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Article

The managerial contradictions of extroverted financialization: the rise and fall of Deutsche Bank

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Abstract

Deutsche Bank was once an acclaimed US-style investment bank but is now struggling. The rise of US finance is often explained as an outcome of financial liberalization that motivated other banks to abandon their traditional industrial support to chase profit opportunities within global securities markets. This story, however, underestimates how the transition to US-led financialization was deeply entangled with managerial struggles and the contradictions of adopting US financial innovations from a peripheral position. By contrast, I use the concept of extroverted financialization to portray Deutsche Bank's transformation as an outcome of its attempts to integrate new funding practices connected to US money markets, called liability management. I argue that this process generated a difficult-to-manage business model and, ultimately, Deutsche's decline. Because of these extroverted strategies, the bank is now caught between opposing logics of banking, within neither of which it can regain its previous powerful position.

Key words: financialization, investment banking, financial institutions, political economy, firm strategy, liberalization

JEL classification: F3 Financial Globalization, F5 International Political Economy, G210 Banks, Securitization

1. Introduction

Deutsche Bank was once celebrated as a successful global investment bank. The transition of Deutsche Bank from its role as 'guardian' of German industry to a global investment bank reflects a broader transformation of commercial banks towards the US form of finance known as 'market-based banking' (Hardie *et al.*, 2013), 'shadow banking' (Mehrling, 2010) or 'deal-based finance' (Deeg, 2010). During this process, Deutsche Bank reaped around

25% returns on equity in the early 2000s, an unprecedentedly large share for the ‘stodgy commercial bank’ (Tett, 2012, p. 109). Leading agent among a group of European mega-banks, Deutsche aggressively expanded into US wholesale finance, while pushing for financial and regulatory changes in German and European capital markets to reflect its conversion towards US-style finance.

Today, Deutsche Bank is in trouble. It is desperately trying to improve on its underperforming, loss-making assets in the USA (Storbeck *et al.*, 2019a), while its traditional clients—German corporations—have abandoned it in favour of other funding sources (Braun and Deeg, 2019). Deutsche has been involved in many major financial scandals (Enrich, 2020) and is barely recovering from being the ‘sick bank of Europe’, having marginally benefitted from the recovery of asset markets during the Coronavirus pandemic (Jenkins, 2021). While the bank is still a powerful player in global markets, holding strong lobbying power and a ‘too-big-too-fail’ position within the European political economy (cf. Hardie and Macartney, 2016; Engelen and Glasmacher, 2018), it is nowhere near its dominant, profitable position of the early 2000s (cf. Hardie and Howarth, 2013).

This paper traces Deutsche’s rise and fall from the 1980s onwards, and argues that this dual development is integrally linked to a process of *extroverted financialization* (EF). EF characterized Deutsche’s attempts to respond to US-led financialization by routing itself into US money markets. While this meant that Deutsche climbed into the ranks of US investment banks in the 2000s, the transition also produced a financialized business model with inherent contradictions that precipitated its fall.

Political economy literature often explains the transformation of commercial banking as the outcome of financial liberalization, which was seen as freeing banks from the regulatory constraints that tied them to domestic ‘real economy’ and industrial support in Europe. The resulting global capital movements allowed banks to make large profits on global securities markets instead (Streeck, 2009, 2014). From this perspective, the German political economy served as a primary example of this epochal change because big German banks traditionally gave out long-term corporate loans and held long-term equity stakes that yielded low returns. By that view, big German banks had previously sacrificed higher yields in exchange for long-term, steady business. However, in the 1990s, growing global competition and declining interest margins made the banks more attuned to specific cost calculations so that they were no longer willing to accept the previous social compromise. When international capital flow constraints were lifted, German banks left their traditional practices behind and moved towards a US financial model (Deeg, 1999; Beyer, 2003; Lütz, 2005; Röper, 2018).

This story sidelines the problems and constraints of the Americanization of German banking that are crucial to understanding Deutsche’s path towards financialization. The notion of financial liberalization relies too much on a false dichotomy between German institutions that constrain profits because of their more socially—coordinated regulation and securities markets that offer higher profits via a free-market style model. While the elimination of international capital controls is an important part of financialization, the concept of financial liberalization is too ambiguous to capture the underlying dynamics of that transformation. The fact that banks are profit-seeking is clear but exactly how they seek profit requires explanation. Most German banks in fact sustained heavy losses in the 1990s when setting up their US financial subsidiaries (Celarier, 1996; Janssen, 2009; Vitols, 2009). The troubles with financialization became particularly obvious during the financial fallout of 2008 when some of the biggest players had to default. Converting to a US form of finance

has caused the banks fundamental problems that are difficult to capture with the concept of financial liberalization.

To scrutinize why Deutsche Bank took this path, I foreground the imperatives and problems generated by the rise of US finance. Deutsche's practices on global markets were crucially constrained by having to adapt to new funding practices—namely, liability management (LM)—associated with US money markets. The rise of LM generated a fundamental shift in funding strategies from the 1960s onwards because it allowed financial agents to raise much more funding than traditional deposits (Beck and Knafo, 2020; Dutta, 2020; Knafo, 2022). This enabled US banks to outcompete other banks because they could raise capital much quicker. As I show, if Deutsche wanted to be internationally competitive and keep up with US banks, it had to find ways to gain better USD resources, which triggered a change in its business model towards LM practices.

This transformation, I argue, also produced new vulnerabilities and contradictions that are often overlooked by accounts of financialization but that are key to Deutsche's fall. I demonstrate how the managerial controversies at the heart of financialized business models affected Deutsche's transformation towards US-style finance. As a result of its commitments to LM, Deutsche has integrated two opposing banking logics, in neither of which it has been able to regain its competitive edge.

I will use the concept of EF that I have developed in more detail elsewhere (Beck, 2021) to analyse how a conglomerate transforms its traditional business model to meet the requirements of US-led financialization. EF aims to capture the problems faced by agents attempting to integrate financial practices developed for a different context. It suggests that the transformation of foreign firms towards US finance relied on 'extroverted' strategies that looked outwards to foreign resources and expertise. My theoretical starting point is that the rise of US finance institutionalized new imperatives within global financial architecture, rather than liberalizing global capital flows (Konings, 2008). From this perspective, financialization is a process through which institutional dynamics were built rather than dismantled (Braun *et al.*, 2021). Accordingly, EF frames Deutsche's transformation according to four factors that have characterized the rise of US finance: (a) the rise of LM in the USA; (b) short-term USD funding; (c) the institutional specificity of US money markets; and (d) the managerial contradictions within financialized banking. Using balance sheet data and qualitative historical resources, I trace how Deutsche responded to these imperatives that significantly constrained the range of strategic choices it could pursue during financialization.

This paper focuses on Deutsche Bank but its findings are more broadly relevant in terms of four scholarly contributions: (a) I offer a meso-level account of the important socio-economic role of a large European bank actively participating in US-led financialization and building precarious USD funding structures, albeit from a peripheral position; (b) Conceptually, I demonstrate the value of using the concept of EF to understand the transformations and contradictions of financialization; (c) Empirically, via zooming in on one powerful bank, I offer an in-depth, firm-level account of the everyday practices, problems and managerial power struggles of financialization; and (d) I supplement largely productivist and inwards-orientated Comparative Political Economy (CPE) accounts of the German coordinated market economy (Mertens, 2017) by revealing how global imperatives have shaped Deutsche's path to financialization.

I make my argument in four steps. The next section critically evaluates the tendency to read financialization in terms of liberalization, which makes it difficult to account for the managerial contradictions at the heart of financialized banking. In the third section, I outline EF and describe my case study of Deutsche Bank. The fourth section traces Deutsche's strategies to integrate itself into US money markets from the 1980s to 2008s global financial crisis (GFC). The fifth section examines the tensions and contradictions that accompanied this shift. The final section analyses the implications of my argument for a differentiated understanding of the power and constraints of global financialized banks.

2. The difficulty of conceptualizing financial liberalization

CPE scholars have influentially conceptualized how different banking models transformed towards a US form of finance. Drawing on historical institutionalism, scholars have grappled with the question of how to conceptualize a global process of financialization that has differing local outcomes (Deeg, 1999). The financialization of German banks often serves as primary example for assessing the extent to which US-style finance has expanded globally because German and US finance were seen as operating on opposing logics (Hardie and Howarth, 2013; Röper, 2018). I revisit this long-standing debate to highlight the analytical stumbling blocks that have made it difficult to reconcile this global process's impact on banking practices, and to examine the imperatives of this transition and the type of banking that emerged.

Within CPE scholarship, US finance is the ideal-typical market-based model that rests on decentralized market forces, ensuring financial competition amongst many financial players. By contrast, German finance was conceptualized as the ideal-typical bank-based model (Zysman, 1983; Krahen and Schmidt, 2004) in which German banks enjoy insider relationships with corporations. Indeed, Deutsche Bank was at the centre of a tight network called 'Germany Inc.' (*Deutschland AG*), but all universal banks exerted considerable influence over German corporations via large shareholdings in companies and personnel on supervisory boards. These relationships were embedded in institutions that coordinated consensus-seeking processes that, by this view, restricted the drive of banks to maximize profits. Universal banks made compromises such as accepting workers' rights and lower profits, in exchange for institutional support for stable business and domestic protection from international competition (Streeck, 2009). This form of relationship banking was funded by private and corporate deposits which ensured slow but stable and cheap funding.

