through its takeover of Dresdner) experienced this problem.

Money market funds in the US are central for the supply of USD as the crisis verified. Indeed, since the GFC, economists are certain that USD in the US (Fed Funds) are above Eurodollars in the hierarchy of dollars. This had severe implications for non-US banks. Even though Deutsche had created a complex global USD funding mechanism, it was still affected heavily by the withdrawal of money market funds. Despite Deutsche's claims that it did not receive any public help during the crisis (Wilson, 2012a), it received USD loans from the Fed as part of the Fed's rescue program, the Term Auction Facility (TAF), which stabilised its financial activities and helped to cushion the deleveraging process of foreign assets for German banks (Buch et al., 2011; Ewerhart and Valla, 2011, p. 141). While it is commonly recognised as a housing crisis, its global spread and severity resulted from the fact that it was a USD funding crisis. It was not the losses of the banks' assets that caused banks' defaults but their inability to roll over debt (Thompson, 2016; Tooze, 2018).

After the GFC, banks have been trying to reduce leverage in banking in the US in order to scale down the volume of debt and therefore complexity in the system. While the Fed's funds helped both Commerzbank and Deutsche Bank to sustain funding their assets temporarily, since the GFC they have struggled (Wixforth, 2017). An analysis by JPMorgan Chase estimated that Deutsche was losing 25 cents for every dollar of business it did in the US (Storbeck et al., 2019b). German finance seems to be retreating from its USD claims and loans (IMF, 2018, p. 44), refocusing its efforts on German retail banking (Hardie and Howarth, 2013a, p. 124) or generally their "home market" (Wilson, 2012b) and thus decreasing their deposits and reserves at the Fed (Aldasoro et al., 2017). Deutsche emphasised during its last AGM that it would reduce its US

investment banking exposure (Storbeck et al., 2019b). In general, European banks have attempted to reduce their USD liabilities and assets. Indeed, USD liabilities have shrunk significantly after the GFC from almost 10 trillion to about 6 trillion (Aldasoro and Ehlers, 2018, p. 18). ABCP conduits also have lost in importance in raising money (Sgambati, 2019).

The IMF Global Financial Stability Report of 2018 indeed confirmed that recent regulatory requirements have forced banks to increase their capacity to reliably meet their short-term borrowing. However, this only counts for their global consolidated balance sheet. Global banks still rely heavily on interbank deposits, commercial papers and swaps for short-term USD borrowing. While they find that German banks are not as exposed to short-term USD liquidity funding as other European banks, they still cover around 15% of their USD funding with short-term swaps⁴². This overall heavy reliance on short-term funding of USD makes the banks highly vulnerable to USD market tightening according to the IMF (IMF, 2018, p. 40ff). Aldasoro et al. (2017) find that overall maturity length of MMF funding has become even shorter over the last few years for non-US banks. This suggests that it is unclear if the funding risks of contemporary geography of USD flows has increased or decreased since the GFC (Aldasoro and Ehlers, 2018). This is a crucial implication of the rise of LM which needs to be managed by non-US banks.

Before the GFC, German foreign affiliates would supply Deutsche Bank with capital market funding. While US subsidiaries would absorb much of Deutsche's USD capital, as I showed in the last chapter, they would also contribute to capture USD liabilities. However, this funding relation changed during the GFC. By the time of the Lehmann collapse, foreign subsidiaries borrowed €50 billion, or 10% of their total assets, from their German parent banks (Düwel, 2013, p. 9). In general, US branches and subsidiaries of non-US banks, as a BIS study has shown, have become net borrowers of their home headquarters (Aldasoro et al., 2018, p. 8). Having invested in capital absorbing global banking networks and their global resources of US dollars declining, German banks must now find new ways to supply these with expensive capital and gain the necessary assets to stay profitable. Their fundamental problems that arose with LM operations under USD dependency have now revealed the deep contradiction of relying on USD as crucial currency.

