

A University of Sussex PhD thesis

Available online via Sussex Research Online:

http://sro.sussex.ac.uk/

This thesis is protected by copyright which belongs to the author.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the Author

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the Author

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given

Please visit Sussex Research Online for more information and further details

UNIVERSITY OF SUSSEX

THE PECULIARITIES OF UNIVERSAL BANKING POLITICS, ECONOMICS AND SOCIAL STRUGGLE IN THE MAKING OF GERMAN FINANCE

Matthieu Hughes

THESIS SUBMITTED FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN INTERNATIONAL RELATIONS

DECLARATION	
I hereby declare that this thesis has not been submitted, either in the sadifferent form, to this or any other university for a degree.	me or

Signature:

ABSTRACT

This dissertation contributes to the global political economy of finance by examining the historical evolution of the German financial system. The origins of Germany's non-market financial structure are consistently identified as path-dependent influences of its system of "patient" rather than "speculative" financial capitalism.

This thesis revisits the historical evolution and crystallization of German corporate banks on universal, as opposed to specialized, financial practices. In stark contrast to the existing literature that relies on efficiency-based explanations, it emphasizes the political nature of bankers' financial practices, and the role of social power in shaping financial structure. Examining universal banking in this way stands its significance upside down by showing its roots in speculative practices and the politics of industrialization rather than patient finance and efficient calculation.

The thesis consists of three parts: Part I delineates the intellectual riddle posed by the received scholarship: "despite obvious connections," between economics and politics, orthodox political economists have been mystified by the role of power in universal banking's development. It therefore outlines an historical sociology of financial development to reassemble this puzzle. Part II charts the developmental path of German banks from the 18th to mid 19th century. This section first stresses how early universal banking—"mixed-banking"—was an unintended product of the *speculative practices* of Rhenish financiers engaged in a political struggle over industrialization. It further demonstrates that the adoption of "mixed-banking" practices by corporate banks must similarly be understood in terms of power rather than as a solution to market failure. Part III charts the historical narrative to 1914 highlighting how the early speculative character of "mixed-banking" engendered a transformation into the concrete form of universal banking following social struggles around the introduction of deposit banking. The thesis underscores the general importance of examining economic institutions from the perspective of power.

ACKNOWLEDGEMENTS

The research and writing of the thesis laid out in the pages below probably took *me* too long to complete. During the extended period of research and writing, this thesis nevertheless became the collective product of countless influences from colleagues, friends and family: above all I thank you all for your patience. Moreover, for your perseverance, innumerable manners of emotional and intellectual support, and general faith that it would, *one day*, be completed (at least, I suppose in a form roughly adequate for submission). I have been as methodical as possible in keeping track of those who have aided along the way, but a proper accounting would undoubtedly require a thesis of its own. Consequently, I apologise to those who I have forgotten to mention, and ask them to trust that I am thankful for their assistance which helped to produce the final product here.

I would like to thank first and foremost Samuel Knafo and Benno Teschke, who have both given countless hours to reading drafts (often at the last minute) and providing insightful commentary and suggestions on every worthwhile piece of writing that I have produced since I began this adventure. They have unselfishly offered their time in reading my work, talking through ideas and engaging carefully with my thinking, prior even to my commencement and registration in the Sussex doctoral program. I had been moving in the direction of pursuing a doctorate prior to studying for a Masters at Sussex. In that vein, Jacqueline Best inspired with her teaching and example at the University of Ottawa during my undergraduate days (and I am thankful for her assistance in my application to Sussex). Tyler Attwood also provided immense reinforcement and inspiration to pursue further study, while I was in my final year at the University of Ottawa. Louiza Odysseos delivered unstinting encouragement and support during the writing of my Master's thesis, and helped further animate me towards pursuing doctoral study. Ultimately, the gracious acceptance of Samuel and Benno to answer questions about their research while I was not even a student at the University, and my sudden, simultaneous and unexpected intellectual entanglement in German and financial history, provided the final decisive impetus and inspiration to apply for the doctoral programme under their supervision at Sussex. I continue to be thankful that they accepted me as a PhD student, and I aspire to live up to their standard of scholarship as well as their inspirational, conscientious and considerate mode of academic instruction (noting that where I've missed the mark, and where I will likely never reach their level of achievement, the responsibility obviously rests with me).

Benno and Samuel further influenced this work by inviting me to their respective research for in the International Relations Department at the University of Sussex. The Political Marxism working group established by Benno served as an excellent space to test out and present many of my ideas. In particular, I was honoured to deliver a paper with an early expression of some of the arguments that appear in Chapter 3. In general all of those associated with the PM group are due mention here, but special thanks goes out to Can Cemgil, Clemens Hoffmann, Andrea Lagna, Maïa Pal, and Steffan Wyn-Jones, who all took time to comment on my ideas (while also allowing me access to their own writing and ideas!), in venues beyond solely the PM Group. The PM research cluster also brought me into contact with innumerable other scholars working at the forefront of historically sensitive Marxist and social science research that has immeasurably enriched my own intellectual development. Apologies to those I haven't mentioned owing to my failing memory. Similarly, the informal reading group organized by Samuel has also served as another venue where discussion and debate helped to forge many of my thoughts about German finance. In that venue, thanks are owed to Sam Appleton, Mareike Beck, Sahil Dutta, Adam Fishwick, Julian Germann, Paul Gilbert, Richard Lane, Lara Montesinos Coleman, Javi Moreno, and Steffan Wyn-Jones. Special thanks are due to the long discussions with Samuel, Rich, Steff and Sahil from an earlier (less organized) period and in often informal venues (e.g. en route to procure fast food or beer) wherein long discussions about the nature of historical social research, agency and method(ology) were pivotal not only for shaping and influencing some of the ideas in this thesis but helped to motivate me to complete it so that they might comment on it. In many ways, these gentlemen are my target audience, and I hope that if it strikes a chord with anyone it is this trio (as well as the examiners).

In 2012 I was happy to join the Max Planck Institute for the Study of Societies (MPIfG) in Cologne as a Visiting Doctoral Scholar. I am thankful to Prof. Dr. Wolfgang Streeck for allowing me a space to work under his research team, as well as for his suggestions about how to improve the argument, and for hints at further reading and research that might help in that vein. I am especially thankful for Prof. Streeck's assistance in putting me in contact with Prof. Dr. Carsten Burhop, who was at that time located at Cologne University's Economic and Social History Department, who allowed

me to pick his brain about many historical details of German joint-stock banking foundations in the mid-1800s. I would also like to thank a great number of people who made my stay at the MPIfG intellectually stimulating and rewarding: Carolyn Biltoft, Arne Dressler, Ruth Hanisch, Susanne Hilbring, Azer Kiliç, Sebastien Kohl, Damien Krichewsky, Jürgen Lautwein, Philip Mader, Daniel Mertens, Inge Rademacher, Martin Seeliger, Alex Spielau, Christian Tribowski, André Vereta Nahroum, and Ines Wagner.

Over the years since I began this work I have had the opportunity to present portions of this thesis in several different venues: firstly, I would like to thank the organizers of the CPERN conference the "The 'Critical' in Critical Political Economy" hosted at Universitat Pompeu Fabra, September 2012 for allowing me to present my extended abstract "The Goliath of Neoclassical Economics: or, what does the orthodoxy do?" as well as the comments that I received from participants there, in particular some very perceptive commentary by Magnus Ryner. That experience has informed the substance presented here in the Introduction, Chapter 3 and Conclusion. I have also been fortunate to have presented elements of chapter 4 and 5 at the International Studies Association Conference in San Francisco 2014, where Anastasia Nesvetailova provided particularly insightful and generous commentary on that material. Finally, I have also had the privilege of presenting an early version of Chapter 3 to the Center for Political Practices and Orders at the University of Erfurt in June 2014, where Prof. Dr. Oliver Kessler, Prof. Dr. André Brodocz and Filipe dos Reis thoroughly examined and interrogated my arguments. The final product has benefitted immensely from their intellectual acumen. Prof. Brodocz and Kessler further supported the final product of this thesis by generously allowing me to take up a teaching post in September 2014, and allowing me extra time to complete the writing. The administrative staff at Erfurt has similarly made my sojourns in Erfurt all the more pleasant by their wonderful assistance, and especially all of their help when I required a leave absence to care for a family member: here I would especially like to thank Sandra Ostermann, Mandy Förster, Alice Ratajczak, and Helga Harden-Birkelbach. I would also like to thank Filipe dos Reis, Arif Ruzgar, Benjamin Wilhelm, Timo Walter and Andrea Lagna (who like me joined Erfurt from Sussex) for good discussions, camaraderie, and great pub nights. Last, but not least, I would like to thank my many students, both at Sussex and Erfurt for their curiosity and probing questions of my teaching which inadvertently or not have sharpened my thinking.

Building on this last thread, I would like to extend a special thanks to Jayne Paulin, and the various staff that have served as Research Coordinator at the University of Sussex over the years. Jayne deserves special mention because she has always made herself available to solve any and every administrative problem that I have encountered, and worked tirelessly to ensure that I had the right conditions to complete the thesis. I am extremely thankful for all of her efforts.

I extend my thanks to Cordelius Ilgman for allowing me to cite his manuscript "The Advent of Corporate Limited Liability in Prussia 1843," published as a working paper at the University of Münster.

Finally, I would like to thank my family for the countless sentiments of support, unstinting assistance and ever-ready possibility for diversion which they have provided. In Canada Maxime, Karine, Gustavo, Danielle, Richard, Gérald, Terry, Lorna, Dave, Carly, Peter, Tim, Patty and Pam were always available, and have made every effort to keep in touch despite long periods apart. Thanks go to my uncle Terry Hughes for discussing his own experience completing his PhD (and his suggestion that "at some point, you just have to hand it in"). Many heartfelt thanks to both Lorna and Terry for the extraordinary efforts and lengths they have gone to in helping me settle my father's estate and allowing me to save money and time commuting back to Canada. This thanks extends similarly to my mother, Louise-Marie Pichette, who also spent countless hours helping clean, organize, arrange and tidy a sadly empty house. I'm not sure how I would have managed without this help. Maman, also deserves praise for always being ready to listen to complex details of 19th century German banking, and especially helping me to bring my arguments succinctly to a point. Oskar, who came along mid-way has provided a constant source of joy, inspiration and ready distraction. Nelly who arrived when the work was nearing completion has already begun to do the same. Henrike, who was there during all of the most formative moments of the work for this thesis has been the most wonderful constant in the turbulent sea of variables that often characterized the process and deserves thanks more than words can express. Finally, I must thank my father, Geoffrey Hughes, who supported me financially, intellectually and emotionally in the long process of completing this work. My Dad relayed a, perhaps apocryphal, story about the renowned economist John Maynard Keynes when I was studying for my baccalaureate at the University of Ottawa. Essentially, my father implied that John Maynard Keynes had been encouraged since he was a small boy to believe that there was no problem he could not solve. Keynes was unquestionably a brilliant mind. My father intoned, however, that it was Keynes' drive, instilled by his belief that he could always find a solution—to even the most difficult problems—that pushed Keynes beyond brilliance, to achievement. More inspired by Marx, I have never investigated this story. However, the perhaps apocryphal anecdote about Keynes always informed my vision of my father, and his dogged pursuit of anything he found academically worthwhile: I aspire to find the vitality in my work that I know was always prevalent in his own restless pursuit of all things intellectual. This thesis, and all that is invested in it, is in that spirit dedicated to my father's memory.