This framework ensured that banks provided patient capital to corporations, enabling long-term investment, which was seen as central to supporting the German coordinated market economy (Höpner and Krempel, 2004) and its export-led growth model (Baccaro and Pontusson, 2016), as well as being the key factor that differentiates a bank-based system from the US market-based one (Lazonick and O'sullivan, 1997, p. 137). Crucially, it is largely accepted that the bank-based system has allowed the German banks a near-monopoly position in lending (Zysman, 1983; Höpner and Krempel, 2004; Vitols, 2005).

Why, then, would German universal banks abandon their financial monopoly and 'safe haven' (Lütz, 2000) to turn to global securities markets instead? Why did they start to financialize their business model, moving from long-term corporate loans to trading short-term securities in global markets? CPE scholars have answered this question with reference to the

liberalization of financial flows,¹ which released competition that made banks more attuned to cost-benefit calculations (Deeg, 1999; Lane, 2003; Lütz, 2005). Big German banks would no longer accept low-yielding corporate loans, instead turning towards global investment banking. Given the option of trading on securities markets, they would no longer accept the coordinated compromise of German institutions, instead opting for US-style investment banking. ‘The traditional Hausbank system has weakened, as securities markets have become more important for both borrowers and savers’ (Deeg, 2010, p. 116). In short, German banks gave up their powerful insider position to seek the higher profits achievable on US capital markets.

Financial liberalization thus allowed German banks to participate in global securities markets. However, if non-US corporations wanted to be listed on the US stock exchange, they had to adopt transparent standards and reduce insider relationships. To learn how to do derivative trading, ABS structuring and FX trading, from the 1990s onwards large German banks bought Anglo-American investment banks such as Bankers Trust (Deutsche Bank) (Deeg, 2005; Vitols, 2009; Trampusch *et al.*, 2014). This produced a shift from relationship banking to transactional banking (Lütz, 2005; Streeck, 2009) so that the original distinction between markets and banks no longer sets banking models apart (Deeg and Hardie, 2016). Since the 2000s, the German finance model has become a ‘hybrid’ or ‘bifurcated’ system, characterized by the importance of both banks and markets (Deeg, 2012; Röper, 2018).

CPE scholars have highlighted important historical turning points of financialization, but I question the explanatory power of financial liberalization. This rests too much on a binary understanding where German financial institutions constrain the banks in their pursuit of financial profits, while global financial markets enable higher profits. From that perspective, banks would automatically gravitate towards global markets once financial liberalization dismantled the German social compromise (Streeck, 2009). But making profit on global securities markets has not been straightforward for the German banks (Janssen, 2009). Although Deutsche made huge returns in the 2000s (Hardie and Howarth, 2009; Deeg, 2012), German banks, including Deutsche, ran heavy losses during their 1990s expansions into the USA. By contrast, in the initial 1970s phases of globalization, German banks were successfully involved in the internationalization of German industry (Fohlin, 2007a; cf. Gall *et al.*, 1995) and led the internal restructurings of corporate finances and pensions (Sattler, 2010). US banks previously envied the opportunities afforded by German banks’ powerful position within the German political economy (Kobrak, 2007), while the current rise of dark pools², for example, attests to the ongoing importance of insider relationships within global financial markets (Mattli, 2019). It seems that German banks would have been well-prepared to tackle international competition together with the German corporate network. The profit motive enabled by liberalization is therefore insufficient to account for the wide-reaching transformations of the German banks.

- 1 Braun and Deeg (2019) demonstrate that the rise of securities markets gave corporations opportunities to fund themselves. The decreasing demand for bank-based loans have weakened the Hausbanks. In this paper, I consider the imperatives and motivations for the big banks to push for these changes themselves.
- 2 Dark pools are privately organized exchanges for trading securities in secret until the trade is complete and reported.

The reliance on liberalization has meant scholars have argued that the German banks have pushed for financial liberalization (Beyer, 2003; Deeg, 2009; Streeck, 2009; Deeg, 2012), but the precise drivers of financialization that prompted German banks to abandon their traditional model have so far not been conceptualized. Because the notion of liberalization downplays the institutions that had to be built (rather than dismantled) to make financialization possible (Braun *et al.*, 2021), it is easy to miss the new institutional constraints that characterize US-led financialization. Instead, scholars fall back on generic notions of hybrid banking models (Röper, 2018) or a quantitative notion of change along a continuum of market-based banking (Deeg and Hardie, 2016, p. 628). Since the speciality of German banks has long been that they offer a wide range of banking services such as loans and securities (Fohlin, 2007b), scholars have struggled to reconcile global financial processes with specific banking strategies in a way that comprehends the new nature of financialized banking.

I argue that the financialization of banking is a *qualitative* shift in banking practices. The next section thus incorporates the new imperatives and constraints of US-led financial markets into the political economy of financialized banking to uncover a more fundamental transition at the heart of financialized business models. This is not to say that European financial institutions and markets did not matter in the banks' paths towards financialization, but rather to recognize that the financialization of Deutsche's business model relied upon banking practices constrained by USD funding structures.

3. EF: a political economy of financialized banking

German financialization has been promoted by the large German banks' trading on global wholesale markets (Hardie and Howarth, 2013). Using the concept of EF, I assert more specifically that financialization is a process in which banks attempted to adjust to new competitive pressures arising from US innovations. From that perspective, German banks devised their international strategies to improve their access to USD to catch up to US banks. This section briefly outlines the contours of Deutsche's rise and fall with the help of key balance sheet variables, before outlining EF and how it can account for that process. I then comment on the benefits and limitations of focusing on the case of Deutsche Bank.

3.1 Deutsche Bank: the rise and fall in numbers

Deutsche grew substantially in asset value until 2008 (Figure 1), as did the share of its trading securities account in relation to total assets (Figure 2), while the share of its customer deposits of total liabilities declined (Figure 3). Over the period of the 1990s until the GFC, Deutsche emulated a giant US investment bank, shifting its business model and sources of power and income away from its traditional 'German' model towards trading on global securities markets. Since then, it has been on a general trajectory of decline.

What is often neglected in accounts of financialization is that the advance of Deutsche was already a problematic process. While adjustment costs and upfront investments are to be expected, Deutsche's growth led to a stark rise in costs that was not matched by profits (Nützenadel, 2020, p. 453). General administrative expenses rose from DM 2687 million in 1980 to 6533 million in 1989 and 19794 million in 1998 (Deutsche Bank, 1989, p. 48; Deutsche Bank, 1998, p. 132), of which the expansion into the USA was the most expensive endeavour. Figure 4 shows its meagre North American financial performance in the crucial years of the 1990s, when total costs rose alongside total revenue. Net income was

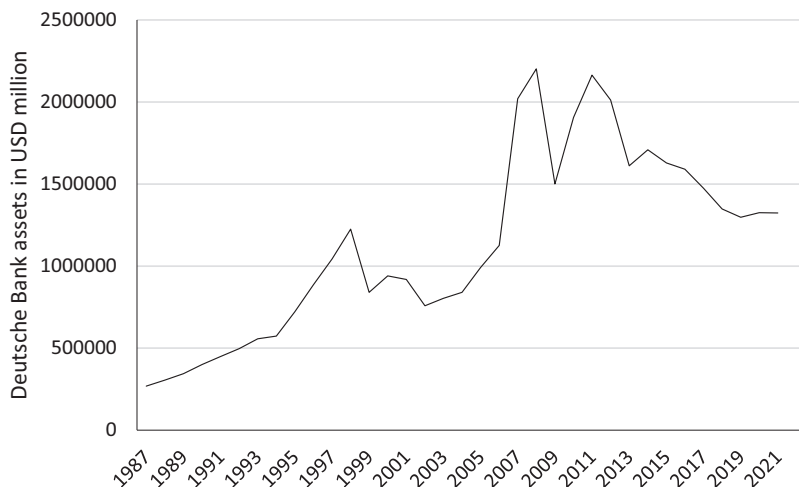


Figure 1 Deutsche Bank total assets.

Source: Compustat Global.

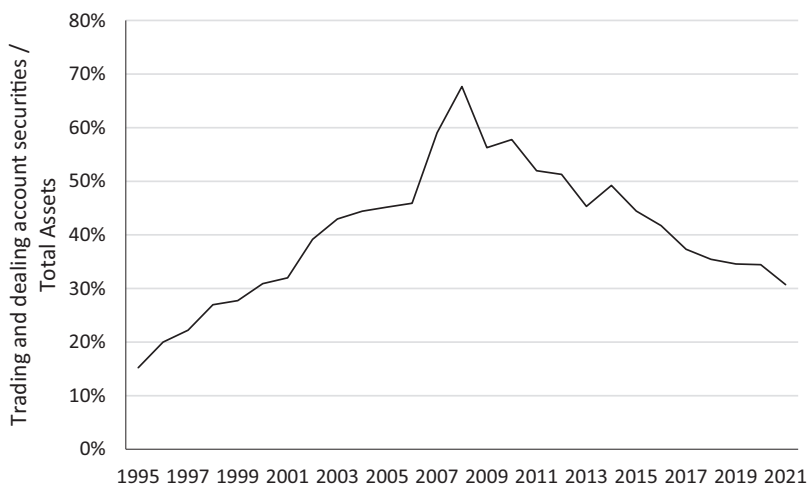


Figure 2 Deutsche Bank trading and dealing account securities as share of total assets.