While German banks have indeed reduced their USD total claims and loans (IMF, 2018, p. 44), the attempts after the crisis did not lead them to overcome their problems. German banks continue to have a large USD funding gap. While they mainly fund themselves in euros, German banks' assets are to a significant extent denominated in US dollars (Abbassi and Bräuning, 2018).

⁴² Net cross-currency derivatives as percent of total assets, Figure 1.26 (IMF, 2018, p. 45).

They have to transform a large chunk of their euro liabilities into US dollars. The USD funding gap was not a problem dealt with during the crisis but is an ongoing issue (Fender and McGuire, 2010; Thompson, 2016; Aldasoro and Ehlers, 2018) and German banks continue to think of their assets in relation to their access to USD funding markets. That is, they have to construct and guard their assets in a way that invokes USD money market confidence (Thompson, 2016, 2015), tying their strategies to the liquidity needs of LM.

This is a problem because USD debt is very paradoxical. As I have argued throughout the thesis, USD liquidity provided by US money markets is one of the most crucial factors for understanding the vulnerability and strategies of German banks. Despite the global nature of the Euromarkets and global technological progress, the ongoing mismatch of currencies of their liabilities and assets was difficult to sustain. Compared to US American banks, German banks have had significantly fewer opportunities to access USD and fewer possibilities to find new sources of funding should one resource dry up. This had made global banking strategies inherently problematic. With limited access to customers' dollars, global banks have to compete with each other on the short-term wholesale USD markets in order to access USD funding (Aldasoro et al., 2018). That means global banks have to consistently find ways to access them through securities and deposits other than their home currencies. It is now apparent that German banks sowed the seeds for their own continuous struggles.

Most USDs remain in the US and can only be accessed through cross-border transactions (Aldasoro and Ehlers, 2018). When MMF reduce their funding, which can happen quickly as demonstrated by the GFC, banks need to find ways to make up for the loss. Aldasoro et al. (2017 Graph A1, left-hand panel) find that USD liabilities for non-US banks have increased even though MMF have withdrawn a significant share. They estimate that in 2016, non-US banks lost around \$555 billion of US dollar funding from prime money market funds, but gained approximately \$140 billion in repo funding from government money market funds. Consequently, there was a reduction in USD funding. Importantly, this shift has resulted in more short-term funding such as repo and foreign exchange swaps.

A recent study at the Deutsche Bundesbank argues that European banks have commonly used FX forwards in order to swap their Euro liabilities into US dollars to match their US dollar assets. German banks' assets are to a significant extent denominated in US dollars. The study found that German banks account for 21% of the turnover in the European FX forward market (Abbassi and Bräuning, 2018, p. 1). Thus, while the German banks' overall USD liabilities decreased, their funding through short-term repos and FX increased, tying them more closely to the short-term

funding wholesale markets in the US. This reliance on LM and funding its USD business has been very costly for the German banks. However, as these numbers show, German banks talk about cutting exposure to US investment banking (Wixforth, 2017), but they do not actually do it.

As a recent funding round for Deutsche Bank demonstrated, it pays more to fund itself than its big rivals in the US. Its credit insurance, credit default swaps (CDS) – derivatives that other investors buy to insure themselves against Deutsche's potential default – have become progressively more expensive. They are priced just shortly under Italy's UniCredit which has a balance sheet full of NPLs. As an investor told Financial Times, Deutsche's "old business model was 'we can fund cheaper than Goldman Sachs, leverage that and make a decent amount of money'. [...] The fact they don't have this anymore is a big problem." (Morris et al., 2018). Commerzbank is in a similarly bad state. Financial analysts have suggested that the problem is rather 'when' it will be bought by a European competitor, not 'if' (Storbeck et al., 2019a).

Despite the global funding mechanism that the German banks have built, and the new management strategies of LM they have devised, as I showed for Deutsche, access to USD markets continues to be a problem. Despite the global nature of USD flows, the ongoing currency mismatch of their liabilities and assets has been difficult to sustain. With limited access to customer dollar, global banks have to compete with each other on the short-term wholesale USD markets in order to access USD funding (Aldasoro et al., 2018). Compared to US American banks, German banks have had significantly fewer opportunities to access USD and less possibilities to find new sources of funding should one resource dry up. This has made global banking strategies inherently problematic. Global banks have had to consistently find ways to access US dollars through securities and deposits other than their home currencies. This highlights the inherently contradictory impact that the rise of LM had for German banks. Pursuing their extraverted strategies to participate in the rise of US wholesale markets, German banks sowed the seeds for their own USD dependency which has had a large impact on their current decline.