DECLARATION	1
ABSTRACT	2
ACKNOWLEDGEMENTS	3
TABLE OF CONTENTS	8
ABBREVIATIONS	11
PART I	
A PUZZLE OF FINANCIAL ORDER	
INTRODUCTION Recasting German Finance in Global Political Economy Bringing speculation back in The features of German finance Bank-based finance: weak securities markets German universal banking	14 21 23 28
The central argument Outline of the thesis	30 32
CHAPTER 1 Accounting for German Finance Towards a historical sociology of financial systems	37
Economic backwardness in retrospective Richard Tilly: the information asymmetry account Socioeconomic interests or class struggle? Asymmetric information and perfect markets Caroline Fohlin: market-led revisionism Constructing German universal banking The narrative component Conclusion	39 43 44 49 56 58 60 61

PART II

STRUGGLE OVER INDUSTRIALIZATION

CHAPTER 2

Universal Banking avant la lettre, 1750-1844

The early development of "abstract" universal banking

Social change between revolutions The organization of political space Corporate Estates and Classes Participatory, Party and normative political trends The struggle over industrialization Origins of abstract universal banking Frankfurt: pre-eminent financial centre of the German ancien régime Cologne: centre of Rhenish Finance Conclusion	67 68 70 73 74 78 79 82 90
CHAPTER 3 The Significance of early Joint-Stock Banking, 1844-1869 The continuation of politics by other means	92
The fallacy of founding banks for efficiency The first foundation wave of joint-stock banks, 1848-1857 The first joint-stock bank: the Schaaffhausen reorganization, 1848 The Disconto-Gesellschaft: a joint-stock bank by other means Founding the Bank of Darmstadt The Berliner Handelsgesellschaft The evolution of financial practices, 1857-1869 Conclusion	94 100 103 113 123 130 134 138
<u>PART III</u> SPECULATING ON INDUSTRIAL SOCIETY	
CHAPTER 4 From Foundation Boom to Crash, 1869-1873 The construction of a speculative imperative Speculation and the Foundation Boom Détente in the struggle over industrialization New institutions for the liberal era Compelling freedom Practices and organization in German finance, 1869-1873 The pillars of German finance The diversity of corporate banks Conclusion	142 145 148 151 155 161 161 164 170
CHAPTER 5 Betting on Social Change: Speculating on Deposits, 1874-1914 Interest associations, financial regulation, and organized capitalism	174
Foundation crisis and the end of the liberal era, 1874-1879 Organized capitalism and the reaction against liberalism	177 179

Betting on deposits, the Deutsche Bank aims to universalize	180
Continuing struggle over industrialization, 1880-1896	186
New sectors of the industrial economy	187
Agrarian agitation against industrial capitalism	188
The competition over deposits, 1896-1914	190
Conclusion	192
EPILOGUE	
CONCLUSION	
The social core of economic institutions	
And the performative codification of Universal Banking	195
WORKS CITED	201

ABBREVIATIONS

ABCP Asset Back Commercial Paper

ADHGB Allgemeines Deutsches Handelsgesetzbuch

(General Code of German Commercial Law)

ADCA Allgemeine Deutsche Credit Anstalt

(The General German Credit Institute, a 19th century Leipzig Bank)

BdL Bund der Landwirte

(Federation of Farmers, a pressure group)

BHI Die Darmstädter Bank für Handel und Industrie

(The Darmstaedter Bank for Trade and Industry)

CC Comparative Capitalism

CME Coordinated Market Economy

CVBB Centralverband des deutschen Bank- und Bankiergewerbes

(The Central Association of German Banks and Banking Sector)

GFC Global Financial Crisis

GPE Global Political Economy

IKB Industrie Kredit Bank

(a for-profit bank in Düsseldorf serving the German *Mittelstand*)

IPE International Political Economy

IPO Initial Public Offering

LBs Landesbanken

(Literally "country banks:" publically owned central savings banks at

the state level in Germany)

LMEs Liberal Market Economy

NDP Net Domestic Product

NFC Non-financial company

NIE New Institutional Economics

OECD Organization for Economic Cooperation and Development

SME Small and Medium Sized Enterprise

VoC Varieties of Capitalism

PART I

A PUZZLE OF FINANCIAL ORDER

INTRODUCTION

Recasting German Finance in Global Political Economy

Bringing speculation back in

"The biggest crisis for decades has shown that, the universal banking system specially befitting our social market economy—with its three pillars of private commercial banks, cooperative banks and public savings banks—has proven itself far more robust than the Anglo-American specialized banking system with its overblown obsession for profits."

"The German model of capitalism is regularly contrasted with an Anglo-Saxon style 'liberal market economy,' with its strong commitment to the principle of unimpeded competition... [German capitalism] is dominated by big economic players—large scale, vertically integrated enterprises and universal banks—who interact less in a spirit of competition, but in one of collaboration and cooperation."²

"Germany's rapid industrial development... meant that banking institutions emerged which combined the functions of commercial and investment banks in order to pool deposits into direct lines of credit and raise the needed investment capital by underwriting bond and stock issuance for very heavy investments in plant and machinery.... Remarkably, most of the key institutional features of German capitalism (with the exception of cartels) remain in place in reunified Germany today, despite two destructive world wars and Cold War division in the twentieth century...[this includes] the dominant position of powerful banks."³

INTRODUCTION

On the 25th September 2008, Peer Steinbrück, the German Federal Minister of Finance (2005-2009), pronounced the German universal banking system secure from the dangers of speculative finance demonstrating themselves in the wake of the Lehman Brothers' collapse. In his speech to the Bundestag, Steinbrück was exercised to explain the rapidly unfolding financial crisis across the Atlantic to the assembly of German parliamentarians. This included the looming dangers afforded to the German economy

_

¹ Steinbrück, Peer in: Deutscher Bundestag – 16. Wahlperiode – 179. Sitzung. Berlin, ² Torp (2011: 349)

³ Grimmer-Solem (2015: 88-9)

from the bleak prospects that the crisis augured at that moment (Deutsche Bundestag, 2008: 18968-72). At the same time, and as the above quote makes clear, Steinbrück mobilized the enduring specificity of Germany's "universal banking system" of corporate finance as a relevant indicator of the assurance that the German financial system was, and would remain, stable. Germany's universal banking system was a non-market one, delivering patient rather than speculative capital, German banks would therefore not fail.

Steinbrück's claims however "appeared to ignore the obvious difficulties facing the German banking system" at the time (Hardie and Howarth, 2013b: 104). Over a year previously, in August 2007, several German banks, inter alia IKB (Industrie Kredit Bank) of Düsseldorf, had already faced ruin because of their voluminous holdings of American asset backed commercial paper (ABCP) (cf. Gumbel, 2007), while "a range of banks announced heavy losses in mid 2008" (Hardie and Howarth, 2013b: 104). Not long after Steinbrück's speech, the German state would be required to bail out Hypo Real Estate to the tune of €35 billion owing to the financial crisis (Zimmermann, 2012) and then implement stimulus packages of €11.8 billion on 5th November 2008 and then again of €50 billion on 27th January 2009 (Hassel, 2014: 141). Following the speech, moreover, the early phase of the crisis would see the German economy contract by more than 5%. This was an even larger drop than the 3.5% of the United States during the same period of the Great Recession (see the OECD figures compiled in Detzer et al. 2013: 310). Germany's "non-market" financial system did not provide the panacea of protection against the financial crisis that Steinbrück insinuated it would, and was partly spared serious *ongoing* devastation in the "real economy" by a relatively quick return to growth in 2010 driven by the reappearance of export surpluses.⁴ Did crisis hit the German financial system *despite* its lack of speculative financial practices? Or is there something more to the failures of even the non-profit Landesbanken that occurred in 2008-9?

That Germany's universal banking system was not the fortified buttress against financial crisis that it had been promoted to be was surprising for many learned and

⁴ There is little space to discuss it here, but the growth of export surpluses in 2010 can potentially be linked back to Germany's role as ideological taskmaster of an austere Eurozone, and its need to protect the balance sheets of banks already threatened by the GFC (cf. Jessop, 2014); however, this would not be the entire story, as the contagion within the German financial system must also be explained by reference to the interbank lending market that follows distinct dynamics of those in the US that initiated the credit crunch.

expert commentators. Even if Steinbrück's speech is discounted as that of a nonspecialist, many scholars, analysts and businessmen also expected the "non-market" nature of the German financial system to protect it against the reverberations of the financial crisis (Detzer, 2014: 56; Hardie and Howarth, 2013b: 104). Indeed, experts within the German government had often taken the opportunity to promote stricter regulations at the international level and chastise other countries for their lax financial regulations believing that German finance was not subject to crisis (Handtke and Zimmermann, 2012: 119). These expectations are testament to the way in which the German financial system has been widely cast as a peculiar non-market financial system devoid of speculation. 5 This intellectual edifice is built around a nomological conception of efficient economic behaviour derived from mainstream Economics. Such thinking avers that despite German financial institutions being "non-market," they are not "extra-economic." The banks of Germany's "bank-based" financial system are, after all, economic actors, for the most part concerned with maximizing profits and minimizing losses. Eronically then, despite the lack of markets, the German financial system has frequently been depicted in Political Economy as following pristine economic principles. This perspective holds that German financial institutions substitute for the lack of formal capital markets.

This assessment is too beholden to the market by locating speculative dynamics exclusively as an outgrowth therefrom. Moreover, fixated on the non-market character of German finance it often fails to consider the role of other institutions' financial dynamics.

Steinbrück's speech serves as a useful exemplar of this widely dispersed nonmarket misconception about German finance. In his speech Steinbrück conflated several different features usually identified with the German financial system: its

⁵ "Peculiar" because despite being capitalist, and fulfilling the functions of a financial system, it seems to avoid the pitfalls that are otherwise accepted as the dark side of Western capitalist financial markets.

⁶ This is nominally not the case for the savings banks, as they have a public mandate to operate on a non-profit basis. However, in the lead-up to the financial crisis, the "advantages" of the *Landesbanken* (LBs)—providing private economic services for small and medium sized enterprises (SMEs) under public guarantees—was a constant thorn in the side of European bureaucrats attempting to enforce EU competition policy. Before the outbreak of the crisis, LBs fearful of being let loose into competitive markets had expanded their balance sheets into securities transactions. The involvement of Banks such as West-LB—the regional "central bank" for the savings banks of North Rhine-Westphalia—in the purchase of ABCP, leading to their insolvency and later bankruptcy demonstrates the peculiar combination of speculative financial practice and non-profit motives (Handtke and Zimmermann, 2012: 121-2).

universalism—the universal, rather than specialized nature of financial service provision from banks; its "bank-based" nature—that is to say, the relative weakness of securities markets for corporate finance; the "patient" form of capital provision, whereby banks are willing to take equity positions in firms with a view towards long-term rather than simply short-term (quarterly) profitability; finally, its three pillars, the (corporate) for-profit banks (*Großbanken*), as against the non-profit savings (*Sparkassen*), and cooperative banks (*Genossenschaftsbanken*). Steinbrück refers to the universal character of banking institutions, but in name only, repeatedly referring to German finance as a "universal banking system." Indeed, the key feature of *universal* as opposed to *specialised* banks is their engagement in both credit issuance, as well as securities business—the latter which necessarily brings them into contact with markets. Steinbrück's speech however highlighted the role of banks as non-market agents for the interruption of market-based activities like speculation.

The aforementioned stylized facts of German finance highlighted by Steinbrück are so widely recognized by experts that there is rarely discussion any longer of their stylistic character. Not only is this the majority opinion in circles of government, but it agrees with the established typologies of financial systems forwarded by the Varieties of Capitalism (VoC) and Comparative Capitalism (CC) scholarship. These strands of Global Political Economy (GPE) distinguish between Liberal and Coordinated Market Economies (resp. LMEs and CMEs), wherein CMEs typically have a bank-based financial system (Vitols, 2004; Jackson and Deeg, 2006). Indeed, for VoC and CC Germany is the "bank-based" financial system par excellence, while the US and UK are the epitome of market-based finance (cf. Hall and Soskice, 2001). Readers familiar with the discussion about the convergence of national financial systems on "market-based" finance (cf. Lütz, 2000) will recognise that the rhetoric of Steinbrück's speech not only highlights the pressing concerns of the short-term possibilities for crisis in Germany circa September 2008, but also a somewhat vindicated stance about the "battle of the systems" (Story and Walter, 1997; cf. Menz, 2005). The features of German finance therefore spoke to its putative "non-market" character, and helped to distinguish it from the savage rapaciousness of Anglo-American financial practices. In the context of autumn 2008, the easy association of Anglo-American "market-based" finance with the

⁷ Indeed, an influential member of the *Sachverständigenrat für Wirtschaft* (something like Germany's "council of economic advisors" to the *Bundeskanzler*), Horst Siebert, also the head of the Kiel Institute of World Economics, acknowledges all of these as important facts of the German financial system vis-à-vis the Anglo-American (Siebert, 2005: 213-243).

vicissitudes of the financial crisis allowed these core "non-market" features of the German financial system to ring like magical bulwarks against the speculative irrationality of unbridled market competition.