Source: Compustat Global, author's own calculations.

so unexpectedly low that, as I will show below, Deutsche's own bankers were ready to abandon US advance.

3.2 EF

How do we account for this transformation in banking? The value of EF is that, to frame the process of internationalization, it foregrounds four key features arising from USD

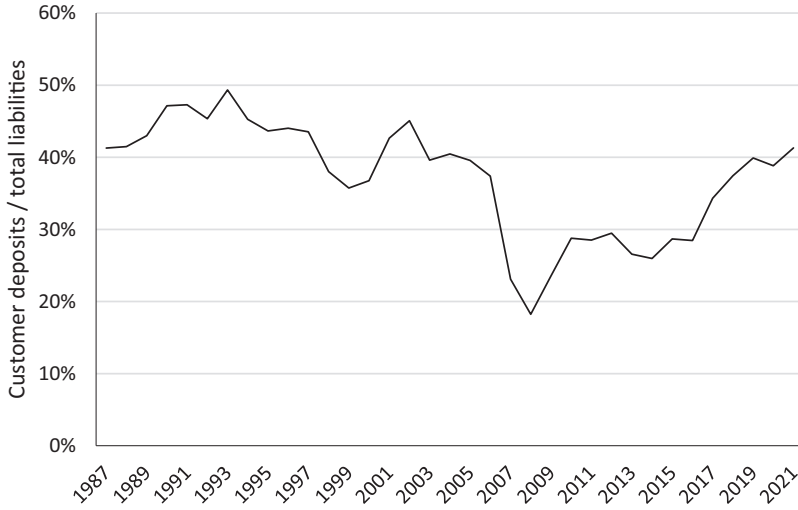


Figure 3 Deutsche Bank: customer deposits as share of total liabilities.

Source: Compustat Global, author's own calculations.

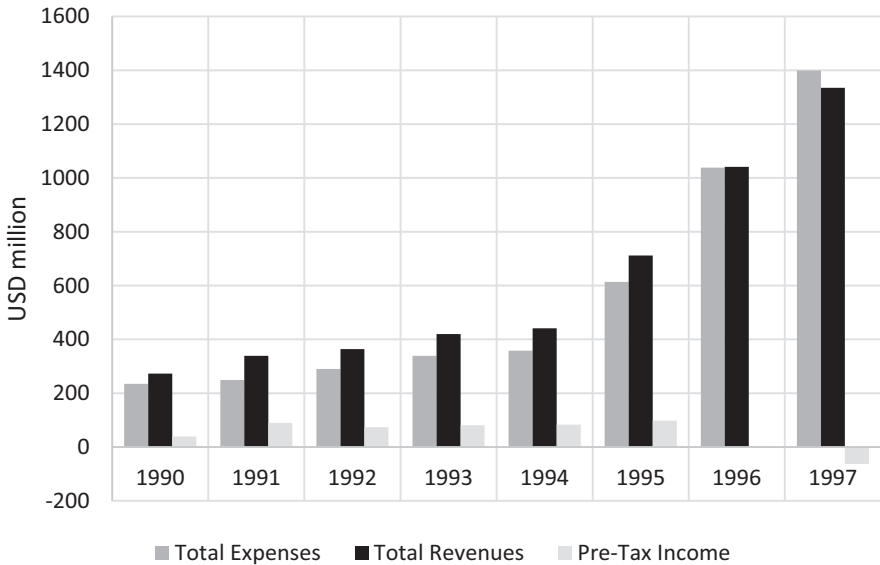


Figure 4 Deutsche Bank North America financial performance.

Source: Schenk (2020, p. 520).

wholesale markets (Beck, 2021). These imperatives and constraints help to explain why this process took on US characteristics rather than other forms, and why Deutsche Bank abandoned its powerful position for the uncertainties of new financial relations:

- (1) The centrality of LM for processes of financialization. LM is a funding practice developed in US money markets from the 1960s onwards. LM became a defining feature of financialization because it allowed actors to finance themselves much more dynamically by buying and selling short-term securities in US money markets (Dutta, 2020), providing a means for financial actors to fund the growing pace and volume of financial transactions (Beck and Knafo, 2020; Knafo, 2022). In contrast to deposits which accumulate slowly and steadily, money market papers are short-term and volatile, and can be flexibly bought and sold to meet the growing funding needs of financialization. Historically, LM developed from pragmatic responses to the funding crisis experienced by commercial banks in New York in the 1960s. In the USA, corporations moved away from depositing their cash with banks and instead invested in money market papers where they could earn higher returns. Regulation Q forbade banks from increasing interest rates to retain those deposits. Consequently, banks started to go to the money markets to get funding with the help of Certificates of Deposits (Stigum, 1990, p. 53f; Cerpa Vielma *et al.*, 2019). While initially a problem, this change in funding strategy allowed US banks to storm the Euromarkets in the 1960s and 1970s and exert new competitive pressures onto other banks who lacked similar possibilities to increase capital (Battilossi, 2010).
- (2) The role of USD as the currency at the apex of global monetary architecture (Schwartz, 2019). This hierarchy enables US institutions to provide the liabilities banks need to fund their assets, particularly in times of crisis (Aldasoro *et al.*, 2019). While European banks were key players in channelling Eurodollars through offshore financial systems (McCauley, 2018), the creation of and access to USD is unequal and determined predominantly in the USA, with the Federal Reserve as its key gatekeeper. This creates a hierarchical system in which other monetary jurisdictions such as the Euro area are considered peripheral. Positions within the hierarchy are determined by the ease with which international central banks can access USD in the form of swap lines that they can extend to 'their' domestic banks in times of crisis. This hierarchy extends to non-crisis times because this amounts to an 'implicit liquidity guarantee' (Murau *et al.*, 2021, p. vi) (guaranteed access to USD if needed), highlighting the importance of institutional access to Fed funds.
- (3) The institutional specificity of US money markets. US money markets have become the 'Achilles heel' of financialized economies (Wansleben, 2020). More specifically, they are central to the practices of LM because of their ability to uniquely accommodate the liquidity requirements of LM. From the 1960s onwards, money markets would grow to a large pool of capital because of the wider institutional landscape of US finance. Apart from corporate surplus cash, private households started to invest in money market funds, including via pension funds, rather than depositing it with banks. This is part of a larger socio-economic programme of financialization that saw household spending, investments and debts drawn into the institutional circuits of finance (Montgomerie, 2006, 2009). German money markets by contrast predominantly represented an inter-banking market without a large pool of private household finance. In Germany, money market funds responsible for pooling household cash have only been allowed since 1994. The much smaller German money markets were used for liquidity management, rather than providing a systematic pool of funding.

As a result, US banks had the institutional sources to fuel their practices of LM with sufficient short-term USD. Banks' success within global financial markets was thus largely constrained by their need for USD, requiring them to find new ways to leverage limited USD. Banks' capacity to leverage rests on their ability to build a distinct market position from which they can better manipulate that market (Sgambati, 2019). This is not simply 'speculation' in terms of making a bet on the future price of an asset (Knafo, 2013), it is more about enhancing one's own power to create the capacity to act. During US-led financialization, this type of power is integrally linked to banks' ability to access USD. While large volumes of offshore USD exist, US banks have advantageous access to US money markets. If non-US banks wanted to compete, they had to attempt to root themselves into US money markets and adopt LM practices as the most suitable strategy in that environment.

- (4) The nature of banking that emerged during financialization. Conceptualizing the translation of financial practices into a new managerial context is important because financialized business models are too often portrayed as easily adapted to and profiting from global securities markets. However, while financial securities might seem universally adoptable, they are institutionally and socio-culturally specific (Aalbers *et al.*, 2011; Wainwright, 2015). Adapting to LM and US money markets, non-US banks thus had to translate US financial logics into their own strategies and operations, causing new tensions and contradictions.

3.3 The contours of examining financialized business models

This paper uses an in-depth case study of one powerful bank to examine how firm-level financialization relates to the macro process. To scrutinize what Deutsche Bank was doing, I follow a historicist method that mobilizes balance sheet data and underused historical sources to shed new light on Deutsche's transition towards a US-form of finance.

I reconceptualize this transformation as a process of EF by tracing the impact of the rise of US finance on Deutsche Bank. The managerial history of Deutsche serves here as an 'extreme case' (Seawright and Gerring, 2008), which can provide a more representative picture of financialization as it includes an important example not yet sufficiently recognized in the literature. Historicizing Deutsche's practices troubles common assumptions of financialization as liberalization and provides an alternative account of what is at stake in financialized banking. The case of Deutsche thus elucidates how a major structural transformation in the US translated into global markets and German finance.