6.4 Conclusion

This chapter has offered evidence that conceptualising from the history of a financial practice, the rise of LM, offers vital insights into the contemporary power relations and inner workings of the global financial architecture. German banks fundamentally need to generate USD debt to be able to empower themselves, but this does not lead to a reduction of their unequal power relation vis-à-vis US banks. The need to sustain USD liabilities is deeply entrenched in

contemporary banking and poses fundamental problems for European banks. For that reason, understanding the transformation of German banking as a process of extraverted financialisation provides a crucial vantage point to examine processes of financialisation. The focus on the imperatives of LM has allowed me to demonstrate the precise interest German banks have had in US wholesale markets and the internal and external contradictions that followed from that.

It is easy to neglect these problems if the notion of marketisation is used to conceptualise processes of financialisation. The idea of marketisation has led scholars to short-handily rely on generic notions of profit imperatives in global financial markets. However, the notion of profits says little about the precise constraints and imperatives that influenced banks' capacity to make profits and that would frame their decision-making processes of why and how they would respond to their financial environment. The generic notion of market pressures neglects the financial developments of the grounds and the political implications that follow. This chapter thus highlights the need to start the analysis from financial practices to account for contingencies rather than conceptualising from profitable outcomes. Analysing the difficulties rather than successes of banks to respond to the imperatives of USD LM, I highlight their embeddedness in the distinct global financial architecture and the power relations it implies.

I have argued that the imperatives of LM can explain to a large extent the current predicament of German banking. I showed how difficult it is to implement the practices of LM and to generate and sustain high leverage, speculation and access to US dollars. By examining the practices German banks engaged with to leverage their limited USD resources, I demonstrated that contemporary banking is best understood as the challenge to overcome USD dependency. However, given US banks' dominance over USD resources, this is difficult for banks outside the US. This power imbalance is a crucial feature of contemporary global financial markets, which influences global financial fragility. I have argued that USD LM represents one of the core contradictions at the heart of the financial management of these banks – the continuous necessity for German banks to acquire USD liabilities even though banking in US wholesale markets is one of the core sources of their problems.

Recasting imperatives in banking as a challenge of LM, rather than profits, can highlight the deeper transformations underlying the problems in contemporary banking. As the last chapter showed, pursuing investment banking operations was complex and expensive. German banks have had to invest a lot of capital in new institutions to bank on USD money markets. It was the imperative to systematically access US dollars that meant they had to fundamentally transform

their assets as well. This chapter has demonstrated the resulting power struggles and contradictions that have ensued for the German banks. Using the concept of extraverted financialisation can thus account for how and why the German banks came to destabilise their own power during the rise of LM. This chapter thus further substantiates the argument that my concept of extraverted financialisation can portray the process of German financialisation. The concept can account for the roots of the transformation, broader changes in the middle, and the consequences of the rise of LM for the transformation of German banking. I have situated this transformation in the US American image while at the same time demonstrated the vital differences and power imbalances that characterise the respective trajectories and contemporary challenges of the German banks.

7 Conclusion

In this conclusion, I firstly summarise the central argument of my thesis and re-emphasise the benefits of using the concept of extraverted financialisation to explain the transformation of German banking. Secondly, I reflect upon what is at stake politically in failing to apprehend the implications of extraverted financialisation. I analyse the recent attempt to merge Commerzbank and Deutsche Bank to 'outgrow' the current crisis of German banking. This strategy highlights that common misconceptions about financialisation as marketisation are also present in the current policy debate about the transformation of finance. Overlooking the consequences of the rise of liability management (LM) and the constraints of USD dependency has meant that (policy) initiatives to transform finance since the GFC have often been misguided.