Was German finance that distanced from the market? It is accurate to highlight that in the post-World War II "Golden Years" of capitalism, German bourses have been, in international comparative perspective, underdeveloped when compared to English and American securities exchanges (Cable, 1985: 119; Deeg, 1995). Nevertheless, the relatively torpid German financial markets between 1945 and the mid 1980s were an exceptional circumstance. This owed in part to the necessity of reestablishing a financial centre in Frankfurt more or less from scratch following the shutdown of the Berlin Bourse with Soviet occupation at the close of WWII (Zschaler, 2002). German securities exchanges, in particular Frankfurt, to a lesser extent Hamburg, have been expanding in their volume of transactions, number of listed firms, and worth since the late 1980s (Holtfrerich, 2005). Indeed, *prior* to the World Wars there were numerous marketplaces for German securities all of which were very active (*inter alia* Burhop and Lehmann, 2014). Therefore the identification of German finance with a non-market, bank-based system as its defining attribute seems not entirely reflective of contemporary, nor longer term, developmental trends.

And yet, the presence of securities markets does not automatically imply speculative activity. The issue that arises here is whether speculative practices can be deduced by distance from the market. Even in the eras where German finance had lively securities exchanges, it was to be distinguished from its liberal, market-oriented, capitalist cousins. The German financial system was historically "peculiar" in relation to its English (Collins and Baker, 2003) and American (Calomiris, 1995) peers during the pre-WWI era owing principally to the combination of commercial and investment financial services within individual banks (cf. Weber, 1915): i.e. banks were "universal" rather than specialized. German finance has continued to exhibit different patterns of development during the period of "globalisation" as well. During the 1990s, the universal character of German banks was operationalized in American legislative debates to provide intellectual ammunition for overturning the Glass-Steagall Act of 1933 (Guinane, 2001). Following the end of specialized banking in the US, distinctive

⁸ The Glass-Steagall act of 1933 was promulgated to legally prohibit American banks from engaging simultaneously in commercial and investment banking. American unit banks for the most part did engage only in commercial banking, but through a system of reserve recycling

patterns of financial dynamics persisted between the American and German political economies. However, now that both countries had universal banks, it appeared more sensible to distinguish them by reference to the more "obvious" distinction of the role of the market. This change roughly coincided with a great deal of debate in International Political Economy (IPE) about the potential convergence of national financial systems on the "market-based" model because of financial globalisation and deregulation (cf. Jackson and Deeg, 2006; Lütz, 2000). Financial globalisation produced footloose capital flows not witnessed since before the First World War. For example, the new openness of international finance introduced the grim spectre of foreign takeovers, exemplified through the acquisition of Mannesmann by Vodafone in 1999 (cf. Kellermann, 2005: 112, 114-6).

Partly as result of these historical changes, GPE has both substantively, and theoretically drifted away from studying the institution of universal banking. This is substantive because the empirical and historical research focus in GPE has centred on the analysis of financial features like the quantitative level of bank-assets held by households (deposits as against securities), and the weakness of existing capital markets (cf. e.g. *inter alia* Siebert, 2005; Vitols, 2004). That is to say the quantitative examination of markets for financial products and services has been favoured over the qualitative study of bank practices. Few scholars ask what qualities of financial dynamics are impelled by participating in issuing securities simultaneously with retail banking in different milieus. In other words, how we might better theorize how it is that financial institutions engage in universal banking in different socioeconomic contexts. When they have done so, they have presumed a universal logic of markets, thereby obscuring potential differences in the concrete practice and dynamics of universal banking. This leads to an intellectual dilemma: if universal banks occur in both LMEs and CMEs, and if both have markets, then must it not be something external to the

functionally used short-term deposits for long-term investment (Konings, 2011). The Glass-Steagall act was for the most part a dead letter already by the time it was repealed: many commercial banks had already began to engage in securities business in the 1960s through affiliated companies (cf. Krippner, 2011). All the same, the symbolic importance of overturning the law itself, through the Graham-Leach-Bliley-Act (1999) should not be understated. Indeed, that German universal banking was utilized to achieve this legal victory demonstrates the prevalence of this conception about universal banking.

The extant literature nominally pays tribute to the institution of universal banking, usually by simply naming the large for-profit banks as "universal," indeed often without examining any more closely what that might mean or entail for actual financial practice, while also ignoring that banks in liberal market economies are now often also universal.

market hindering its proper operation that explains differences in financial dynamics? This also underlies the difficult problem of assessing whether German finance has "converged" on more market-based forms. Typically, this question is addressed by observing the extent of the market. When scholars demonstrate the extension of markets in German finance, the persistence of non-market dynamics becomes perplexing. For example, how can it be that financialization has advanced, even in the savings and cooperative banks, in Germany and yet the close relationships with non-financial firms have persisted (Deeg, 2012)? Where the normal dynamics of markets do not arise, it is attributed to the *interfering* influence of power, politics, social or cultural institutions.

This sets politics, as well as social relations, theoretically at odds with the market as an economic realm *devoid* of power. This opposition treats "the market" and power as separate, discrete, and countervailing forces that are not co-constitutively involved and imbricated with each other's development. Indeed, it is an assumption of the Comparative Capitalisms (CC) literature that even though markets are themselves institutions, their dynamics may be influenced by other "external" social institutions (Streeck, 2001: 7-8; cf. Bruff and Harmann, 2014; Konings, 2006). That is to say, the market may be a social institution, but it is distinct from all other social institutions because of its hard core of economic content (cf. Krippner, 2001). Conversely, it is argued here that, a new appreciation of the dynamics of German finance is to be had for GPE by highlighting the internal relation between "market" and "non-market" institutions (cf. Konings, 2008). This helps push the connection of universal banking, as a non-market institution, to specific markets, and their social purpose, into sharper relief. This argument makes evident the necessity for GPE to rethink the historical development of universal banking in the German context.

To make this case, the next section outlines the typically highlighted qualities of the German financial system, and how these have all too often been conflated as compelled by "non-market" finance. In the third section, the recent contribution of the new "market-based banking" approach (Hardie et al., 2013a; *idem*, 2013b) is critically examined as a frame through which to appreciate the intellectual problems of organizing the study of German finance through the banks-versus-markets dichotomy. "Market-based-banking," despite being forwarded as an attempt to move beyond the banks-versus-markets dichotomy, has been constructed on the edifice of a monolithic understanding of "the market." It is argued that a shift from the rubric of "bank-based" finance to the institution of universal banking is more promising for the ongoing study

of German finance; however, in order to properly appreciate the operation of this institution we must understand it historically. Consequently, in the third section, some preliminary aspects of universal banking are presented. It is here posited that to grasp the role of this institution it must be deconstructed through historical sociological analysis, necessitating a return to its origins in the 19th century. The final section presents a summary of the argument as a whole, and an outline of the thesis.

THE FEATURES OF GERMAN FINANCE

All of the central attributes of German finance suggest alternatives to market organization. This has underpinned the commonplace conflation of these key institutional facets wherein each is suggested as a metonym for "bank-based" finance. Germany has long been held to have "weak" securities markets. That is to say there is a low volume of trades on the DAX in Frankfurt (historically, the Berlin securities exchange) compared with leading world securities exchanges, there are few secondary markets (where existing rather than newly issued shares and debt can be traded), and because of these former features its markets are not very liquid (Baliga and Polack, 2004). Moreover, a high proportion of German financial assets are held as bank deposits rather than as financial securities (Siebert, 2005; Vitols, 2002). For many of these reasons Germany is typically considered to be a "bank-based" financial system (Allen and Gale, 2000). Germany's banks are "universal" rather than specialized, which is to say that instead of focusing strictly on the commercial business of taking deposits and making loans, they also engage in investment business floating equity and debt on securities markets (Büschgen, 1998). The key actors in the German financial system have been with few exceptions universal banks, often leading authors to use the term "bank-based" finance as a way to appeal to the underdeveloped level of securities markets while simultaneously highlighting the role of universal banks. Similarly, German banks are renowned for their "patient" rather than "speculative" provision of external capital to non-financial firms (Goyer, 2011). The patience of German capital is frequently located in its "relationship" or "relational" banking that is the converse of Anglo-American "transactional" banking (European Central Bank, 2002). The dual provision of commercial and investment services under one roof creates economies of scope in the provision of multiple services allowing banks to forge long-term relationships with non-financial companies: this is then linked to "bank-based" finance and highlighted as converse to the market (Walter and Story, 1997: 137, 140-2). In the

UK and US, as well as "market-based" systems of corporate finance more generally, financial markets provide investment capital and determine the cost of credit based on short-term (quarterly) profitability: when firms do not perform well quarter over quarter, equity holders sell their shares and buy those of firms that perform better (issue higher dividends, or increase the share price) (Lazonick and O'Sullivan, 1997). This is often called "transaction(al)" banking, as the associations between banks and their borrowers are centred on relatively anonymous arms-length transactions. Once a transaction for a particular loan or credit is complete, both parties to the transaction do not retain any ongoing relationship with each other. Conversely, in Germany banks are held to be the principal providers of capital and holders of equity. While many of the "big three" (Deutsche Bank, Dresdner Bank and Commerzbank) have since the early 2000s divested their block holdings of shares (Hassel, 2014), universal banks are nonetheless more willing to keep equities on their books than their specialized Anglo-American peers. Banks' decisions for holding equity are often made on long-term considerations of firms' profitability, as well as the stakes held by banks in firms, rather than the short-term considerations of quarterly profitability (Carney, 2009). Finally, Germany has a large proportion of "non-profit," and member-run (co-op) banks that operate alongside the large "for-profit" banks. Consequently, Germany is often labelled as having a "three pillar" banking system: these are the pillars of "commercial banks" (Aktienbanken, for-profit incorporated banks), ¹⁰ savings banks (Sparkassen) and credit cooperatives (Genossenschaftsbanken) (Butzbach and Mettenheim, 2015; Brunner et al, 2004; Deeg, 1999). As outlined above, the universal banks are often highlighted as operating under non-market principles; similarly, and quite obviously, the co-op and non-profit organizing principles for financial institutions indicate other "non-market" forms of business practice.

It is not necessarily unwarranted to assume an association between these features. In a way, they all highlight "non-market" methods of financial coordination.

¹⁰ In the Anglo-American context, "commercial banks" are considered to be those institutions that focus on taking deposits and providing short-term credit, whereas "investment banks" are those banks that provide long-term industrial finance by underwriting the flotation of securities. As universal banking is typically described as the amalgamation of "commercial" and "investment" banking, I refer to the *Aktienbanken* or corporate banks as "commercial banks" only in this specific context here. Their chief features are that they are legally incorporated as for-profit financial institutions. In order to avoid confusion in the remainder of the text where a great deal of discussion pertains to the combination of "commercial" and "investment" banking of universal banks, I refer to this class of banks as corporate, or joint-stock banks only

Especially historically, these four traits can be found with a certain amount of regularity amongst Continental European political economies (Fohlin, 2012; Forsyth, 2003; Michie 1998; Ziegler 1998). 11 This prevalence is therefore also correlated with the CMEs, or "nonliberal" economies of the Varieties of Capitalism (VoC) and Comparative Capitalism (CC) literature (Hall and Soskice, 2001; Deeg and Jackson, 2006). The key aspect of CMEs vis-à-vis their LME counterparts is the ability of the former to coordinate economic activity through non-market institutions (Höpner, 2007; Streeck, 2001). Straightforwardly then, banks exercise control over loan contracts based on personal familiarity rather than the anonymous calculations of market actors (cf. Zysman, 1983; Stiglitz and Weiss, 1981). Banks that provide a universal range of services, have failed to specialise as advanced market actors that float equity and debt, or accept deposits and issue short-term loans as their sole services (i.e. investment banks or commercial banks) (cf. Ziegler, 1998). Investors that leave their capital with one firm for extended periods of time have foregone the potential for higher returns that could have been acquired by alternative investments. Non-profit banking institutions like savings banks and credit cooperatives directly subvert the profit incentive of market actors (Butzbach and Mettenheim 2015; Brunner et al., 2004). These different terms for institutional structures in the (esp. German) financial system all imply non-market coordinating mechanisms, and so are frequently used interchangeably in an analytical and theoretical sense. 12

BANK-BASED FINANCE: WEAK SECURITIES MARKETS

It has been conventional to understand differentiation amongst national financial systems along a "market" to "bank-based" spectrum of ideal-types in GPE (Hardie et al., 2013a: 2-8). Indeed, it is even prevalent in the more mainstream literatures of Financial Economics (cf. Baliga and Pollack, 2004; Allen and Gale, 2000) and Economic History (cf. Fohlin, 2012; Tilly, 1998). This dominant schema for the analysis and study of financial systems in political economy can be traced back to the work of John Zysman (1983). Zysman's classic typology aimed to demonstrate how differing constellations of financial institutions could explain differing economic dynamics in the advanced industrial countries (Zysman, 1983, 55-95). Zysman's

With the exception of the non-profit sector.