Any such knowledge claim has, of course, its own constraints. First, as the notion of an extreme case suggests, despite the large-scale nature of US-led financialization, generalizability of Deutsche's experience across other financial and non-financial firms has limits of course. But I argue that the problems and contradictions of financialization provide valuable new research avenues into the uneven power relations for International Political Economy (IPE). Further in-depth analysis of other large European banks is necessary to assess whether they experienced similar problems with the rise of LM and access to US money markets. In many respects, Deutsche is an 'unusual case' (Seawright and Gerring, 2008, p. 301), as its unique transformation in the 2000s and its historically special role in German political economy attest. The bank was uniquely involved in most large financial scandals of the past decade, which accounts for some of its contemporary problems (Enrich, 2020). However, both public and private German banks have experienced trends of financialization from the

1980s onwards (Hardie and Howarth, 2013; Trampusch *et al.*, 2014), and even the German *Sparkassen* (public savings banks) show signs of ‘market-based banking’ (Schwan, 2021). Deutsche has been analytically categorized with other European mega-banks (Bayoumi, 2017) and has been in direct competition with them (Celarier, 1996). Given Deutsche’s importance in European finance and corporate architecture, my findings might elucidate general competitive pressures the rise of US finance imposed on multinationals outside the USA.

Secondly, the obscurity of banking operations and the lack of reliable data on offshore markets create empirical gaps (Wixforth, 2010). Banks do not broadcast their strategies, even less so their managerial conflicts, and they circumvent regulations so that many practices do not show on public balance sheets or other official accounts.³ To minimize the problem, my critical political economy approach reflexively gathers evidence from heterogenous sources to make knowledge claims (Montgomerie, 2017, p. 131) regarding what might have motivated Deutsche to move into the USA. These include a range of academic scholarship, the bank’s own annual reports and publications, Compustat—Capital IQ,⁴ monetary authorities and specialized journalist accounts. While annual reports and market-level data from central bank authorities provide useful overviews of banking, the use of specialized financial news outlets are valuable resources for tracing problems financial agents faced on global markets and the innovations banks attempted to produce in response.

4. The rise of Deutsche Bank as a process of extroversion

This section shows how Deutsche’s extroverted strategies drove the bank to convert to a US-style business model as it tried to root itself into US money markets. I focus here on how the attempt to improve its capacity to raise USD debt (a change of the banks’ liability side) slowly triggered a paradigmatic shift on its asset side and its entire banking model. The story begins in the 1980s when Deutsche expanded its international network and consolidated its domestic empire. At that time, it followed a dual strategic outlook. In Germany, Deutsche maintained its institutional privileges and continued to exploit financial markets using its ‘traditional’ strategies of patient capital. Most of these strategies were financed by stable domestic deposits and secured by an institutional arrangement that privileged the German universal banks (Vitols, 1998).

Internationally, its position was less certain. Deutsche tried to rival US banks that had started to impose on its European corporate credit business via the Euromarkets (Battilossi and Cassis, 2002; Wixforth, 2010). It was losing its credit business (its assets) and needed to catch up. To offer Eurodollar bonds and loans to corporations, however, the bank needed better USD funding sources. Up until the 1980s, European banks complained that US money markets were inaccessible. While US banks expanded extensively into Europe via Eurodollar markets and took over a considerable amount of European assets, European banks were not allowed to set up subsidiaries in the USA (Abdelal, 2006). Because Deutsche did not have stable and secure USD deposits, it had to innovate to overcome its peripheral position in the US money markets. Despite its extensive corporate network, compared to US banks

3 Borio *et al.* (2017) estimate that USD 10.3 trillion are ‘missing’ from balance sheets simply because of accounting rules that allow FX swaps and forwards to not be recorded.

4 Compustat compiles S&P Global Market Intelligence Data through Wharton Research Data Services.

Deutsche was on the back foot in the Euromarkets and had to adjust its international strategies accordingly.

Deutsche Bank built its global network in three stages, as I demonstrate below. First, it embraced its London base in the 1980s, bought the British investment bank Morgan Grenfell in 1989, and bought US investment bank Bankers Trust in 1999. These decades represent distinct, if overlapping, phases of the bank's extroverted strategies to improve its access to USD and realign its business model to the imperatives of LM. Though unintentionally, each phase would engender a qualitative transformation that ultimately took over much of the bank. This transition made Deutsche a global banking giant, but also manifested the contradictory banking model it struggles with today.

4.1 First stage: building a global funding mechanism

The first stage of extroversion concerns Deutsche's strategies on the Euromarkets. This was the central source of offshore USD for foreign banks. And indeed, Deutsche was a main actor in the Euromarkets from the 1960s onwards (Burk, 1992; Pohl, 1998). Deutsche founded various global entities in the 1980s, including Capital Management International GmbH (CMI) in the USA in 1983 and Deutsche Bank Financial Inc., Dover in 1985. CMI was established as an independent asset and money manager to exploit the growing pool of pension funds and thereby circumvent the SEC ban on foreign banks accessing ERISA funds. Deutsche founded independent offshore subsidiaries in Curacao in 1981 (Büschgen, 1995, p. 854) and the Cayman Islands in 1983 (Oermann, 2013) to gain short-term funding in the commercial paper market and Euromarkets. Deutsche was able to offer some money market financing which was a crucial funding source for corporations and banks alike (Kobrak, 2007).

Yet Deutsche could not acquire a competitive edge by simply expanding its global networks via offshore subsidiaries. This was particularly evident in corporate finance, Deutsche's traditional stronghold. Despite its close relationships with German corporations, the bank found that German corporate subsidiaries in London and New York preferred the service of financial institutions that offered a broader range of US financial products (Pohl, 1998; Kobrak, 2007, p. 318). Because Deutsche's asset manager CMI still used traditional performance measurements and found new mathematical models difficult, it was shunned by investors operating on different metrics (Büschgen, 1995, p. 762), therefore only acquiring a few investors. A recently-hired corporate finance expert observed that the bank 'had its traditional competence as a lender, but for more sophisticated products ... American colleagues turned to American banks' (Schmitz, quoted in Quint, 1992). Deutsche's international strength was traditionally trade financing, but it struggled to adapt to corporate financing imperatives on the money markets.

It was only in the late 1980s that another subsidiary, Deutsche Bank Capital Corporation (DBCC), managed to become attractive to large German companies. While DBCC was leading amongst non-American banks, Deutsche was still far behind US banks Goldman Sachs and Morgan Stanley (Büschgen, 1995, pp. 846, 766). Deutsche's US subsidiaries still could not survive on their own, needing too much expensive US capital from the parent banks, rather than supplying its network with USD. It had to institutionalize itself more fully into US money markets to address its USD needs if it wanted to keep up with big US banks. Indeed, Herrhausen, chairman of Deutsche from 1985 to 1999, asserted

that Deutsche urgently needed to learn the ‘Anglo-Saxon way of money management’ (Kobrak, 2007, p. 307).

4.2 Second stage: London and the Eurodollar markets

In 1989, Deutsche bought the investment bank Morgan Grenfell to form Deutsche Morgan Grenfell (DMG). Morgan Grenfell had had a strong position in London and the Eurodollar markets and had long-standing US links. DMG had a stake in the investment firm CJ Lawrence, and brought in new securities experts and software systems (Kobrak, 2007, p. 329). While Deutsche’s German rivals like Dresdner Bank had to rely on US bank Merrill Lynch to coordinate its USD capital increase, Deutsche could now place its own equity stakes on the New York Stock Exchange (Euroweek, 1995). DMG built up Deutsche’s capacity in derivatives and Deutschmark swaps, enhancing foreign exchange and USD money management. Deutsche initially tried to keep its other lending business separate, centralizing its investment strategies at DMG to move ahead on the Euromarkets. However, it was already fully integrated in 1994 (Montagu-Pollock, 1995). The bank could not resist integrating the technologies for money market funding into the rest of the bank.

Throughout this transformation, the Euromarkets remained a central node of USD funding. Deutsche acquired Eurodollars to finance its US business, and used DMG to manage internal capital flows from its London base. By 2002, one-quarter of assets and revenue came from North America (Kobrak, 2007, p. 14). In order to accommodate these various 1990s acquisitions, large European banks in general restructured themselves so that London headquarters centrally managed the operations of the banks, including the deposits collected by branches within other countries (McGuire, 2004, p. 75f). Collecting USD funding, banks would then pass this on to their non-bank entities in the USA, representing a shift from placing dollars within the inter-banking market in London to placing them with non-banks in the USA. In the early 2000s, Deutsche operated 600 legal entities in the USA, held together under Taunus Corporation (Kobrak, 2007, p. 361). London was an indirect route for Deutsche to raise USD from US money markets, allowing it to compete against US banks.

Because of these acquisitions, Deutsche came under increasing pressure to adopt more US practices to accommodate the growing costs of advancing its own USD funding structures (Vitols, 2009). This meant that Deutsche had to start restructuring its core business: corporate finance, its asset side. Key stepping stones towards financialized banking were the reductions of German banks’ loan portfolios in the 1990s and 2000s. Deutsche’s adjustment to LM resulted in a radical cut of these loans as a proportion of its assets from about 60% in 1993 to 20% in 2003 (Janssen, 2009, p. 108). With the rise of securitization spurred by the rise of LM, banks increasingly started to sell off their loans in order to underwrite more. There were no official figures in 1993 according to *The Economist* (1993), but the market for loans increased exponentially from the mid-1980s.