7.1 Summary of the argument

This thesis has analysed the transformation of German banking in response to the rise of US finance. I have demonstrated that German banks' path to financialisation has ultimately been connected with their strategies of internationalisation. As chapter four demonstrated, their initial international strategies were connected to the rise of the Eurodollar markets in Europe since the 1960s. German banks were part of European syndicates and club banks in which several banks jointly issued loans and bonds. Club banks were useful because they allowed banks to pool resources amongst several banks, which dispersed the risk and capital requirements of large financing projects on the Euromarkets. Subsequently, German banks attempted to establish their own international subsidiaries on the Euromarkets, first in Luxemburg and then in London in the 1970s. Luxemburg was a core centre for the German banks to raise Eurodollars and EuroDM to fund their operations on the Euromarkets. It was also a Eurocurrency hub in which the banks engaged with foreign exchange securities and mix-currency loans. In London, by contrast, German banks engaged more directly with new US American financial practices connected to corporate finance and more complicated structures of Eurodollar bonds.

The next phase of internationalisation started in the late 1970s, as examined in chapter five. I show that German banks started to establish foreign subsidiaries in the US. Initially as part of joint ventures with other European banks, Deutsche Bank quickly started to buy and set up its own foreign affiliates. It began targeting money market practices and USD retail deposits at the same time to enhance its capacity to get USD funding. It also started to sell securities such as Treasury bonds on a larger scale. At the same time, it established more and more global offshore

institutions to engage with the growing Eurodollar markets. It thus slowly built an international network of foreign affiliates in the 1980s.

Two foreign mergers shaped Deutsche's strategies of internationalisation in the US, the acquisition of London's merchant bank, Morgan Grenfell in 1990 and Bankers Trust in 1998. With Morgan Grenfell, Deutsche started to engage more systematically with US financial innovations such as money market papers and other financial securities. As a result, it centralised its Eurodollar funding and investment practices in London and changed its practices vis-à-vis corporations, significantly reducing its loan portfolio. Bankers Trust, on the other hand, was an investment bank in the US through which Deutsche started to trade with asset-backed securities on a large scale, making high returns on equity in the late 1990s until the GFC. By contrast, Commerzbank was not able to engage more systematically with US wholesale markets. While it tried to establish itself in the US through several smaller acquisitions, it largely failed to sustain its operations over a longer period of time. Particularly the US American asset-backed securities it acquired via the takeover of Dresdner Bank in 2008 caused large problems on Commerzbank's balance sheet.

Since the GFC, Deutsche's fortunes have changed, however. German banks in general are in crisis and Commerzbank and Deutsche Bank run their US investment banking practices at a loss. As I have demonstrated in chapter six, the transition of Deutsche Bank in adopting US financial practices was largely characterised by internal controversies and resistance against new financial practices. Even though it made large profits in the 2000s until the GFC, many of its US-based activities ran at a loss before that period. The troubles of the German banks are largely connected to their exposure to US investment banking. Despite their attempts to retreat from US financial markets, they struggle to get out of their crisis. As this last chapter highlights, German banks' path to financialisation have been difficult and did not result into the well-being of the bank on global financial markets as they would have hoped to. How then should we account for this trajectory and for the strategies of German banking that seem to have brought about their own crisis?

As I demonstrated in chapter two, common theoretical dispositions explain this transformation as a form of marketisation in which German banks have become more like US banks. This perspective rests on at least one of the following three assumptions. Firstly, the transformation of German banking is depicted as a US American imposition in which US financial logics have impacted German finance in the 1990s and transformed it according to the needs of US foreign investors. Secondly, scholars often understand banks as financial intermediaries that have lost

out as a consequence of the rise of financial markets. In that sense, banks are often posited conceptually in opposition to financial markets, which implies that when financial markets expand, banks consequently lose their significance during financialisation. Thirdly, scholars attribute the 'profit imperative' large explanatory power in explaining why banks would follow this shift. Market-based practices are seen to offer higher profits compared to the traditional long-term financial practices of German banks. The fact that banks are profit-seeking is obvious. Yet the notion of the profit imperative reveals very little about the concrete financial developments and contradictory financial pressures on the ground. The notion of marketisation cannot explain why banks would start engaging with the Eurodollar markets in the 1960s, before the US impact on German financial institutions came to be felt in the 1990s. As this thesis has shown, banks actively engaged with global financial markets in a way that is not necessarily very profitable either. Crucially, if German banks became more like US banks, the notion of marketisation cannot explain why German banks now struggle so much more in contrast to US banks.