¹² This was also the case in earlier strands of political economy and historical research that considered the German economy to be an example of "organized capitalism" (cf. Winkler, 1974).

typology was premised upon a "classic model" of bank lending, whereby banks accept deposits from one group of customers, for which they pay interest, in order to make loans to another group of customers at a higher rate of interest and thereby profit from the interest rate differential. At the center of Zysman's model is an idea of power as opposed to market forces in the setting of prices for credit (cf. Hardie et al. 2013a: 4). Market forces act through mass, anonymous, coordination to set prices beyond the agency of individual lenders. By contrast, banks exercise power when they determine the price of credit autonomously from market forces. Zysman delineates this distinction using Hirschman's dichotomy of "exit" and "voice" (Zysman, 1983: 64; cf. Hirschman, 1970). Market actors provide credit to borrowers on fixed terms, and when those terms are broken, the creditors exit from the contract (either by selling on to those who find the realized terms acceptable, or by writing off the loan). Conversely, banks "use their voice" and involve themselves in the operations of borrowers in order to ensure that acceptable secondary terms are agreed in the event that an original contract cannot be met. In (capital) market based financial systems, markets are strong, deep and liquid and there exist also secondary markets for financial assets. In bank-based systems by contrast, securities markets are weak, shallow and illiquid. Consequently, when banks are the dominant intermediary in financial systems, market forces are unable to play the central role in setting the price of credit. Conversely, in market-based systems the prevalence of markets compels market actors to accept the discipline of exit and shortterm performance oriented goals.

The continuing validity of the "market" and "bank-based" typology has been increasingly questioned since the turn of the 21st century. During the 1990s and early 2000s there was a great deal of energy invested in exploring the convergence of bank-based systems of national finance on market oriented structures (Deeg and Jackson, 2006). This scholarship was principally driven in academic political economy circles by questions of financial globalisation (cf. Menz, 2005; Windolf, 2005; Streeck and Höpner, 2003; Lütz, 2000; Streeck, 1997; Strange, 1997). It was reinforced by the work of international institutions with large research apparatuses, like the IMF, who were interested in exploring the role of the financial system in economic development (e.g. Byrne and Davis, 2003; Rajan and Zingales, 2003; cf. with Aybar and Lapavitsas, 2001 for context). Yet, the question of convergence in the 1990s missed the way in which more fundamental changes had already altered prevailing institutions since the 1970s (Deeg, 2010).

Iain Hardie, David Howarth, Sylvia Maxwell and Amy Verdun (2013a; idem, 2013b) have recently advanced what they call a "framework" of "market-based banking" in order to challenge the continued utilisation of the market-bank dichotomy. This framework has been advanced individually as a theoretical framework (Hardie et al 2013a), and also as an edited volume exploring the nuts and bolts of this vision (Hardie and Howarth, 2013a) as well as specific national case studies (e.g. Germany, Hardie and Howarth, 2013b). The scholars argue that changes in the international financial system, and specifically in the business practices of banks, have invalidated the moniker of "bank-based" finance because all banks are now highly reliant upon wholesale markets for obtaining their own working capital. That is to say, in contrast to the practice of banking from which Zysman based his typology, wherein banks draw their working capital from deposits, banks across the capitalist West now borrow from wholesale markets in order to finance their lending operations (Hardie et al 2013a). The authors argue that this fundamental change in the manner in which the regular business of banking is carried out requires a commensurate change in conceptualization on the part of political economy. The financial crisis of 2007-8 makes this problem all the more evident. The GFC presented numerous instances of confounded expectations for political economists because countries such as Germany that were anticipated to be unscathed because of their "bank-based" character were in fact much more heavily damaged by the fallout of the crisis (Hardie et al, 2013b: 13). In a nutshell, they argue that Zysman's typology was probably apt for the period up until the 1990s; however, since then changes in banking practice, aided by the expansion of international financial markets, have increasingly invalidated this old measure of financial differentiation, and that the global financial crisis served as the final writing on the wall. Hardie et al forward "market-based banking"—in essence, market forces are the ultimate originator of banks' working capital instead of depositors—as a better frame through which to examine changes in contemporary financial systems (Hardie et al. 2013b: 1, 14-5; Hardie and Howarth, 2013a: 23-25).

"Market-based banking" presents several conceptual and analytical problems that serve to further highlight the difficulty of the market-bank dichotomy. Firstly, "market-based banking" is not a sufficient ersatz for the conceptual core of the market-bank dichotomy. By simply highlighting the greater role of wholesale markets for commercial credit on the liabilities side of banks' balance sheets, Hardie et al have simply recorded a change of the contemporary international political economy. This is

not a conceptual refinement of the original model, but rather an empirical observation. Owing to this conflation of theoretical novelty and empirical observation, Hardie and Howarth are themselves incapable of explaining the "peculiar" nature of devastation of the financial crisis in Germany during the GFC. The peculiarity here was the initial sudden devastation of particular banks, followed by a lack of any real ongoing damage to the "real" economy. Hardie and Howarth show that German banks, like banks across the capitalist West, have become since the 1990s much more dependent on wholesale markets to finance their credit operations (i.e. instead of relying on deposits). Nevertheless, despite this greater "market dependence" they also point out that the majority of German banks borrow from the domestic German interbank market, which they highlight as exhibiting entirely different characteristics of such markets in the UK, or US (Hardie and Howarth, 2013b: 115-6). That is to say, despite greater market dependence (or increased "market based banking"), a divergent outcome from other market-based banking systems was the result. In this case the framework of market-based banking provides us with little more than a new puzzle to solve.

In a recent contribution, Richard Deeg (2012) has also highlighted an ongoing empirical puzzle generated by the market versus bank dichotomy. Deeg examines processes of financialization in the UK and Germany as the two emblematic national financial systems of the VoC typology. While earlier VoC and CC discussions about the convergence of national financial systems were framed around the concept of globalization, Deeg modernizes this approach by studying financialization: namely, decomposing this category into "profit" and "control" financialization. Increase of financialization on either scale would typically imply a convergence on the "market" based model of financial system and its trademark characteristics. Oddly control financialization decreased in the large German banks, where it would have been expected to increase, and increased in the savings and co-operative banks where it would have been expected not to occur (Deeg, 2012: 143-4). Deeg submits that the understanding of this unexpected constellation is given by the dominant political coalition, and is a highly path-dependent outcome extending back to the immediate post-WWII period (ibid: 145). In other words, according to Deeg, the financial institutions prevalent in Germany since the end of the Second World War helped to set the stage for 21st century developments. Deeg is correct in highlighting the path dependent character of these developments, but somehow does not consider how a more rigorous study of the institution of universal banking—as the historical practice of

linking commercial and investment banking—might help to clarify the divergence of outcomes.

According to both of these recent studies covering German finance since the turn of the 21st century, the "bank-based" model is no longer sufficient to understand contemporary developments. The typical pattern of "patient finance" provided by house banks (*Hausbanken*) has in fact been strengthened, despite their financialization (greater involvement in securities business), while this financialization has resulted in a decrease in relational banking activities for the large corporate banks (Deeg, 2012). Despite an increase in "market-based banking," and initial bankruptcies and failures in the crisis of 2008, the German financial sector did not encounter a credit crunch as a similar consequence to the GFC that Ango-American countries did (Hardie and Howarth, 2013b; *idem*, 2009). How is it, in short, that German finance has become ever more market-like in its financial activities while concomitantly maintaining many of its traditional non-market characteristics? Does it make sense to continue pursuing a research agenda for German finance focused ultimately on the influence of the market?

To answer these questions we need to examine the associational ties and social purpose undergirding market activity. Moreover, we need to turn our attention from the bank-based character of German finance to the concrete institution of universal banking. Financial markets do not operate everywhere and always the same. The interbank market in Germany did not shut down the provision of credit in the wake of the GFC, in part because banks were less apt to mistrust each other. Indeed, the depiction of the German banking system as stable likely had a role to play. Even if this "performative" interaction suggests a force softer and more social than hard material economic compulsions, it nevertheless indicates that the same "rational response" to the economic problem of the GFC cannot be adduced to all "markets." The operation of the big corporate banks and their drift away from blockholding until the 1990s, and the increased use of securities issuing undertaken by savings and cooperative banks, are both examples of how compulsions generated in one business segment affect operation in another (Ahrens and Wixforth, 2010). The early internationalization of the large firm sector in Germany, served by the big universal banks, helped to change the social purpose undergirding their securities business. This suggests that in order to understand the contemporary constellation of financial forces in the German political economy, we need to break open the black box of the market. Doing so foregrounds the role of the institution of universal banking, as a set of historical social relationships linking differently situated market actors. Moreover, it does so without presupposing how it is that those market actors behave, or what form of dynamics their activity generates.

GERMAN UNIVERSAL BANKING

What is universal banking? There is no one agreed definition (Benston, 1994); however, we can distinguish between a minimalist or abstract conception and a maximalist and concrete conception. The abstract conception is premised on parsimony and suggests that universal banking is simply the practice of combining commercial and investment banking. Commercial banking is here understood as the regular business of banking, borrowing at one interest rate and making loans at a higher one (cf. Sgambati, 2015). Investment banking is understood as accumulating capital in order to finance investment. The former is concentrated on the short-term, and the latter on the long-term. The concrete conception suggests that universal banking was a specific combination of commercial and investment activities that arose at a precise time. The specific financial services were deposit-taking and the underwriting of IPOs and bonds. The precise time was the "second industrial revolution" of the late 19th century. Universal banking is "peculiar" in the latter concrete sense because it involves the risk of liquidity problems in translating its short-term borrowing (deposits) into long-term credit (securities issuing).

The distinction between these two forms of universal banking is important for theoretical as well as historical intellectual reasons. Theoretically, the simple combination of commercial and investment banking is such a broad understanding that it could potentially arise at any point in history. Merchant bankers advancing short-term credit in bills of exchange while also financing longer sea voyages or taking shares in government run monopolies could potentially fall under "universal banking" in this regard. In this study, we will add the caveat of advancing credit and finance to non-financial industrial ventures to our delineation of abstract universal banking. This brings the concept nearer to the concrete concept so that the threat of liquidity lock-up can be better understood even in this parsimonious definition (industrial firms, unlike governments, are more prone to bankruptcy). Moreover, it avoids the problem of eternal regress throughout history, and temporally brings us to the vicinity of the industrialization period. This definition still remains too broad for historical purposes, but is at least not elastic enough to stretch through all of recorded commercial history. The distinction between these two definitions is also pertinent because Alexander

Gerschenkron's first recognized "theory" of the origins of universal banking (cf. Forsyth, 2003; Verdier, 2002; Gerschenkron, 1962) rooted his understanding of this institution in the specific financial techniques and practices of the German banks circa the last quarter of the 19th century. These included the practice of accepting deposits, which historically was not pursued by German banks (or indeed many other banks), *before* this period of time. That is to say universal banking *as per this* definition cannot exist prior to the incorporation of deposit-taking into the regularized financial praxis of banking institutions.