At Deutsche, this transformation was led by Ronaldo Schmitz, head of North American capital operations. Previously CFO of a global corporation, he understood the bank’s shortcomings in its management of the corporate loan portfolio. Schmitz started to develop Deutsche’s expertise in issuing securities to finance corporations, rather than providing loans, to regain corporate funding from US banks. He also contemplated the acquisition of a major US bank or securities firm to foster this transition. His role models were Bankers Trust and JPMorgan (Quint, 1992). The process of extroversion thus necessitated a change in how Deutsche treated its loans. Deutsche was eager to gain US capital market investment

opportunities not simply as a profit-maximizing strategy, but more specifically as a necessity to accommodate its extroversion strategies.

While DMG bankers initiated fundamental changes within the German lender, the institution in London did not fulfil the promise of managing USD funding in a way that could match Deutsche's increasing costs and keep up with major US banks. This failing initiated the third stage when Deutsche embarked on a more radical transformation to accommodate the implications of LM.

4.3 Third stage: the purchase of bankers trust and banking in US money markets

The acquisition of Bankers Trust in 1998 marked the beginning of a period often regarded as Deutsche's successful ascendancy as a US investment bank. Deutsche bought Bankers Trust in 1997 for USD 9.7 billion. It was the largest foreign takeover of a US bank at the time. The merger made Deutsche the world's biggest bank in assets, surpassing Citibank and UBS A.G. (Andrews, 1998). Deutsche became a mega-bank of DM 1.3 trillion. Investment banking leapt in importance, going from 28% to 56% of Deutsche's operating income before tax (Celarier, 1996). Bankers Trust scored highly in Deutsche's screening of potential candidates for a US acquisition (see Wieandt and Moral y Santiago, 2006, p. 87) because it provided operational capacities such as new IT technologies, risk management and high-speed trading. Bankers Trust pioneered many LM practices and was thus experienced in transforming retail banking operations with the help of LM (Sanford, 1996). This acquisition allowed Deutsche to leverage extraordinary sums for a brief period in the 2000s, but it should also be seen as part of a longer transformation that connected Deutsche to USD wholesale funding.

Another major transformation then was the sale of Deutsche's large equity holdings, the dissolution of Germany Inc. This is commonly associated with the abolishment of the capital gains tax (which stood at 50%) by SPD finance minister Hans Eichel in 2000 (effective in 2002), which allowed corporations to sell holdings easily without paying large taxes (Lütz, 2005, p. 147). Deutsche's share of ownership in publicly-traded companies decreased from 12% in 1998 to 9% in 2003 (Vitols, 2005, p. 391). However, even with Eichel's gift to the banks, it was not an obvious time to sell because in 2002, when the tax was abandoned, share prices were generally low after the Dot Com crash (Vitols, 2001). The abolishment of the tax represented a final straw in a longer-term process (Lane, 2003, p. 92; Höpner and Krempe, 2004), which becomes clear when we look to the imperatives of the US money market funding.

Equally important is that the sale responded to growing liquidity requirements of LM practices, which necessitated a fundamental transformation. The pressures of USD wholesale markets would make long-term holdings of low-yielding securities unbearable for the bank (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 had to bolster its balance sheet with the sale of its holdings (Ibid, 2009, p. 219), but also needed money to pay expensive traders and for US acquisitions. With the acquisition of Bankers Trust, Deutsche embarked on a fundamental transition to sustain itself in global financial markets. In the words of Rolf Breuer (quoted in *Euromoney*, 1999), Deutsche's chairman at the time, 'Bankers Trust is more than just an acquisition. I think it forces us more than ever to reinvent the bank ... After Bankers Trust, Deutsche

Bank cannot and will not be the same.’ Deutsche thus left its position at the centre of the German economy. For many, this is a key indicator for its loss of power. However, this story underestimates how far Deutsche’s new pursuit of power concerned LM or, more commonly phrased, money market funding of capital market lending.

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 of the riskiest type (Tooze, 2018, p. 74). It rose up to the ranks of the big broker-dealers, ‘the haves’ that benefitted from financial developments in the 1990s and 2000s (Martli, 2019, p. 103). Building its own high-frequency trading systems, Deutsche did not lose by discarding monopolies in corporate stock. Instead, by building ‘dark pools’, Deutsche profitably traded stocks and other assets behind closed doors.

In the 2000s, Deutsche bought many US financial institutions that provided important assets to sustain the high costs of its global funding structure and indeed to leverage to the extreme.⁵ These marked a new form of asset management, as it was selling off its long-term loans and shareholding. Thus Deutsche became number one in combined real estate property and real estate equity securities, first in the USA in high-yield securities and second in asset-backed securities (Wieandt and Moral y Santiago, 2006, pp. 89–94), and best derivatives bank of the year in 2004 (Tett, 2012, p. 109).

Deutsche’s new securities firms not only provided the income needed to pay for expensive dollars, but they also provided the collateral to exploit USD repo markets—another means to access USD funding. Here, Deutsche used DMG in London to access dollars in a round-about way. In the 2000s, it was easier to leverage via repo finance in London than in the USA, where repeated repo collateralization with the same collateral was restricted to 140% of the collateral value. In the UK, banks could use the same collateral over and over. The volume of repo collateralization reached up to 400% of the underlying collateral (Tooze, 2018, p. 82), demonstrating the large volumes of USD liquidity management in Europe. The most aggressive European banks had a leverage ratio of 40:1, whereas in the USA it was only 20:1 (Bayoumi, 2017; Tooze, 2018, p. 90). Repo developed into an important short-term LM resource to fund Deutsche’s US strategies. Deutsche engaged in repo borrowing very quickly with the help of securities sourced in the USA. Bankers Trust’s assets cemented the exponential increase of the bank’s USD round-tripping in the 2000s.

In sum, its international strategies integrated Deutsche further and further into USD funding networks. Having started to operate on Eurodollar markets, Deutsche Bank was driven to tap into US money markets. Integrating the practices of LM through the acquisitions of DMG and Bankers Trust ultimately culminated in a large-scale transformation of the whole bank to address its USD liquidity needs. The new asset-based strategies demanded by financialized banking meant that previously successful strategies no longer worked.

5 For example, 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, dubbed the ‘deal of the year’, made Deutsche the fourth largest asset management player. In 2002, Deutsche also bought RoPro US holding for real estate. RREEF, a leading real investment manager in the USA, made Deutsche the world’s largest real estate investment manager in 2002. In 2004, it acquired Berkshire Mortgage Finance, despite being a market leader already in commercial real estate (including trading, structuring, originating, securitizing) in order to engineer higher yielding assets for its balance sheet management (Wieandt and Moral y Santiago, 2006, pp. 89–94).

Deutsche was driven to reduce its loan portfolio and give up its power position at the heart of Germany Inc. While the transformation towards LM empowered the bank to compete with US banks, the next section shows that adopting the technologies of US finance created complications for Deutsche that have been increasingly difficult to manage.

5. The contradictions of financialized banking: the fall of Deutsche Bank

This section delves into the managerial challenges of integrating LM fully into Deutsche's operational systems and how this process generated opposing financial logics within the bank. I highlight here how the commitment to LM generated new tensions as Deutsche became torn between two opposing approaches to banking, within neither of which it has so far been able to regain its previous leading position. I thus argue that its fall is closely connected to the contradictions that were created by its attempts to catch up to US banks.

Deutsche is of course still a powerful bank that is influential in lobbying for finance's sake and produces financial scandals that have global adverse repercussions. The media covers the scandals and problems of the bank including its recent job cuts (up to 18,000), pre-tax net losses in several years post-GFC as it had to pay fines for money laundering, and LIBOR manipulation and misconduct regarding subprime mortgages (Storbeck *et al.*, 2019b; Enrich, 2020; Jenkins, 2021). Alongside the low-interest environment and a stagnating economy in Europe, these scandals and fines have cut into earnings. However, rather than focusing on its semi-legal activities or Europe's financial environment, I address the tensions at the heart of financialized business models that are strongly connected to USD funding.

A key problem in building operational systems to do money market funding was that the board in Frankfurt did not understand LM, according to Detlev Staecker (interviewed by Kobrak, 2007, p. 320) who was sent to head the New York branch in the early 1990s. Executives in Frankfurt tracked developments from afar but did not fully grasp what was happening in New York as late as the mid-1990s. This confusion was deeply resented by Deutsche's US bankers. According to them, German bankers were rather 'stupid' (Lewis, 2011).

Deutsche's board initially tried to contain the US side of operations, despite the increasing importance of the latter, putting heavy restrictions on the deal-making capacities of its foreign subsidiaries (Lee, 1998). But traders in New York needed to make quick decisions to keep up with the pace of US money markets. Deutsche had to restructure treasury operations in Frankfurt to improve communication between continents. The New York branch was further limited to credit lines of USD 2 million (Kobrak, 2007, p. 118), a tiny amount for New York, where rival bankers (quoted in Stigum, 1990, p. 303) could take out as much as USD 100 million cash at once, in order to hedge interest rate risks through Eurodollar futures. Deutsche could not play the game of (mis-)matching books to such an extent.

Running speculative, un-matched books is at the heart of financialized banking (Sgambati, 2019). Only after giving way to a more transformative change was Deutsche able to construct novel ways of controlling its new financial environment. 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 to manage the volatility of money markets (Sanford,

1996; Guill, 2016). One such statistical tool to manage money market funding was RAROC (risk-adjusted return on capital), pioneered by Sanford of Bankers Trust in the 1970s and adopted by Deutsche Bank in the 1990s. It was a statistical tool to price and measure the performance of traditional loans by considering 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, scarce capital and to measure the cost of capital across the institution. It was only when RAROC centralized this control that banks started monitoring correlations of lending exposures because they needed to be able to manage corresponding short-term funding. RAROC thereby highlighted that it made sense for the bank to quickly sell on loans that absorbed too much capital.