By contrast, this thesis has developed an original concept called 'extraverted financialisation' that can explain German banks' path to financialisation. The concept highlights that non-US banks have pro-actively engaged with financialisation through extraverted strategies. They oriented their international strategies towards external US dollar flows since the 1960s. Thereby, their activities were shaped by distinct imperatives and constraints that cannot be explained with the notion of marketisation. They were fundamentally different for non-US banks as for US banks. The concept of extraverted financialisation rests on four theoretical disposition that can account for why German banks have taken their specific paths in response to the impact of US American finance.

Firstly, to understand the expansion of US American finance, it is necessary to grasp the model of banking that emerged in the process of financialisation. The concept of extraverted financialisation draws attention to radical transformation in the way US banks have funded themselves on the US money markets. These new financial practices, called LM, developed out of pragmatic responses to overcome the crisis of funding that commercial banks in New York experienced in the 1960s. In contrast to the slow accumulation of deposits, LM depicts a new practice that financial actors use to finance themselves much more dynamically by buying and selling short-term securities in money markets. This allowed banks to raise funds very quickly so that they outcompeted European banks.

This new funding strategy imposed new pressures on banks. Money markets were more volatile and riskier than funding with deposits, so funding became more expensive. To afford the higher costs of funding, banks started to invest in assets that carried higher yields, and consequently more risk. As a result, they sought new ways to sell securities quickly so that they would use up less expensive capital on the balance sheet. This caused a huge rise in financial transactions and US banks were uniquely able to leverage large amounts of debt. As a result, financial markets grew globally. In that way, the practices of LM represent a core financial practice at the heart of the rise of US finance. This created distinct imperatives and constraints for non-US banks that have been crucial for shaping the way they engaged with processes of financialisation.

The second feature highlights that the rise of LM caused non-US banks to seek US dollars. They needed USD liquidity to be able to compete against US banks on global financial markets. These, however, non-US banks did not have as their traditional deposits were not denominated in US dollars. As a result, non-US banks started to innovate in various ways to leverage their limited USD resources. This caused non-US banks to develop the practices of LM, too, as they attempted to gain those US dollars in US wholesale markets. Thus, the concept of extraverted financialisation draws attention to a core imperative for non-US banks in the era of financialisation: obtaining USD liquidity, rather than any form of funding. This can explain why German banks have engaged with the Eurodollar markets to such an extent since the 1960s. They provided an opportunity to find USD funding.

Thirdly, the practices of LM are uniquely suited to US American financial institutions which caused constraints for non-US banks as they could not develop those practices in their own home markets. US financial markets are institutionally complex, deep and highly liquid, resting on a large pool of USD capital. Particularly the money markets are unique in their short-term nature and meet the dynamic funding requirements of LM. As a result, LM caused imperatives of non-US banks that had to be satisfied in the US. This can explain why German banks went to the US to anchor themselves in US money markets. They had to go in order to institutionalise the practices of LM so that they could gain and sustain sufficient volumes of USD funding. The need to institutionalise LM and money market connections also helps to clarify why Commerzbank failed to sustain its US investments. In contrast to Deutsche, Commerzbank did not enhance its own institutional capacity to do LM and therefore failed to sustain USD funding required for US investment banking practices.