Both conceptions of universal banking highlight its chief peculiarity as an economic one: the successful and efficient transformation of maturities. That is to say, universal banking is intellectually interesting for scholars of finance because of the risk of liquidity lock-up presented by the potential failure of long-term investments for short-term liquidity of banks (cf. Canals, 1996; Benston, 1995). Universal banks are presumed to collect liabilities that can be redeemed in the short-term, in order to finance long-term investments in industrial non-financial corporations. As deposits can be claimed on short notice, but equity stakes or bonds are less liquid, in the event of a high number of customers asking to withdraw their deposits, banks would be forced into insolvency, even if the absolute value of their assets was greater than their liabilities. This problem has led scholars to examine universal banking often from the perspective of efficiency: what kind of investments can be made that will minimize the risk of financial loss, and therefore avoid runs on deposits?

This framing of universal banking, as a purely economic institution, has led economists to cast universal banks, using those in Germany as the epitome of their expression, as institutions that solve the market failure of incomplete information in existing financial markets (cf. Cable, 1985; Stiglitz and Weiss, 1981). In financial markets with poor information distribution, potential borrowers may not be able to signal their credibility for paying back a loan. Consequently, capital may not flow to good projects because investors are fearful that they will be defrauded. The close relationships of universal banks with their customers allows them to better assess the performance of potential borrowers of long-term capital through the monitoring of their regular repayment of short-term credit. In this way, universal banks are said to represent a conservative, risk-averse financial institution substituting for perfect markets.

This presentation obscures the often speculative character of the investment business undertaken by universal banks—the sometimes very high risks taken, and failures experienced, by banks in different historical contexts. Instead, only the successful long-term investments of prosperous banks with long lineages have been underscored. This is a classic way of presenting finance whereby "speculation is undertaken by those who fail; banking is engaged in by those who succeed" (paraphrased from Pohle, 1995). Universal banking is in short depicted as an institution that arises and is reproduced to serve a purely economic, and efficiency enhancing, function.

The operation and reproduction of German universal banking as an institution serving efficiency is frequently expressed as the outcome of path-dependent events leading back to industrialization. Even if its contemporary operation can be highlighted to diverge from the efficiency explanation, this might simply fall victim of the charge of the "economic externality"—contemporary actors have misunderstood their role as universal bankers. Consequently, in order to produce the maximum critical understanding of contemporary German universal banking and its peculiarities, we must not only decompose different concrete market imperatives associated in specific universal banking practices, but return to their historical origins. To get a proper handle on the institution of universal banking, we need no less to return to its "origins," diffusion, and crystallization on a form that has been reproduced for a century.

THE CENTRAL ARGUMENT

This thesis engages with the theoretically informed historical literature about the origins, expansion and institutionalisation of universal banking during the industrialization period. It presents a necessary prolegomenon to a combined new research programme into the historical development of German finance, as well as towards further theoretical enquiry into the social bases of economic institutions more generally. The central substantive argument of the thesis is that *contra* the prevalent explanation in the literature, universal banking developed as a path-dependent outgrowth of *speculative* financial practices and the politics of industrialization. Underscoring the speculative and political origins of universal banking inverses the typically accepted significance of this economic institution. Rather than being grounded in "economic" behaviour seeking the efficient generation of profits and minimization of risk, the emergence of universal banking is best understood as the result of struggles over social power, and the direction of social transformation.

The way in which several key terms—speculation, social struggle, and social transformation—are understood bears stressing here. Speculation is understood as wagering in relation to uncertain social outcomes. Defined this way, speculation encompasses both the narrow definition of "rational" economic investment and irrational "gambling." Whereas investment is undertaken in relation to calculable "economic fundamentals," "gambling" or "betting" is without such "rational" foundation (Konings, 2015). Historically, much of the "investment" activity of German bankers could in no way be calculated in relation to strictly economic fundamentals. This suggests that "investment" activity was more weighted toward "gambling." However, it is only when such investments are examined in relation to strictly economic pay-offs that there appears to be no basis for such wagers. Here the role of social struggle, and the reward of social reordering was paramount. Social struggle is deployed to highlight contests between different historical agents over the generalized form of associational logic and social relations prevalent within specific spatio-temporal areas. The terms "struggle over social power," "sociopolitical struggle" and "social struggle" are all used synonymously in that regard. Social struggle in this sense overlaps with its typical usage as a euphemism for class struggle, but is also broader as this usage directs attention similarly towards intra-class conflict. Finally, social transformation is mobilized throughout the course of this work as a manner to highlight generalized change in the macro character of historical social relations.

This argument also carries a broader significance for GPE. As the above discussion about the banks-versus-markets nature of German universal banking made clear, scholars' attempts to rethink existing frameworks are often, if not always, indebted to mainstream approaches. Attempting to get beyond the constant appraisal of German finance in relation to the baseline of a homogenous depiction of "the market" has typically returned scholarship to the point where it started. In a similar fashion critical GPE more generally is at a disadvantage in promoting its alternative theoretical perspectives, because when conducting empirical or historical research it must often *found itself upon the basis of orthodox studies about the economy*. This occurs as above in terms of clashing with existing theories, or supporting ones critical theory with established secondary empirical sources. In this way, non-critical perspectives become imbricated in the narratives told about economic institutions, and "the economy" more broadly. While theoretical reflection and reasoning can establish the abstract conditions to provide novel accounts of the social bases of the political economy, the actual

accounting for social dynamics must be more fundamentally pieced together by *telling* substantively new analytical stories.

OUTLINE OF THE THESIS

The thesis is comprised of three parts: Part I delineates the significance of the economic institution of universal banking for GPE (the introduction). Secondly, it explains the intellectual riddle posed by theoretically sensitive accounts of financial historiography that aim to account for the development of universal banking in Germany. Finally, it outlines some considerations on theory and method necessary to piece together the puzzle that has been constructed around universal banking with the help of mainstream accounts of the economy. Chapter 1 reconstructs the lineages of debate and discussion pertaining to the genesis, diffusion, and institutionalisation of universal banking in Germany. It argues that scholars who have engaged with the problem of universal banking's institutional development have wandered into an intellectual cul-de-sac because of their inability to observe the sociopolitical character of this "economic" institution. Caroline Fohlin inadvertently highlights this problem when she writes that "despite obvious connections," between economics and politics, orthodox political economists have been mystified by the role of power in universal banking's development (Fohlin, 2000: 23). The chapter begins by recounting the legacy of Alexander Gerschenkron's theory of backwardness on historical theorizing about German universal banking. Subsequently, it outlines the role of asymmetric information theory in developing an explanation for abstract universal banking. Revisionist scholars like Fohlin have highlighted the failure of asymmetric information to account for the development of concrete universal banking in the last quarter of the 19th century. Nevertheless, despite positing this, Fohlin herself offers no theory for this development. Constructivist scholars have recently also joined the fray, but have taken as given the origins of universal banking in the corporate banking sector. Consequently, constructivist scholarship offers a sociopolitical theory of the diffusion of universal banking, while failing to provide a theory for its genesis. The result of this research vector has been that there is no viable explanation for the genesis of abstract universal banking in the first half of the 19th century, nor of the emergence of concrete universal banking amongst the large corporate financial institutions of the German Kaiserreich. What is required is a theoretically sensitive historical account of the emergence of

universal banking in sociopolitical perspective. The chapter presents some preliminary musings in this vein, arguing that in order to understand the development of financial institutions from a sociological perspective, it is necessary to find a method that can reconstruct the basic associational ties of different forms of historical agency. The chapter concludes by highlighting the necessity of deploying this perspective to four specific historical periods where key elements of the institution of universal banking emerged. These historical periods are respectively covered by each of the historical chapters.

33

Part II charts the first half of these historical periods, examining the evolutionary path of German banks from the 18th century to the end of the 1860s. This part of the thesis underscores the social purpose of the struggle over industrialization, that helped to propel the key transformations of German finance and initiate a path-dependent trajectory around "abstract universal banking."

Chapter 2 examines the first critical conjuncture, relating to the emergence of abstract universal banking in the 1830s Rhineland of Prussia. This chapter argues that universal banking was an unintended product of the speculative practices of Rhenish financiers engaged in a struggle to bring about industrialization. The predominant asymmetric information and New Institutional Economics (NIE) explanation posits that the amalgamation of commercial and investment banking was undertaken as an institutional solution to market failures generated by uneven distribution of information. This suggests that calculative practices conceptualised in terms of efficiency, helped financiers make rational decisions about combining commercial and investment banking to found railway companies. This justification might potentially explain the later practices of large corporate universal banks that emerged following the foundation of Imperial Germany. In the context of the 1830s Rhineland, its projection of rational action comes into contradiction with the sequence of private bankers practices. The key target of investment banking activities was the foundation of railway companies, with whom the private bankers could not have had prior commercial banking relationships. Asymmetric information therefore puts the cart before the horse by suggesting that it was the regular short-term credit relationships that provided a basis for long-term investment finance. Long-term investment finance preceded short for railway companies, thereby posing the question why rational bankers would have wagered their entire livelihood on firms that had a large potential for failure. The answer lies in the social context. Rhenish bankers believed that railway companies held the promise of

generating the basis for a self-sustaining dynamic of industrialization. Railways would provide the payments that would solve the dearth of payments prevalent in the Rhineland as well as provide a decisive shift in the direction of social change towards an industrial future.

Chapter 3 examines the spread of abstract universal banking practices from private to corporate banks. The chapter details the circumstances of the "first foundation wave" of joint-stock (corporate) banks in Germany from 1848-57, and follows the evolution of these new corporate banks' financial practices until 1868. The predominant explanation for the foundation of joint-stock banks is itself a product of NIE reasoning, and has largely conflated this development with the evolution of universal banking. Chapter 3 argues that these were two distinct developmental trends, which when considered separately, (a) highlight the historical inconsistency of the NIE position, (b) the sociopolitical motivations for founding corporate banks, (c) the unintended outcome of conjoining abstract universal banking practices with the joint-stock legal form, and (d) the ongoing evolution of universal banking as an institution. The corporate form was chosen for a variety of reasons, all of which must be set against the ongoing struggle over industrialization. This is detailed in relation to four case studies of joint-stock bank foundations that establish how the background of the ongoing conflict over the future shape of German society provided the missing social context to understand why financiers sought to establish joint-stock banks. These four detailed cases also emphasize how there was no pre-existing demand on the part of financiers to meld abstract universal banking with the corporate form. Indeed, the variety of their financial practice highlights the continuing breadth of this institution, but also importantly underscores the common theme of their engagement with the speculative foundations business. Towards the end of the period, these banks may have all become "universal" in an abstract sense, but the diversity of their financial practice indicates a constellation that was not yet capable of reproducing universal banking in a path-dependent manner. The chapter underscores more generally how the adoption and creation of economic institutions is better depicted in terms of power than efficient functionality.

Part III rounds out the historical narrative, chronicling developments up to the outbreak of the First World War. This section of the thesis outlines a new phase in the development of universal banking following a shift in the struggle over industrialization. Towards the end of the 1860s, and especially at the beginning of the period covered here, the sociopolitical conflict over the shape of German society

35

between forces favouring agrarian or industrial interests, had shifted as the forces within the Prussian and German states began to more widely accept liberal politico-economic ideology. There was widespread social discontent with this ideology following the Foundation Crash of 1873, but it continued to inform the practices of bankers until almost the end of the period.

Chapter 4 follows the "second foundation wave" of corporate banks during the "Foundation Years" between 1869-1873. The literature on universal banking history argues that this wave of joint-stock foundations was unleashed by the liberalization of the North German Confederation's concession policy in 1870. It is further argued in the extant literature that by the end of this foundation wave, the corporate banking sector was organized along universal banking principles and practices. By contrast, this chapter argues that legal changes nominally intended to curb speculative practices, actually compelled private bankers to found corporate banks. The second foundation wave often serves as a companion to the first insofar as the literature highlights the role of economic efficiency as the driving raison d'etre for the establishment of joint-stock banks. Conversely, the ongoing diversity of practices within the corporate banking sector is presented to highlight the continuing openness of the historical process. The corporate banking sector was at the end of this period driven forward principally by the needs of the "irregular" speculative foundation business: the potential profits from foundations were highly lucrative for financiers, but as the technical aspects of this business required also banks that could specialise in the "regular" banking business of providing short-term commercial loans for the operating capital of firms in the provinces, a rough division of labour developed between financial centre and provincial joint-stock banks. Before the outbreak of the financial crisis (Gründerkrise), it seemed as though German financial development might move in the direction of specialization rather than further universalization.