Today, it is normal to estimate a risk-adjusted return on capital of single loans and the entire loan portfolio. So why did Deutsche not do this earlier? The managerial and technological innovation of RAROC implied a change in previous power structures and some bankers resisted change. As Krumnow, risk manager from Deutsche, explains in an interview with *The Economist* (1993, p. 25), it took a couple of years until the board was convinced that there should be an overall risk assessment in 1988. At first, members of the board were dubious of central oversight that cut into their capacity to make independent decisions—after all, they were eminent Deutsche bankers, previously unchallenged at the top of the German economy, or so it seemed. Banks were organized into regional centres and managers would concern themselves with the risk of their specific areas. This was their expertise and they wanted to keep that control. Compared to issuing loans, holding them in banks' books and earning interest for keeping them, RAROC was a radically new way of practicing banking. German bankers quit or lost their jobs over this development (Nolmans, 2006; cf. Deeg, 2005).

Kopper explains the transformative impact at Deutsche in a Euromoney interview (Fallon, 1994, p. 34) when they tried to integrate primary and secondary dealings in the early 1990s:

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. [...] We push the two together and we now have a structure that I think is state of the art [...] There were big fights at the top over this: turf battles, someone saying: "These are my people, your people are not supposed to yell at mine."

The resistance of Deutsche's bankers is perhaps not too surprising, given the incompatibility of LM with Deutsche's institutional context. Given the expenses of building US money market connections, coupled with having to take their quick pace and costs of capital into account, long-term loans and low-yielding shareholdings became difficult to sustain. In the aftermath of the Bankers Trust acquisition, for example, Deutsche kept staff from Bankers Trust but fired German bankers who did not support the changes (Salama *et al.*, 2003, p. 316). The difficulty of this transition is further reflected in Deutsche's high cost-to-income ratio in the 1990s. Breuer, chairmen from 1997 to 2002, lamented the cost to income ratio of 76%, which, despite attempts to bring it down, rose to 86% in 2002 (Janssen, 2009, p. 86; compare Figure 4). While the 1990s low interest environment and high level of non-performing corporate loans was a problem for German banks, its low profitability was foremost related to building expensive global structures for investment banking (Vitols, 2009). Bankers complained that the North American endeavours had to be subsidized by the rest of the bank (Schenk, 2020, p. 520).

Adopting these US practices, German banks were accused of having lost their way (cf. Höpner and Jackson, 2006). Nonetheless, these changes were introduced *despite* internal resistance and public outcry. The adjustments were needed to build and manage US money market activities. Therefore, the loss of previous lending practices—and power—resulted from attempts to participate in financialization processes. However, adopting the practices of LM created new tensions at the heart of financialized business models.

Since the GFC, it became apparent that USD funding represented a challenging bottleneck for global finance and Deutsche has been trying to reduce its exposure to US money markets. The breakdown of the USD repo market⁶ during the GFC cut off the key USD funding chain connecting European banks to US money markets (Gabor, 2016). While the transatlantic repo trade grew tremendously in the run-up to the crisis, the repo market since then has not recovered (Wansleben, 2020), providing a vital shock to the US strategy of Deutsche. Furthermore, before the GFC, foreign affiliates and particularly US subsidiaries would supply Deutsche with USD. By the time of the Lehmann Brothers collapse, foreign subsidiaries of German banks borrowed EUR 50 billion, or 10% of their total assets, from their parent banks (Düwel, 2013, p. 9). An analysis by JPMorgan Chase estimated that Deutsche was losing 25 cents for every dollar of its US business (Storbeck *et al.*, 2019b). German banks in general seem to be retreating from their USD claims (Aldasoro *et al.*, 2017; IMF, 2018, p. 44).

Deutsche has not been particularly successful in LM over the past 10 years. At the AGM in 2019, shareholders went as far as demanding a retreat from the USA (Storbeck *et al.*, 2019b). However, Deutsche is dependent on US investment activities in terms of both liabilities and assets. Its US investment banking activities accounted for EUR 3.2 billion of pre-tax profits, while the group total was EUR 1 billion after subtracting losses. Recent improvements on profits and stock price have prompted financial commentators to proclaim a more positive outlook, but this performance partially reflects recovering capital markets during the COVID-19 pandemic and is meagre at best when compared to US rival JPMorgan (Jenkins, 2021). In turn, US banks have been dominating European investment banking since the GFC (Goodhart and Schoenmaker, 2016), confirming that the extroverted strategies of European banks have manoeuvred them into weak positions as financialized banking practices structurally favour US banks (Beck, 2021).

To make up for this gap, Deutsche and other German banks have been refocusing their efforts on retail finance in Germany (Hardie and Howarth, 2013). The problem here is that Deutsche lost its powerful position within the German political economy as its previous customers looked elsewhere for corporate finance (Braun and Deeg, 2019). The attempted merger with Commerzbank in 2019 to consolidate—or possibly rescue—Deutsche's position within German and global finance failed (Morris *et al.*, 2019). Moreover, retail finance is very competitive as many smaller and regional public banks and cooperatives occupy most of the retail finance sector, leaving limited room for big commercial banks (Mertens, 2017). As a result, the commitments to LM have produced a contradictory business model that Deutsche has not been able to overcome. The bank partly deconstructed its original banking model but cannot overcome the problems and constraints created by extroverted strategies that made its funding dependent on US wholesale markets.

6 Repo is short for repurchase agreement, a short-term, collateral—backed overnight loan. See Gorton and Metrick (2012) for a detailed analysis of the centrality of the 'run on repo' for the GFC.

6. Conclusion

Hilmar Kopper, chairman of Deutsche from 1989 to 1997, was adamant that Deutsche would never fully emulate a US bank such as Bankers Trust. He claimed that such an approach would not suit the German lender (Fallon, 1994). Yet, as we have seen, a few years later, Deutsche could not help but try to integrate the US institution.

I have argued that this transformation towards a US style of finance resulted from extroverted strategies shaped by the rise of LM. To compete with US banks on the Eurodollar markets, Deutsche had to find new ways to raise USD, which brought the bank to USA money markets—the deepest and most liquid source of USD—and, eventually, to adopting LM itself. The rising contradictions of integrating LM into its traditional business model, however, ultimately caught up with the rest of the bank, and led to further managerial complications of having to sustain USD funding. Deutsche's extroverted strategies are therefore a significant reason for why Deutsche abandoned its powerful position at the head of Germany Inc., and go a long way to accounting for its extraordinary rise and fall.

How could this inform the analytical categories we use to understand the power of banking giants? The history presented here suggests that the power of banks consists in their capacity to anchor themselves in USD institutions, and leverage USD resources. This has fundamental implications for the uneven power relations of financialization. The translation of LM into German finance highlights the peripheral power position of Deutsche Bank, and, consequently, the rising structural power of the USA in global financial markets. Indeed, apart from a brief period, Deutsche has failed to catch up to US banks. Instead, it has revealed contradictions at the heart of financialization because the practices of LM proved difficult to adopt and sustain from its outside position. The concept of EF can thus foreground the institutions and constraints of global financial architecture, and, therefore, its uneven power struggles.

What is at stake politically in shifting the analytical framing of the transformation of banking towards EF? Banks are often seen as crisis managers, absorbing the risk of industrial development. During the current Coronavirus crisis, political and financial establishments have applauded European banks as living up to their role as financial buffer, and aim to support the banks with an abundance of liquidity, asset purchases or changes in capital and collateral requirements (e.g. ECB, 2020). However, the guardian role commonly attributed to commercial banks is weak. Despite an abundance of cheap credit during quantitative easing, it is questionable that banks absorb non-performing loans or support the so-called real economy (Ivanova, 2018). Importantly, their role in financial markets is fundamentally dependent on their ability to roll over USD debt, and thus on the Fed to provide USD—as became apparent in March 2020 (Greeley *et al.*, 2020). To a significant extent, financialized business models are oriented towards managing short-term US money market funding, rather than supporting any socio-economic recovery plans. If we want banks to alleviate, rather than create, the relentless crises of global finance, we must address the dependence on US money markets which require banks to adopt LM. This would require a more fundamental overhaul of banking and the centrality of USD funding structures. The silver lining here is that if USD wholesale markets have not simply been 'freed' by financial liberalization but built by specific financial practices, they could be transformed. In other words, they can be undone.