Fourthly, the concept draws attention to the internal controversies in the management of LM and the contradictions at the heart of financialisation. Adopting USD LM and conducting banking

practices in a different geographical location is difficult, fragile and expensive for non-US banks. Non-US banks constantly need to bridge the currency mismatch and differences in performance measurements and managerial strategies compared to their home markets. The shift to LM has engrained USD dependence within the everyday of global banking. Funding with US dollars is more difficult to sustain for non-US banks in contrast to US banks, particularly when US money market investors grow reluctant to invest abroad, as the GFC has shown. The global USD funding infrastructures that non-US banks have created through their extraverted strategies have enhanced their capacity to act within processes of financialisation. However, now, they cannot simply reduce this problematic dependence. This helps to explain why German banks have struggled so much in the process of financialisation and why they now cannot solve their own individual financial crises. While banking on US wholesale markets became too expensive since the GFC, they cannot reduce their costly reliance on US dollars.

The methodological benefits of my concept of extraverted financialisation are threefold. Firstly, it incorporates the history of the changing nature of US American banking. It thus highlights the specific imperatives this posed for banking since the 1960s. This has enabled me to develop insights into a global financial transformation from its very origins, that is, from the financial practices that played a core role in starting the process in the first place. Secondly, the concept permits a careful historicisation of the broader transformation of financialisation outside the US because it provides the conceptual tools to trace how the practices of LM travel to new places. This allows me to demonstrate why a change in US finance would affect other banking practices outside the US. Relying on distinct imperatives and constraints can highlight the different kinds of challenges this held for non-US banks in contrast to US banks. This helps to contextualise the extraverted strategies of non-US banks in adjusting to different banking environments. Thirdly, the concept suggests that banks are best understood in their own terms, rather than as financial intermediaries, which would derive banks' activities from their relationships to corporations. This shifts the attention to banking practices as attempts of empowerment, that is, of gaining control over financial market dynamics.

In the era of financialisation where financial logics seem to dominate socio-economic ones (Van der Zwan, 2014), the fact that banks hold a central position within financial capitalism deserves more analytical attention. I have suggested to use the concept of extraverted financialisation to understand how German banks have shaped processes of financialisation. The concept provides a framework to analyse the transformation of German banking in the image of US American finance, based on the strategies of German banks. At the same time, the concept accounts for

the differentiated power relations within the global financial architecture that US banks hold vis-à-vis non-US banks.

7.2 Policy implications: Reversing financialisation?

What is at stake politically in missing the implications of extraverted financialisation? The problem of underestimating the transformation of funding practices is not only present in the CPE literature outlined in this thesis. The misunderstanding of financialisation as ‘marketisation’ is also reflected in policy initiatives aiming to transform finance. Understanding the process of German financialisation as extraverted financialisation is important because as I quoted in chapter two, “Thinking about future alternatives to capitalism requires us to think about alternative conceptions of its past” (Wood 2017:8). This is particularly pressing in a time when various efforts proliferate to reform and transform banking since its destructive power became apparent during the GFC. Several initiatives have been proliferating around the world to make finance more ‘stable’ or serve the ‘real economy’ rather than engage in speculation, including for example the Capital Markets Union in Europe (cf. Braun et al., 2018). One of the most recent attempts to restructure German banking so it can cope with the new world of finance has been to merge Commerzbank and Deutsche Bank. Earlier this year, the German political and financial establishment attempted to construct a ‘national champion’ that could rival US banks and financially support German industry (Morris et al., 2019). The merger would create a German giant that would manage EUR 1.8 trillion in assets (Massoudi et al., 2019). This attempt of merging failed after several weeks of negotiations between the two banks. What it highlighted, however, is that the discourse surrounding this initiative remained trapped in a problematic understanding of the process of financialisation and what banks do.

The idea of a merger resulted from the desire to have a strong bank again that can allocate capital to German industry. The crisis of German banking, as is implied by these calls, threatens the financial independence of Germany. A strong German bank should also be able to rival US American banks such as JPMorgan (Storbeck, 2019). Peter Altmaier, Federal Minister for Economic Affairs and Energy, sums up the role he imagines for finance and Deutsche Bank in his industrial strategy: “A country like Germany also has to lay claim to playing an international role in financial markets and banking” (cited in Schieritz and Nienhaus, 2019, own translation). Creating ‘national champions’, both for corporations and banks, is a core feature of this strategy. Similarly, Olaf Scholz, Germany’s current finance minister argues that “We will only be able to seize our global opportunities if we have an efficient financial sector” (cited in Storbeck, 2019).