In chapter 5, the final steps towards the crystallization of concrete universal banking on the form that would correspond to its image as a provider of patient capital were taken. The chapter argues that the key dynamic setting this institutional crystallization in place was a change in the issuing of securities in the foundation business. As earlier chapters explained, when banks engaged in the foundation business, they underwrote securities for corporations that had not yet come into existence. This was a speculative practice because even for firms such as railway companies, the potential for failure was still very high. During the *Kaiserreich* the corporate banks

began to only float securities for firms with whom they already had established commercial credit relationships. It is only at this point that it is even possible for the efficiency argument based on asymmetric information to correspond to the shape of universal banks. However, far from principally seeking to take advantage of their superior information and thereby become more conservative and patient lenders, the corporate banks were hemmed into this strategy as the cumulative result of earlier speculative decisions. In particular, the chapter shows how the speculative decision to implement deposit-taking by the Deutsche Bank engendered new competitive pressures in the corporate banking sector. These competitive pressures, when experienced regulatory changes implemented by anti-industrial reforms helped to establish an evolutionary dynamic whereby banks were forced to be more conservative in their issuing of securities.

Universal banking is a seminal economic institution, and its German variant is typically considered to be its quintessential form. The existing explanations for the origins, diffusion and crystallization of German universal banking on a form that could be institutionally reproduced throughout the 20th century currently represent the retrojection of mainstream economics into the past. The theoretical premises that frame the accepted historical narrative help to structure not only contemporary researchers' assumptions about the financial past, but are also fed into our thinking about the financial present. This thesis was written in order to demonstrate the surprising nature of that financial history, and how our contemporary expectations are so often confounded by it. When the action of financiers is no longer entirely conceived strictly in relation to economic justifications for that action, the role of politics and power becomes all the more visible.

CHAPTER 1

Accounting for German Finance

Towards a historical sociology of financial systems

"For over forty years, Gerschenkron's arguments have stood at the center of historical research on the development of financial institutions.... Criticisms of and exceptions to Gerschenkron's thesis have emerged in this vast literature, but until recently, one looked in vain for an encompassing alternative explanation for the origins of difference between national financial systems." ¹³

""[O]bjective processes' that are determined prior to concrete and historical actions of subjects raise the problem of their own enactment. How can subjects instantiate a logic which transcends them? This definition of a logic, created prior to what people do in history, generates a problematic trade-off since theory is 'explanatory' only to the extent that people do not alter substantially what was defined abstractly. In other words, the theory has explanatory powers only if it considers subjects to be reified." 14

"Dates cannot lie, and the more distant the dates, the less willingness to uncover their social content, context and significance. But periodization is no innocent exercise, no mere pedagogical and heuristic device to plant markers in the uncharted flow of history." ¹⁵

INTRODUCTION

This chapter outlines the central debates pertaining to the development of Germany's universal banking system, and sketches some principles for a historical sociology of financial development. Focusing chiefly on that scholarship that is theoretically informed, ¹⁶ I argue that there exist two central problems in the historical narratives about the development of German universal banking. Firstly, despite the frequent mobilization of terms such as "peculiar" or "backward" to indicate the

¹³ Forsyth (2003: 2)

¹⁴ Knafo (2002: 147-8)

¹⁵ Teschke (2003: 2)

¹⁶ In selecting which scholars to examine I struggled with including Manfred Pohl, who wrote *Entstehung und Entwicklung des Universalbankensystems: Krise und Konzentration als wichtige Faktoren* (1986), a monograph ostensibly with a theoretical focus on the development of universal banking. I have decided not to include any extended analysis of this text, because there is little delimitation of how exactly we should understand universal banking. Moreover, its "theory" for the development of universal banking is simply an observation of changes in banking structure following periods of concentration and crisis. There is little methodical linkages made as to what might induce crisis or concentration, taken exogenously as they are.

differentiated form of Germany's financial development, this always occurs against the background of a constant underlying assumption of a *naturalized* logic of economic activity. Secondly, and in part consequentially, this reliance on the deductively assumed "normal" operation of markets, "the economy" or "rational actors," has shunted the examination of universal banking's origins and development away from politics and power. These two problems have together resulted in an intellectual cul-de-sac. Scholars recognize that "social, political and regulatory environments play key roles" in the development of financial structure (Fohlin, 1999: 306); however, what exactly those roles might be is never articulated. The paradoxical outcome is that there exist "obvious" connections between politics and the development of financial institutions, yet these connections cannot be identified or accounted for (cf. Fohlin, 2000: 23)!

By contrast, institutional constructivist approaches have added politics and social struggle to explain the *expansion* of universal banking practices throughout the entire German financial system. This contribution has focused on the typically underemphasized role of the savings banks and credit co-operatives in German financial history. Despite this laudable advance, because the narrative is focused on the *diffusion* of universal banking across the non-profit "pillars" of German finance it takes for granted how it is that the for-profit banking sector came to be organized around a universal provision of financial services. Consequently, the constructivist approach has no explanation for the *emergence* of universal banking apart from that provided by orthodox economic historians. This also posits problems for its account of the diffusion of universal banking to the other financial pillars, because it assumes coherent institutions had already developed by the late *Kaiserreich*.

The product therefore of theoretically sensitive historical explanation for the emergence of German universal banking, are explanations centred on an *ahistorical* logic of market relations, and rational economic action. The literature essentially presumes that because universal banking is an "economic" institution, that any explanation of the emergence, and development of these institutions must be conducted with reference to efficiency, or through economic categories. Power, politics, legal institutions and historical context may enter the analysis, but only as accidental and external influences on an already established economic dynamic.

The chapter offers a chronology charting the development of this problem. The scholarship on German financial history is extensive, and consequently, the analysis here is organized around the work of authors representative of different key advances.

39

Firstly, I outline the Gerschenkronian argument about universal banking. Gerschenkron's account was not principally concerned with financial institutions, but nonetheless helped to establish the explanandum for a generation of researchers into German finance. One such follower was Richard H. Tilly whose renovation of Gerschenkron through theoretical elements of the New Institutional Economics (NIE) and mainstream Economics' asymmetric information approach is discussed in section two. Tilly's theoretically sensitive narrative advances, but is firmly a part of the "Gerschenkronian paradigm," for the manner in which it preserves an economic functional core at the centre of his argument. Nevertheless Tilly's explanation has itself set the groundwork for a generation of economic historians, and has helped to proliferate NIE, and information theoretic, themes throughout German historical scholarship. Thirdly, I discuss the recent wave of revisionist research challenging the Gerschenkronian and information theoretical assumptions for Germany's financial development. This scholarship is examined through the work of Caroline Fohlin, who despite meritoriously deepening the wealth of empirical details about universal banking, does not provide any theoretical explanation herself. Finally, I discuss the constructivist literature on the history of Germany's universal banking through the prism of Richard Deeg's scholarship. Deeg's historical institutional approach to narrating the development of a German system of universal banking incorporates the long overlooked influence of sociopolitical conflict as well as the role of the savings (Sparkassen) and cooperative (Genossenschaftsbanken) banks. Deeg's work provides important clues for the dispersion of universal banking practices across all pillars of the German financial system. Nevertheless, because Deeg does not probe the origins of universal banking practices in the for-profit banks, his narrative cannot account for the origins of universal banking.

ECONOMIC BACKWARDNESS IN RETROSPECTIVE

Following the Second World War, Alexander Gerschenkron challenged the linear view of economic development implicitly propounded by mainstream economics, as well as the prominent and *de rigeuer* stagist understanding of development promoted by "modernisation theory." "Modernisation theory" advanced the idea that all societies passed through essentially the same development "stages" before arriving at economic "take-off" (the beginning of self-sustaining growth) and then industrialization (e.g. Rostow, 1960; cf. Slattery, 2005: 146-150). In contrast, Gerschenkron posited that the

modernization/industrialization process itself could not be foretold apart from specific historical circumstances. Most importantly for Gerschenkron, is the presupposition that the development process varies depending on the starting point of different countries/societies. The relationship of different societies to the "first mover" (Britain) determined different combinations of the rate of industrial growth, the ideology of industrialization and, different market substituting institutions (Gerschenkron, 1962: 7). These different institutional structures related to the specific way that markets, banks and the state were involved in the industrialization process.

The further removed from the industrial pioneer, the more "backward" was a country in its industrialization. This "relative backwardness" manifested itself in growing amounts of institutional involvement in the industrialization process. In drastically backward countries like Russia, the state was required to directly intervene in the industrialization process. Conversely, backward countries like Germany were not so dissimilar from England that state intervention was necessary. Primarily lacking in moderately backward countries was an *institution* to mobilise the capital for large scale investment:

in a relatively backward country [like Germany] capital is scarce and diffused, the distrust of industrial activities is considerable, and, finally, there is greater pressure for bigness because of the scope of the industrialization movement, the larger average size of plant, and the concentration of industrialization processes on branches of relatively high ratios of capital to output (Gerschenkron 1962: 14).

According to Gerschenkron, in Germany, universal banks arose as economic institutions to satisfy this gap. The universal banks provided these services in a fundamentally different manner than English deposit banks. English banking was based on the quick turn-over of business: 18 the transformation of deposits into short-term loans—focused on bills of exchange, to make liquidity possible for industry and commerce. This English method of attracting deposits required that loans be short-term, as the banks' customers could return at any time to withdraw their deposits. Therefore loans were made more for the purposes of "working" rather than "fixed" capital (Collins, 1991). "External" finance for large industrial projects was rarely needed during initial industrialization. When it was later needed, special institutions—securities markets—

¹⁷ This is not a Gerschkronian term *per se*, but accesses a key insight in it. See Selwyn (2011: 440) and Schwartz (2009: 83, 86, 145).

¹⁸ The following description can not be found in its entirety in Gerschenkron's pivotal text itself, but is consistent with the view in the kind of sources that he himself likely consulted (e.g. Whale, 1930; Weber, 1915).

had arisen in order to satisfy this need through the issue of stocks or bonds. There was in England a division of labour between commercial banks, investment banks and capital markets. In Germany, all of these functions were amalgamated (and augmented) under one roof. The "universal banks" combined the "regular" banking business of short-term lending activity associated with English banks together with the "irregular" long-term industrial finance of securities underwriters. Furthermore, the German banks formed tight institutional connections with industrial firms, vis-à-vis the supervisory board (*Aufsichtsrat*), to assist and guide non-financial companies (NFCs)¹⁹ in their entrepreneurial activities.

Ultimately, "it [was] the pressure of these circumstances [of backwardness] which essentially gave rise to the divergent development in banking over large portions of the Continent as against England" (Gerschenkron, 1962: 14, my emphasis). In other words, the organizational structure of universal banks and all of the related services that would come to be associated with a system of universal banking—entrepreneurial advice to non-financial firms, "patient capital" for investment, "interlocking directorates," and business policy decision making power—was a functional outcome of "the timing of industrialization." ²⁰

Gerschenkron refrained from straying too close to historical details in order to paint the broad-brush strokes of his over-arching vision of European industrialization. Such perfunctory formulations leave us with a sketchy narrative of the development of German finance: continental "backwardness" vis-à-vis England *necessitated* the development of an institution that could mobilise significantly larger amounts of capital in order to industrialize. The earlier development of England ensured that when Germany and other continental societies started their industrialization processes, more advanced technology was available to them. For example, when Germany was industrializing, the textile, leather and food-stuff industries were not at the cutting edge of the industrialization process any longer as they had been in England. Instead those archetypal heavy industries—"coal mining, iron and steel making, electricity and engineering, and heavy chemicals" (Gerschenkron, 1962: 15) represented the leading sectors of industrialization. The functional necessity for an institution to finance the dissemination of these innovations was answered by the development of "joint-stock

¹⁹ This is anachronistic nomenclature, but analytically useful for the development of this chapter's argument.