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References

- Aalbers, M. B., Engelen, E. and Glasmacher, A. (2011) ‘“Cognitive Closure” in The Netherlands: Mortgage Securitization in a Hybrid European Political Economy’, *Environment and Planning A: Economy and Space*, **43**, 1779–1795.
- Abdelal, R. (2006) ‘Writing the Rules of Global Finance: France, Europe, and Capital Liberalization’, *Review of International Political Economy*, **13**, 1–27.
- Aldasoro, I., Ehlers, T. and Eren, E. (2019) ‘Global Banks, Dollar Funding, and Regulation’, *SSRN Electronic Journal*. <http://dx.doi.org/10.2139/ssrn.3368973>.
- Aldasoro, I., Ehlers, T., Ere, E. and McCauley, R.N. (2017) ‘Non-US Banks’ Global Dollar Funding Grows despite US Money Market Reform’, *BIS Quarterly Review*, **March**, 22–23.
- Andrews, E. L. (1998, December 1) ‘Bank Giant: Deutsche Gets Bankers Trust for \$10 Billion’, *The New York Times*.
- Baccaro, L. and Pontusson, J. (2016) ‘Rethinking Comparative Political Economy the Growth Model Perspective’, *Politics & Society*, **44**, 175–207.
- Battilossi, S. (2010) ‘The Eurodollar Revolution in Financial Technology: Deregulation, Innovation and Structural Change in Western Banking’, In Kyrtis, A.-A. (ed) *Financial Markets and Organizational Technologies*, London, Palgrave Macmillan, pp. 29–63.
- Battilossi, S. and Cassis, Y. (eds) (2002) *European Banks and the American Challenge: Competition and Cooperation in International Banking Under Bretton Woods*, Oxford, New York, Oxford University Press.
- Bayoumi, T. (2017) *Unfinished Business: Origins and Implications of the North Atlantic Financial Crisis*, New Haven, London, Yale University Press.
- Beck, M. (2021) ‘Extroverted Financialization: How US Finance Shapes European Banking’, *Review of International Political Economy*, 1–23.
- Beck, M. and Knafo, S. (2020) ‘Financialisation and the Uses of History’. In Mertens, D., Mader, P. and van der Zwan, N. (eds) *Handbook of Financialisation*, Routledge, Taylor & Francis Group, pp. 136–146.
- Beyer, J. (2003) ‘Deutschland AG a.D.: Deutsche Bank, Allianz Und Das Verflechtungszentrum Des Deutschen Kapitalismus’, In Streeck, W. (ed) *Alle Macht Dem Markt?: Fallstudien Zur Abwicklung Der Deutschland AG*, Frankfurt, Campus Verlag, pp. 118–146.
- Borio, C. E. V., McCauley, R. N. and McGuire, P. (2017) ‘FX Swaps and Forwards: Missing Global Debt?’, *BIS Quarterly Review*, **September**, 37–54.
- Braun, B. and Deeg, R. (2020) ‘Strong Firms, Weak Banks: The Financial Consequences of Germany’s Export-Led Growth Model’, *German Politics*, **29**, 358–381.
- Braun, B., Krampf, A. and Murau, S. (2021) ‘Financial Globalization as Positive Integration: Monetary Technocrats and the Eurodollar Market in the 1970s’, *Review of International Political Economy*, **28**, 794–819.

- Burk, K. (1992) 'Witness Seminar on the Origins and Early Development of the Eurobond Market', *Contemporary European History*, 1, 65–87.
- Büschgen, H. E. (1995) 'Die Deutsche Bank von 1957 bis zur Gegenwart: Aufstieg zum internationalen Finanzdienstleistungskonzern', In Gall, L., Feldmann, G., James, H., Holtfrerich, C.-L. and Büschgen, H.E. (eds) *Die Deutsche Bank, 1870-1995*, München, C.H.Beck, pp. 579–877.
- Celazier, M. (1996) 'Battle of the Bulge', *Euromoney*, 331, 38–42.
- Cerpa Vielma, N. et al. (2019) 'Too Big to Manage: US Megabanks' Competition by Innovation and the Microfoundations of Financialization', *Cambridge Journal of Economics*, 43, 1103–1121.
- Deeg, R. (1999) *Finance Capitalism Unveiled: Banks and the German Political Economy*, Michigan, University of Michigan Press.
- Deeg, R. (2005) 'Change from Within: German and Italian Finance in the 1990s', In Streeck, W. and Thelen, K. (eds) *Beyond Continuity: Institutional Change in Advanced Political Economies*, Oxford, Oxford University Press, pp. 169–202.
- Deeg, R. (2009) 'The Rise of Internal Capitalist Diversity? Changing Patterns of Finance and Corporate Governance in Europe', *Economy and Society*, 38, 552–579.
- Deeg, R. (2010) 'Industry and Finance in Germany since Unification', *German Politics and Society*, 28, 116–129.
- Deeg, R. (2012) 'Financialisation and Models of Capitalism: A Comparison of the UK and Germany', In Wood, G. and Lane, C. (eds) *Capitalist Diversity and Diversity Within Capitalism*, London, Routledge, pp. 121–149.
- Deeg, R. and Hardie, I. (2016) 'What Is Patient Capital and Who Supplies It?', *Socio-Economic Review*, 14, 627–645.
- Dutta, S. J. (2020) 'Sovereign Debt Management and the Transformation from Keynesian to Neoliberal Monetary Governance in Britain', *New Political Economy*, 25, 675–616.
- Düwel, C. (2013) *Repo Funding and Internal Capital Markets in the Financial Crisis*, SSRN Scholarly Paper, Rochester, NY, Social Science Research Network.
- ECB (2020) 'ECB Announces Package of Temporary Collateral Easing Measures'. Press release 07 April, accessed at: <https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.pr200407-2472a8ccda.en.html>. on July 18, 2020.
- Engelen, E. and Glasmacher, A. (2018) 'The Waiting Game: How Securitization Became the Solution for the Growth Problem of the Eurozone', *Competition & Change*, 22, 165–183.
- Enrich, D. (2020) *Dark Towers: Deutsche Bank, Donald Trump, and an Epic Trail of Destruction*, New York, NY, Custom House.
- Euromoney (1999, September) 'Deutsche Bank - Exclusive Interview: Rolf Breuer on Bankers Trust', *Euromoney*, London.
- Euroweek (1995) 'Commerzbank Joins Growing German Line-up of International Equity Issuers', *Euroweek*, 5, London.
- Fallon, P. (1994, January) 'The Battle Plans of Hilmar Kopper', *Euromoney*, London, 297.
- Fohlin, C. (2007a) 'Does Civil Law Tradition and Universal Banking Crowd out Securities Markets? Pre-World War I Germany as Counter-Example', *Enterprise and Society*, 8, 602–641.
- Fohlin, C. (2007b) *Finance Capitalism and Germany's Rise to Industrial Power*, Cambridge, Cambridge University Press.
- Gabor, D. (2016) 'The (Impossible) Repo Trinity: The Political Economy of Repo Markets', *Review of International Political Economy*, 23, 967–1000.
- Gall, L., Feldmann, G. D., James, H., Holtfrerich, C.-L. and Büschgen (eds) (1995) *Die Deutsche Bank, 1870-1995*, München, C.H.Beck.
- Goodhart, C. and Schoenmaker, D. (2016) 'The Global Investment Banks Are Now All Becoming American: Does That Matter for Europeans?', *Journal of Financial Regulation*, 2, 163–181.

- Gorton, G. and Metrick, A. (2012) 'Securitized Banking and the Run on Repo', *Journal of Financial Economics*, 104, 425–451.
- Greeley, B., Smith, C. and Politi, J. (2020, March 31) 'Fed Sets up Scheme to Meet Booming Foreign Demand for Dollars', *Financial Times*.
- Guill, G. D. (2016) 'Bankers Trust and the Birth of Modern Risk Management', *Journal of Applied Corporate Finance*, 28, 19–29.
- Hardie, I. and Howarth, D. (2009) 'Die Krise but Not La Crise? The Financial Crisis and the Transformation of German and French Banking Systems', *JCMS: Journal of Common Market Studies*, 47, 1017–1039.
- Hardie, I. and Howarth, D. (2013) 'A Peculiar Kind of Devastation: German Market Based Banking'. In Hardie, I. and Howarth, D. (eds) *Market-Based Banking and the International Financial Crisis*, Oxford, OUP Oxford, pp. 104–125.
- Hardie, I. et al. (2013) 'Banks and the False Dichotomy in the Comparative Political Economy of Finance', *World Politics*, 65, 691–728.
- Hardie, I. and Macartney, H. (2016) 'EU Ring-Fencing and the Defence of Too-Big-to-Fail Banks', *West European Politics*, 39, 503–525.
- Höpner, M. and Jackson, G. (2006) 'Revisiting the Mannesmann Takeover: How Markets for Corporate Control Emerge', *European Management Review*, 3, 142–155.
- Höpner, M. and Krempel, L. (2004) 'The Politics of the German Company Network', *Competition & Change*, 8, 339–356.
- IMF (2018) *Global Financial Stability Report*, Washington, DC, International Monetary Fund.
- Ivanova, M. N. (2018) 'Quantitative Easing: A Postmortem', *International Journal of Political Economy*, 47, 253–280.
- Janssen, S. (2009) *British and German Banking Strategies*, Basingstoke, Palgrave Macmillan.
- Jenkins, P. (2021, April 13) 'Deutsche Bank Dodges Bullets and Goes Mainstream', *Financial Times*.
- Knafo, S. (2013) 'Financial Crises and the Political Economy of Speculative Bubbles', *Critical Sociology*, 39, 851–867.
- Knafo, S. (2022) 'The Power of Finance in the Age of Market Based Banking', *New Political Economy*, 27, 33–46.
- Kobrak, C. (2007) *Banking on Global Markets: Deutsche Bank and the United States, 1870 to the Present*, Cambridge; New York, Cambridge University Press.
- Konings, M. (2008) 'European Finance in the American Mirror: Financial Change and the Reconfiguration of Competitiveness', *Contemporary Politics*, 14, 253–275.
- Krahnen, J. P. and Schmidt, R. H. (eds) (2004) *The German Financial System*, Oxford; New York, Oxford University Press.
- Lane, C. (2003) 'Changes in Corporate Governance of German Corporations: Convergence to the Anglo-American Model?', *Competition & Change*, 7, 79–100.
- Lazonick, W. and O'sullivan, M. (1997) 'Finance and Industrial Development: Evolution to Market Control. Part II: Japan and Germany', *Financial History Review*, 4, 117–138.
- Lee, P. (1998, July) 'Deutsche Dumps Its Investment Bankers', *Euromoney*, London.
- Lewis, M. (2011) 'It's the Economy, Dummkopf!', *Vanity Fair*, 53, September, 304–318.
- Lütz, S. (2000) 'From Managed to Market Capitalism? German Finance in Transition', *German Politics*, 9, 149–170.
- Lütz, S. (2005) 'The Finance Sector in Transition: A Motor for Economic Reform?', *German Politics*, 14, 140–156.
- Mattli, W. (2019) *Darkness by Design: The Hidden Power in Global Capital Markets*, Princeton, NJ, Princeton University Press.
- McCauley, R. (2018) 'The 2008 Crisis: Transpacific or Transatlantic?', *BIS Quarterly Review*, December, 39–58.