A national champion shall strengthen German banks and thus rescue Germany's inefficient financial sector, ensuring better corporate finance again (Gammelín, 2019). Scholz pressed for this merger and went so far as threatening to find another European buyer for Commerzbank if the merger fails⁴³.

Contrary to the ministers, the merger plan has been criticised for several reasons. Merging would entail huge restructuring costs that would require fresh cash to pay for it. It would need capital increases. The new bank would have higher capital requirements because of its higher systemic relevance (Storbeck and Morris, 2019). Various financial experts such as Isabel Schnabel, member of the German Council of Economic Experts, have pointed out that it would be very problematic if there was only one big private bank. It would practically enjoy a state guarantee (Schnabel, 2019). Such a guarantee is often taken as a license to neglect prudent financial conduct, leaving them free to speculate too much, resulting in financial crisis. The mega bank would be even more difficult to control, monitor and understand. It would be "too big to fail", a feature of banks that represents their "perverted power" and constitutes a "threat to society as a whole" (Wixforth, 2017, p. 605)⁴⁴.

The history in this thesis suggests that these criticisms do not go far enough. I have outlined a more fundamental transformation at the level of financial practices that is often overlooked within these debates. According to Lisa Adkins (2012, p. 621), the GFC and subsequent recession sparked "a call for all manner of returns to previous states of existence, both real and imagined." This nostalgia is particularly present in the imagination of German banking where the call for a return to 'boring' banking is widespread, including from financial watchdogs, politicians and shareholders, as the last AGM showed. From this perspective, German banks should stop speculating on US markets and alter their assets so that they finance the 'real economy' instead. The Deutsche CEO himself invokes this imaginary, something for which he has been widely applauded (Schreiber and Willmroth, 2018).

The discourse and policy implications of the attempted merger reproduce the idea of financialisation as marketisation in fundamental ways. As a result, people underestimate the transformation of funding practices connected to LM. The debate surrounding the merger reflects a perspective that views US financial markets, rather than German banks, as the problem, resting on the popular conceptual binary of markets vs. banks. This perspective is

⁴³ How much this plan is related to an attempt to strengthen the government's stake of 15% in Commerzbank before the next crises could not be established.

⁴⁴ Own translation.

steeped in an old-fashioned understanding of traditional German bank-based system as representing a more progressive ‘social’ market economy, in which banks act as the guardians of the German economy, until US finance led to their transformation in the 1990s. Their long-term credits were heralded as allowing corporations to focus on long-term investment and high quality production. This would ensure a form of corporate governance that is characterised by compromise between different stakeholders so that benefits are shared more consensually (cf. Streeck, 2009). From this perspective, the German financial system served progressive ends such as financing industry which created jobs, and divided up the profits of international capital markets more evenly. Consequently, Scholz would only need to set the conditions right for German banks to fulfil their inner, normatively better, purpose again. The bigger the banks are, apparently, the better they could keep at bay the trouble of US finance.

In that way, the idea of a mega merger to save the German economy represents the popular myth that banks are financial intermediaries serving the ‘real economy’. This focuses too much on deriving what banks do from their ideal-typical relations with corporations. The wish for a return to traditional banking practices carries the (implicit) delusion that banks would go back to acting as financial conduits, passing on liquidity to the industrial sector, if they only could. The history presented in this thesis questions the idea that banks ever acted as passive intermediaries of capital allocation. The appearance of stability of the German financial sector and the “harmonious” relationship between finance and industry (Lütz, 2000) was in many ways deceptive. Deutsche might focus more on big German exporters if it shrinks its US American investment business. However, I have instead demonstrated that Deutsche Bank has had its principal interest in financial globalisation, rather than in trade finance. Commerzbank only focused on investment banking with SMEs in Europe because their preferred strategy – banking on USD money markets – failed.