²⁰ This turn of phrase is not used by Gerschenkron himself, but has a wide currency in the literature (Fohlin, 2007; *idem*, 1999; Vitols, 2001; Edwards and Ogilivie, 1996).

banking" as exemplified by the Péreire Brothers *Crédit Mobilier* investment bank (banque d'affaires) in France. By adopting the model of the *Crédit Mobilier* from France and combining its investment model with the short-term activity of commercial banks, the German banks became the "paragon of the universal banks" (Gerschenkron, 1962: 13) that were then able to mobilise the funds necessary for these heavy industries which required significantly larger injections of long-term financial capital. While the *Crédit Mobilier* had been overly reliant on stock market fluctuations and subsequently failed as a result, German (and Austrian) banks substituted close links with industrial concerns in order to manage their finances. These close links were managed via the appointment of bank officials to supervisory board (*Aufsichtsrat*) positions in non-financial firms.²¹

Gerschenkron's argument relies problematically on a baseline, or "normal," case of industrialization against which "backward" countries are compared: England. This particular case, according to the Gerschenkron view, flows from the understanding of England as the primordial bastion of liberalism, where the market was unleashed and industrialization occurred without the sullying influence of institutions, politics or agency (Knafo, 2008).²² This is not only problematic because there is evidence to indicate that English liberalism was not as liberal as its rhetoric indicates that it was (Knafo, 2013), but also *because it injects necessity in a functionalist fashion into the analytical spaces of the narrative*. Institutions emerge quasi-automatically in order produce the outcome of successful industrialization as measured against England, and

²¹ As an important note to the forthcoming analysis, it is crucial to point out some of the historiographical assumptions this narrative makes. Firstly, Gerschenkron pins his hopes on the functional utility of the Great Banks making possible industrialization during "the Great Spurt." This Great Spurt most likely corresponds to the period from 1870 until shortly before the First World War. Although this was a period replete with depressions (Wehler, 1995: 552-609), it also marks a permanent shift to an industrial society. In other words the leap forward in growth is profitably seen as a permanent qualitative change of social structure rather than a sustained period of quantitative economic growth. Additionally, he presumes that the close links between the banks and industry were managed through the institution of the supervisory board (Aufsichsrat). This formal institution did not appear until after the amendment to the New Company Law (Aktienrechstnovelle) of 1884; and finally, and perhaps least importantly, Gerschenkron makes reference to bank paternalism through the expression "the cradle to the grave" (a phrase attributed to Jakob Riesser who wrote about the Great Banks chiefly post 1870). Consequently, we can safely assume that Gerschenkron is making reference to the Big Berlin Credit Banks and rapid industrialization and economic development which occurred in the last three decades of the nineteenth century.

²² Indeed, Knafo (2008) demonstrates that this perspective is difficult to accept given the weight of historical evidence: the English state played a prominent role in the development of its financial system.

43

given a specific historical endowment of technology and institutions. Consequently, the emergence of institutions to satisfy the "preconditions" for industrialization in individual backward countries appear as necessary outcomes in a historical teleology converging toward English development. The problem of backwardness in Germany was experienced as the dilemma of accumulating sufficient quantitative levels of capital in one place to satisfy the higher demands required for the most advanced technology. Ergo, universal banks arose in Germany to collect the necessary levels of capital and channel it to industry.

RICHARD TILLY: THE INFORMATION ASYMMETRY ACCOUNT

One reason Gerschenkron's pithy comments perhaps have lasting power, is because they appear to provide a basic theory for the development of Germany's universal banking system. Of the scholars and historians working on this subject since Gerschenkron's time, Richard Tilly has formulated the most consistent and comprehensive theoretical engagement with the development of universal banking in Germany (Tilly 1999; *idem*, 1998; *idem*, 1995; *idem*, 1994; *idem*, 1992; *idem*, 1989; *idem*, 1986; *idem*, 1967; *idem*, 1966a).²³

Tilly's attention to the history of German finance extends nearly half a century. Over such a period of time it is not uncommon that a scholar might adjust or update his positions. Without much surprise then, we can bisect Tilly's theoretical formulations on German finance into basically two different periods that are separated by an overarching change in the thrust of his theoretical position about financial development. The first begins with the publication in 1966 of *Financial Institutions in the Rhineland* (1966), where Tilly used primary archival research in order to assess the impact of financial institutions on industrialization in the Rhineland (reiterated in Tilly, 1967). Beginning in this book, Tilly propounded a synthetic theory of socioeconomic interests in order to explain the development of German "mixed-banking." Many aspects of Tilly's original interpretation expounded in this book would remain more or less unchanged. There was a crucial alteration beginning in 1986, wherein he would update his interpretation of universal banking evolution using the "asymmetric information," and New Institutional Economics (NIE) theoretical approaches of neoclassical

²³ Indeed, Tilly (1998) contends that "economic backwardness" à la Gerschenkron is not actually much of a "theory" *per se*. From his perspective it is a typological formula—"backwardness plus historical inertia."

economics. Tilly's theorization of German finance is undisputedly more sophisticated than that of Gerschenkron. Nevertheless, it is not without its problems. The most significant problem arising from Tilly's work, and persisting across his oeuvre, is the tacit, or unexpressed, separation that he creates between "economic" and "political" phenomena. In connection with his later espousal of the "information asymmetry" approach, this is especially problematic for advancing the status of research on the development of German universal banking.

Socioeconomic interests or class struggle?

What is striking about Tilly's early engagement with German financial history, is the theoretical sensitivity that he brings to the historical narrative. *Financial Institutions in the Rhineland* (1966), is a remarkable book in part because of the way that it blends primary archival research with a careful attention to the wider significance of the often localized financial stories that it has to tell. In this, Tilly's first research monograph, Tilly blends a theoretical perspective developed from Schumpeter and Gerschenkron in order to outline the connection between the "real" and "financial" aspects of capitalist economies in development. Mobilizing Schumpeter, Tilly posits that the key function of banks (or financial intermediaries) is the task of creating new purchasing power, which is linked to their ability of credit creation (Tilly, 1966: 6). Tilly is quick to note, crucially I might add, that

The importance of credit creation—which is not, after all a monopoly of profit-maximizing firms—turns entirely on the *purpose* to which new purchasing power is put. Governments, for example, have made large-scale use of credit creation since preindustrial times to finance unproductive activities such as warfare or monument-building. Credit creation provides a means to development, but guarantees no results (Tilly 1966: 6, my emphasis)

This is an important theoretical statement. By contending that "the importance of credit creation...turns entirely on the purpose to which new purchasing power is put" we are immediately told that the key practice of "finance" in the capitalist economy is not necessarily *politically neutral* in its consequences for social development. Additionally, financial development is most consistently averred to be a *social process* throughout the opening theoretical salvo.

Tilly also mobilizes Gerschenkron in order to set the stage theoretically for the historical narrative of the advent of credit creation in Germany (ibid: 9-10; also Tilly, 1967: 151). Importantly, Tilly distances himself from Gerschenkron almost immediately by noting that the "advantages of backwardness" that might have been reaped by early

45

German entrepreneurs extended only to the railway industry and related backward linking trades (mostly mining and iron smelting) (ibid: 9). This presents a different chronological narrative to Gerschenkron's account, placing the development of universal banking in the 1830s rather than the post 1870 period.

Tilly's opening theoretical chapter is also interesting because he foregrounds the geographic distinctiveness of the Rhineland in relation to the rest of Germany. In particular, Tilly distinguishes the social-political differences of the ruling classes and their concomitant socioeconomic interest bases. The Rhineland had been stimulated into early industrialization as far back the 15th and 16th centuries through trade with Northern German states and the South Netherlands and propelled into the earliest industrializing area within the German states after the take-over of the Rhineland by the French during the Napoleonic Wars. Prussia, by contrast, had not made the same strides toward industrialization, and its primary socioeconomic interests lay in agriculture and not industry. The conjoining of the Rhineland with Prussia, following the Congress of Vienna, set the stage for conflict between the ruling classes of these Western and Eastern regions.

This account of Prussian "geography" is the fulcrum upon which many of Tilly's contributions to German financial history pivot. The sociopolitical interest conflict between the Eastern agriculturally focused Junkers and the Western industrially oriented Rhenish businessmen animates the particular development of universal banking according to Tilly because of its consequences for Prussian monetary policy: the essence of this historically informed explanation relating to bank-note issue, and the chartering of new private issuing bank.²⁴

Not unlike Gerschenkron, Tilly utilizes a comparison with England in order to explain the importance of Prussian government restrictions on the foundation of banks that could issue their own paper money. In England, banks had been able to issue promissory notes in relation to their deposit business, and as a consequence were able to provide the liquidity needed for industrialization. Conversely, the Prussian government refused to charter private banks of issue to satisfy the Rhenish need of liquidity for fear of diluting the strength of its conservative agrarian oriented interests. In particular, Tilly traces the debates amongst contemporaries and suggests that members of the Prussian state bureaucracy feared that private issuing banks would ultimately undermine the

²⁴ This is indeed a highly important issue, but needs to be contextualized in a much different way in order to underscore the development of universal banking. See Chapter 5 in this thesis.

ability of the government to provide credit to agricultural producers on favourable terms. Moreover, in the event of a banking crisis, the government might be responsible for the claims against the banks in order to preserve the health of the industrializing economy. Consequently, any form of financial assistance would most likely necessitate adding to the already high level of government debt. This latter consequence was also considered less than ideal because in relation to the State Edict of January 7, 1820, or the "State Indebtedness Law," increases in government borrowing would eventually require the approval of an elected legislature—an outcome that was not favoured by the Junker elite (Tilly, 1966).²⁵

46

There were several consequences of prohibiting the chartering of new noteissuing banks in the Rhineland according to Tilly. The most immediate of these was the foundation of such institutions in German states bordering Prussia. The ultimate significance of these banks, however, was never particularly great, and following midcentury, most of them ceased to be of much importance (Tilly 1966a: Chapter 3). The real pertinence of this early monetary prohibition according to Tilly was in the way that it directed Rhenish financiers to other means of credit creation and money substitutes. These were found in the devices of overdraft credit and bills of exchange. Unlike the promissory notes used by English commercial banks that could be redeemed on demand, bills of exchange as credit instruments had longer maturity dates. This provided more opportunity for bankers to reinvest the money loaned to them in other projects where the risk of their money being tied-up was greater. Moreover, current account credits granted to clients could be rolled over, so that a formally short-term credit could be transformed into a long-term one. The Prussian state had therefore unwittingly created the *conditions* for an entirely different form of credit creation—the signal Schumpetarian aspect of Capitalist banks. In a few words, this was the nascent combination of "mixed-banking" brought about by the actions of the Prussian state (Tilly, 1966: 134-5; idem 1967: 181-2) and profit oriented financiers who stepped into the available business opportunities left to them.

Tilly's early interpretation is at odds with the strict Gerschenkron account in several ways. *Pace* Gerschenkron, who argued that the "relative backwardness" of Germany was not significant enough to involve the institution of the state, Tilly is evidently keen to point out an important role for the state in the development of German

²⁵ For a highly readable account of the indebtedness law, also called "Hardenburg's Time-Bomb" see Christopher Clark (2007).

finance. This "early Tilly" all the same mobilized Gerschenkron insofar as the historical timing of leading industrialization technologies—railroads and the their ancillary industries—were important in the determination of "mixed-banking." The relatively large volume of financial capital required still has a role to play in calling forth the institutions that funnel it from source to destination.

Perhaps one of Tilly's most important contributions is to find fault with the implicit Gerschenkron argument equating the "Great Berlin Banks" (Berliner Großbanken) with the distinctiveness of universal banking circa the post-unification period (1870s–1914). Tilly suggests that the roots of universal banking practice began as early as the 1830s in the Rhineland. Basing his argument on solid archival evidence, Tilly reasons that this "mixed-banking" even predates the unification of commercial and investment banking in the 1850s with the early proliferation of joint-stock and commandite banks. Early private banks were the first financial intermediaries to combine commercial and investment practices together. Among them the Abraham Schaaffhausen and the Salomon Oppenheim private banks in Cologne (Tilly, 1966: Chapter 8), who would both then transport the associated activities into the joint-stock banks which they founded. Finally, the "early Tilly" is also very ambivalent about the role of banks and financial intermediaries in economic growth and industrialization. He does not find clear evidence to suggest that financial institutions had a decisive causal role to play in stimulating the "real" side of the economy—that is as a decisive influence in the process of industrialization. This casts further doubt on the ability of the banks to act in the Gerschenkronian functional manner of stimulating the "Great Spurt" or "second wave" of German industrialization.