- McGuire, P. (2004) 'A Shift in London's Eurodollar Market', *BIS Quarterly Review*, September, 64–78.
- Mehrling, P. (2010) *The New Lombard Street: How the Fed Became the Dealer of Last Resort*, Princeton, NJ, Princeton University Press.
- Mertens, D. (2017) 'Putting "Merchants of Debt" in Their Place: The Political Economy of Retail Banking and Credit-Based Financialisation in Germany', *New Political Economy*, 22, 12–30.
- Montagu-Pollock, M. (1995, December) 'Inside Deutsche Morgan Grenfell', *Asiamoney*, 10.
- Montgomerie, J. (2006) 'The Financialization of the American Credit Card Industry', *Competition & Change*, 10, 301–319.
- Montgomerie, J. (2009) 'The Pursuit of (Past) Happiness? Middle-Class Indebtedness and American Financialisation', *New Political Economy*, 14, 1–24.
- Montgomerie, J. (ed) (2017) *Critical Methods in Political and Cultural Economy*, Abingdon, Oxon; New York, NY, Routledge.
- Morris, S., Crow, D. and Storbeck, O. (2019, March 4) 'Deutsche and Commerzbank: Why Berlin Is Backing a Merger', *Financial Times*.
- Murau, S., Pape, F. and Pforr, T. (2021) '*The Hierarchy of the Offshore US-Dollar System*', *On Swap Lines, the FIMA Repo Facility and Special Drawing Rights*, GEGI Study, Rochester, NY, Global Economic Governance Initiative.
- Nolmans, E. (2006) *Josef Ackermann Und Die Deutsche Bank: Anatomie Eines Aufstiegs*, Zürich, Bilanz, Orell Füssli.
- Nützenadel, A. (2020) 'Globalisation and Crisis, 1989-2020'. In Plumpe, W., Nützenadel, A. and Schenk, C. R. (eds) *Deutsche Bank: The Global Hausbank, 1870-2020*, London, Bloomsbury Publishing, pp. 211–459.
- Oermann, N. O. (2013) *Tod Eines Investmentbankers: Eine Sittengeschichte Der Finanzbranche*, Freiburg; Basel; Wien, Verlag Herder.
- Pohl, M. (1998) 'Deutsche Bank in London 1873-1998'. In Pohl, M. and Burk, K. (eds) *Die Deutsche Bank in London: 1873-1998*, München; Zürich, Piper, pp. 11–112.
- Quint, M. (1992, May 6) 'Deutsche Bank Pursues Diversity for Its U.S. Unit', *New York Times*.
- Röper, N. (2018) 'German Finance Capitalism: The Paradigm Shift Underlying Financial Diversification', *New Political Economy*, 23, 366–390.
- Salama, A., Holland, W. and Vinten, G. (2003) 'Challenges and Opportunities in Mergers and Acquisitions: Three International Case Studies – Deutsche Bank-Bankers Trust; British Petroleum-Amoco; Ford-Volvo', *Journal of European Industrial Training*, 27, 313–321.
- Sanford, C. (1996) 'Managing the Transformation of a Corporate Culture: Risks and Rewards' Speech delivered as part of the 1996-97 Musser-Schoemaker Leadership Lecture Series at the Wharton School, University of Pennsylvania. accessed at <https://www.terry.uga.edu/about/history/sanford/managing-transformation> on January 03, 2019.
- Sattler, F. (2010) "'Investmentsparen" – Ein Früher Durchbruch Der Geschäftsbanken zu Breiteren Privatkundenkreisen?'. In Ahrens, R. and Wixforth, H. (eds) *Strukturwandel Und Internationalisierung im Bankwesen Seit Den 1950er Jahren*, Stuttgart, Steiner, pp. 35–70
- Schenk, C. R. (2020) 'Globalisation and Crisis, 1989-2020'. In Plumpe, W., Nützenadel, A. and Schenk, C. R. (eds) *Deutsche Bank: The Global Hausbank, 1870-2020*, London, Bloomsbury Publishing, pp. 461–660.
- Schwan, M. (2021) 'Weathering the Storm? Financialisation and German Savings Banks', *New Political Economy*, 26, 422–438.
- Schwartz, H. M. (2019) 'American Hegemony: Intellectual Property Rights, Dollar Centrality, and Infrastructural Power', *Review of International Political Economy*, 26, 490–519.
- Seawright, J. and Gerring, J. (2008) 'Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options', *Political Research Quarterly*, 61, 294–308.

- Sgambati, S. (2019) 'The Art of Leverage: A Study of Bank Power, Money-Making and Debt Finance', *Review of International Political Economy*, 26, 287–226.
- Stigum, M. L. (1990) *The Money Market*, Homewood, IL, Dow Jones-Irwin.
- Storbeck, O., Crow, D. and Morris, S. (2019a, April 26) 'Germany's Big Banks Are Left Grasping for Answers', *Financial Times*.
- Storbeck, O., Morris, S. and Jenkins, P. (2019b, February 14) 'Top Investors Call on Deutsche to Cut Back US Investment Bank', *Financial Times*.
- Streeck, W. (2009) *Re-Forming Capitalism: Institutional Change in the German Political Economy*, Oxford; New York, Oxford University Press.
- Streeck, W. (2014) *Buying Time: The Delayed Crisis of Democratic Capitalism*, London, New York, Verso Books.
- Tett, G. (2012) 'Fool's Gold: How Unrestrained Greed Corrupted a Dream', *Shattered Global Markets and Unleashed a Catastrophe*, London, Abacus.
- The Economist* (1993, April 10) 'New Tricks to Learn, A Survey of International Banking', *The Economist*.
- Tooze, J. A. (2018) *Crashed: How a Decade of Financial Crises Changed the World*, New York, Viking.
- Trampusch, C., Linden, B. and Schwan, M. (2014) 'Staatskapitalismus in NRW Und Bayern: Der Aufstieg Und Fall Von WestLB Und BayernLB', *Zeitschrift Für Vergleichende Politikwissenschaft*, 8, 129–154.
- Vitols, S. (1998) 'Are German Banks Different?', *Small Business Economics*, 10, 79–91.
- Vitols, S. (2001) 'Frankfurt's Neuer Markt and the IPO Explosion: Is Germany on the Road to Silicon Valley?', *Economy and Society*, 30, 553–564.
- Vitols, S. (2005) 'Changes in Germany's Bank-Based Financial System: Implications for Corporate Governance', *Corporate Governance: An International Review*, 13, 386–396.
- Vitols, S. (2009) 'Die Großbanken Und Die Internationalisierung Des Deutschen Finanzsystems'. In Sorge, A. (ed) *Internationalisierung: Gestaltungschancen Statt Globalisierungsschicksal*, Berlin, Edition Sigma, pp. 135–156.
- Wainwright, T. (2015) 'Circulating Financial Innovation: New Knowledge and Securitization in Europe', *Environment and Planning A: Economy and Space*, 47, 1643–1660.
- Wansleben, L. (2020) 'Formal Institution Building in Financialized Capitalism: The Case of Repo Markets', *Theory and Society*, 49, 187–213.
- Wieandt, A. and Moral y Santiago, R. (2006) 'Banking & Finance'. In Lucks, K. (ed) *Transatlantic Mergers and Acquisitions: Opportunities and Pitfalls in German-American Partnerships*, Hoboken, Germany, Publicis, Wiley, pp. 85–96.
- Wixforth, H. (2010) "'Global Players" im "Europäischen Haus"? Die Expansionsstrategien Deutscher Großbanken Nach 1945'. In Ahrens, R. and Wixforth, H. (eds) *Strukturwandel Und Internationalisierung im Bankwesen Seit Den 1950er Jahren*, Stuttgart, Steiner, pp. 97–120.
- Zysman, J. (1983) *Governments, Markets, and Growth: Financial Systems and Politics of Industrial Change*, Ithaca, NY, Cornell University Press.