Crucially, however, I have exposed a more fundamental transformation at the level of funding practices that cannot simply be reversed. As the GFC revealed, a primary choking point for the functionality of banks was their ability to sustain their USD debts, rather than the value of their assets. Too often, however, people fail to appreciate how financialisation is not simply about what banks invest in, who they lend to or what they speculate with. Instead, as the history of LM has shown, global banking has transformed in a way that has connected accessing USD liabilities to the central strategies of banks which has been a core issue for non-US banks. In response to the rise of US finance, banks have restructured their liability side. This has led to a change in assets in a way that accommodated their active management of USD liabilities. Thus,

the imperative to restructure their assets was precipitated by a radical transformation of funding. Therefore, what banks invest in or trade with cannot simply be reversed as the assets of banks must meet the requirements of LM. Too often, people think of risk-taking at the level of assets, rather than liabilities, which misguides what we think needs to be fixed in financial systems.

As I have demonstrated, the rise of LM has elevated USD as the central currency for the everyday of global banking. LM has integrally linked non-US banks to US wholesale markets. Funding on US wholesale markets is inherently volatile and can provide a weak link to banks outside the US. As a result, global banks are neither “efficient”, nor would they be a German “national” champion able to rival US banks such as JPMorgan Chase. The impact of US finance goes beyond the fact that the finance secretary of state, Jörg Kukies, is a former Goldman Sachs banker, and that Goldman Sachs consulted Commerzbank about the merger with Deutsche (Gammel, 2019). Financialisation has deeply engrained a USD dependence.

This has been a core problem for German banks, particularly after the GFC, and has shaped their strategies, even against their opposition, as I have argued in chapter six. Kit Juckes, global head of FX strategy for Société Générale sums up a core funding issue for European banks: “There’s no other currency anyone wants to buy” (Szalay et al., 2019). Current liabilities in the money markets are almost as large as those from customer deposits (Praet and Herzog, 2011, p. 96, based on data from Bankscope). Achleitner, chairman of the supervisory board, argues that Commerzbank’s large deposit base would reduce Deutsche’s funding costs (Storbeck, 2019). And yet, the Postbank takeover in 2012 with its large German deposit base and branch network (Hardie and Howarth, 2013b, p. 124) has not helped Deutsche much either. Indeed, the troubled investment banking part in the US still runs on USD, and EUR deposits cannot finance that. These examples serve to show some of the fundamental problems with the rise of LM that are often underestimated. Thus, any policy initiative must tackle the problems of global banks that result from their USD funding practices on US wholesale markets.

Therefore, any idea about transforming banking has to be situated more broadly in geopolitics and US financial imperialism. Indeed, the concept of extraverted financialisation has large implications for geopolitics and US financial imperialism. The German banks’ USD dependence has already shown once before the limits of the influence of other states outside the US in controlling financial developments during the European debt crisis (Thompson, 2016). Crises have historically led to more demand for US dollars in specific countries (Judson, 2012) and it seems this dynamic is so far an on-going development. Albeit a big bank is equipped with a lot

of market power due to its sheer size, this dependency would still be a difficult issue to overcome, even, or perhaps even more so, with a German mega bank. As I have demonstrated in this thesis, global banking rests on USD liquidity to a large extent. This has re-oriented financial strategies to accommodate LM requirements on US wholesale markets. Counter some suggestions that US financial power is declining, the GFC in fact reinforced USD dominance (Tooze, 2018).

Extraverted financialisation thus exposes much larger structural problems connected to US dollar funding and geopolitical dependence on the US. The recent debate in Germany about creating a mega bank highlights the urgency of using this concept to understand the transformation of German banking. Because of the rise of US money markets, banks' financial practices are concerned with the immediate imperatives and constraints of accumulating USD liabilities to meet the requirements of LM. This has set in place a global financial infrastructure whose fragility rests on the capacity of non-US banks to acquire USD funding. Any attempt to transform finance has to keep in mind that banks' interests are not primarily in accumulating corporate loans, but in institutionalising their power to sustain their USD debt.

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