The analysis of the early Tilly shares with Gerschenkron a fundamentally functional theorization of the development of universal banking. The ultimate theoretical connection that Tilly makes between financiers and "mixed-banking" basically *assumes* the emergence of a practice to fit an existing economic need: agency follows a simple path of least resistance. In the concise formulation of two scholars who essentially agree with Tilly's account: "[banks] had to adjust their liabilities to fit the *necessary* asset structure, that is, they... engage[d] in the *remaining* promising business of financing industry by short-term and long-term credits" (Pollard and Ziegler 1992: 29, my emphasis). This explanation takes for granted what needs to be explained if we are to treat the institutional structure of "mixed-banking" as problematic. By simply positing that this was a profitable avenue of business and that financiers stepped into

that void, we are not left with any real understanding of why it is that they decided to do something that was fundamentally different from their peers. We are left without a theory of this interesting new form of *historical financial agency*.

Indeed, if Tilly's assessment of the chronological commencement of this practice is correct, then we must recognize that engaging in large-scale industrial finance was a fundamentally strange type of behaviour for these early private bankers. Indeed, the literature is replete with evidence to suggest that the "financial system" in the German states, until roughly the middle of the nineteenth century, was largely dominated by the business of mercantile (trade) and government finance (inter alia Born, 1983; Engberg, 1981; Feldenkirchen, 1991; Kindleberger, 1993; North, 1997; H. M. Pohl, 1982a; idem, 1982b; Ziegler, 1997). Thus the combination of investment and commercial banking, no less industrial financing, by Rhenish bankers in comparison to their competitors and peers—both internationally (across Europe), but also within Prussia (and the other German states)—was a highly "peculiar" turn of events. When the earliest "mixed-banks" began to practice this way, they engendered a social rationale which was sociohistorically novel. To attribute this to the profit motive surely captures some aspect of this behaviour accurately—if it had not held some promise of profit, or had not at all proved profitable, then financiers would most likely not have pursued it. Nonetheless, profits were to be had in other segments of the financial sector, and the mentality of many investors was predominantly conservative²⁶ in the sense of avoiding catastrophic hazards to accumulated wealth. In this way, it is important to harken back to Tilly's Schumpetarian inspired maxim that credit creation is not sociopolitically neutral in its consequences. We may also need to tarry with the notion that that credit creation may not be sociopolitically neutral in its origins. Taking this suggestion seriously requires acknowledging the insulation that is created in Tilly's account between the "economy" and "polity," and that a proper account of this agency may require un-thinking many of the assumptions that a priori separates what is "economic" from what is "political."

²⁶ In the contemporary economics parlance "conservative" translates as "risk averse," but I would use this non-euphemistically here as a general *political* term.

²⁷ We may wish to further suggest between "economy" and "society."

Asymmetric Information and Perfect Markets

Tilly's thought in the intervening time since he published his earliest research on the German banking system has moved even further in the direction of isolating the "political" from the "economic." In the mid-1980s, Richard Tilly learned of and appropriated the nascent theory of "asymmetric information," along with comparable elements from NIE, in order to interpret and explain the origins of "mixed-banking" in Germany. Continuing from the evaluation of Tilly's early work in the last sub-section, I now demonstrate how the continuing ontological and phenomological separation between "economics" and "politics" in Tilly's work, if anything strengthened by the importation of the "information theoretic" approach, poses serious challenges to a theoretically controlled appreciation, and interpretation, of the development of German universal banking.

Markets for sub-standard goods

The new informational economics, despite being only a slightly modified approach to all of the classic elements of "the dismal science," is actually a relatively novel reinterpretation of quintessential aspects of the "marginalist school" of neoclassical economics. Almost all of the basic assumptions remain the same—methodological individualism, instrumental rationality, equilibrium price theory, marginalism and stable preferences (Fine and Milonakis, 2009: 63)—except for the perfect information postulate—that *fictio juris* where all agents in the market have an encyclopædic knowledge of all commodities.

What had been termed "market failure" by classical and neoclassical economics was usually oligopoly and monopoly conditions within the market—impediments to perfect competition. "Information theoretic" scholars have dubbed these kinds of market breakdown "the old market failures" (Stiglitz, quoted in Fine and Milonakis, 2009: 57). Classical and early neoclassical theorists rarely considered other types of market failure. In order to overcome many of the contradictions between theory and empirical data, the idea of "externalities" was mobilized in order to explain inefficient outcomes in markets (Screpanti & Zemagni, 2005: 400, 403). Essentially, an "externality" occurs where an agent not party to contract can impose an inefficiency on a market-outcome. This is a variation of the idea of a "non-profit" motivated government intervening in the economy and disturbing the egoistic equilibrium of its participants (usually, to the detriment of all). What is crucial to note is that the idea of "externality" mobilized by

neoclassicals allowed them to maintain their grasp theoretically on the idea of "perfect markets" (despite the widespread evidence of monopoly and oligopoly). Inefficient outcomes were not a problem with underlying "perfect markets," but rather a problem of something *exterior* to the eternal logic of the market. This "exterior party" to contracting market participants intervened in the market process and spoiled the otherwise pristine equilibrium wrought by forces of supply and demand. The concept of "externality" is not terribly useful for concrete historical and social research, because it mobilises something that is unexplained, and *left unexplained*, according to the central theoretical logic of analysis. That is to say, it simply displaces the contradiction experienced from the incongruity of theory and empirical data to a third category which serves as something beyond analysis, un-theorizable and purely contingent.²⁸

50

Information economics by contrast can largely do away with the concept of "externality" because it has developed a different understanding of market failure and its relationship to those aspects of the social world "exterior" to the pure logic of markets. Stiglitz has dubbed these "new market failures" (Stiglitz, quoted in Fine and Milonakis, 2009: 57), and they assume as generally, or frequently, operative the notion of imperfect and/or costly information and incomplete markets. In the face of such imperfection, however, "rational actors" will take the opportunity to create institutions that serve to either make information more symmetrical or complete markets. The radical nature of this proposition arises because it has popularized the acceptance by otherwise orthodox economic theorists that markets may often operate in an imperfect manner. Furthermore it allows economists to extend the purview of their discipline into other disciplines by suggesting that institutions and social relations are the result of rational actors attempting to perfect the market mechanism (Boldizzoni, 2011).

George Akerloff's "Market for Lemons" (1970) provides an excellent example of this kind of reasoning.²⁹ The market for lemons is, first of all, *not a market for citrus fruits*. For the uninitiated, "a lemon" in North American parlance, is a used-car that has a hidden defect, or is actually a pile of junk masquerading as a legitimate means of carbon powered locomotion. Secondly, according to Akerloff, seemingly perverse effects might occur in the market for used cars if all of the neoclassical assumptions were observed. Akerloff explains by asking us to

²⁸ "Stochastic" is the term most likely to be used by my disciplinary interlocutor in this kind of circumstance.

²⁹ This article serves as one of the popular touchstones in the "information theoretic" literature and a key source for Tilly's re-interpellation of German finance.

51

Suppose (for the sake of clarity rather than reality) that there are just four kinds of cars. There are new cars and used cars. There are good cars and bad cars (which in America are known as "lemons"). A new car may be a good car or a lemon, and of course the same is true of used cars.

The individuals in this market buy a new automobile without knowing whether the car they buy will be good or a lemon. But they do know that with probability q it is a good car and with probability (1-q) it is a lemon; by assumption, q is the proportion of good cars produced and (1-q) is the proportion of lemons.

After owning a specific car, however, for a length of time, the car owner can form a good idea of the quality of this machine; i.e., the owner assigns a new probability to the event that his car is a lemon. This estimate is more accurate than the original estimate. An asymmetry in available information has developed: for the sellers now have more knowledge about the quality of a car than the buyers. But good cars and bad cars must still sell at the same price—since it is impossible for a buyer to tell the difference between a good car and a bad car. It is apparent that a used car cannot have the same valuation as a new car—if it did have the same valuation, it would clearly be advantageous to trade a lemon at the price of new car, and buy another new car, at a higher probability q of being good and a lower probability of being bad. Thus the owner of a good machine must be locked in. Not only is it true that he cannot receive the true value of his car, but he cannot even obtain the expected value of a new car...most cars traded will be lemons, and good cars may not be traded at all...the bad cars sell at the same price as good cars since it is impossible for a buyer to tell the difference between a good and a bad car; only the seller knows. (Akerloff 1970: 489)

Akerloff is arguing that if buyers of vehicles were privy to sufficient information and could assess in advance of purchase the quality of the cars they were buying, then the price for "lemons" would decrease, and the price for "good" cars would increase. Without this information, sellers know that the value of their "good" cars will not be reimbursed in the market so they do not sell. Purchasers of automobiles will not buy automobiles because they know in advance that all of the automobiles are "lemons." Consequently, the market for used automobiles will cease to exist!

What is very interesting is the turn that the argument makes following this reasoning. Akerloff avers that the sellers or consumers will actually take the opportunity of market failure to *create institutions* that will enable them to overcome market imperfections.³⁰ Akerloff forwards several institutions that have such origins: product guarantees for consumer durables, brand names (which supposedly therefore suggest a certain level of quality), franchising (which creates a network of offices where quality complaints may be reported), and licensing. In all of the examples that Akerloff notes, it is most likely immediately apparent to the reader that our "information theoretic" author has presumed what he means to explain. The institutions Akerloff enumerates are

³⁰ Akerloff actually articulates the development of new institutions in a much more passive fashion. He suggests that institutions will "arise" in order to counteract this type of market failure.

assumed to have arisen in order to satisfy, or perfect, markets for specific goods. This suggests an odd relationship to the history of these types of institutions.

If we do not take Akerloff at his word, and instead interpret his formulation "loosely" then we might suppose that he really intended that these particular institutions did not *arise* in order to solve market imperfections. Rather, they may have arisen as the result of other activities—economic, political, social or otherwise, but produced the consequence of "perfecting markets" for specific products in an entirely unintentional fashion. This speaks only to one aspect of these institutions' continued function and very little to their development or evolution. It should be clear from this latter, looser interpretation that the deductive reasoning presented in Akerloff (1970) is therefore not terribly useful for the direct understanding of the development of *specific institutions*.

Information Asymmetries in Rhenish Finance

Tilly began in the 1980s to draw on theories of information asymmetry in financial intermediation in order to provide a more comprehensive theroretical account of "mixed-banking." Tilly's first explanation for the development of "mixed-banking" is overly reliant on the state as the indirect facilitator of this institutional form. Without the state intervening in the economy, and inhibiting the ability of "private" actors to pursue profit-oriented business with issuing banks, the development of Germany's distinctive banking system would not have been possible. The substance of Tilly's assessment of the state's role in developing "the mixed-banking programme," is ultimately one of a permissive condition. As I explained in the section on Tilly's early work this must then assume what it needs to explain.

Through a series of different papers Tilly has developed upon his earlier interpretation by applying the theory of information asymmetry (Tilly, 1986; *idem*, *idem*, 1989; *idem*, 1992; *idem*, 1994; *idem*, 1995; *idem*, 1998). This has led him to criticize the pure Gerschenkron typology as amounting to little more than "economic backwardness plus historical inertia" (Tilly, 1998: 10). By contrast the work of asymmetric information scholars (Akerloff, 1970; Stiglitz, 1985; Diamond, 1984) according to Tilly provides a theoretical account of early German financial practices that has a "rational core."

Financial intermediaries' role within the economy is to provide finance for industrial projects. Being profit oriented, they charge a certain price for this finance, as indicated by the interest rate on loans. The difficulty arises because of the unevenly

possessed information between those seeking finance (borrowers—entrepreneurs, those with industrial projects) and the financiers (lenders). Borrowers have a much better idea of their capabilities, intentions and possibilities than do lenders. Consequently, there is the possibility of "moral hazard": essentially, that those receiving loans will not pursue reasonable, safe, the least risky or most assured path to success in completing their industrial project. When borrowers are uncertain about the amount of risk that a particular loan entails they "naturally" seek conditions in order to improve the assurance that they will not only accrue interest payments, but also receive their principal back. In the event that few or insufficient conditions can be put on loans, or that such conditions as may be imposed do not ameliorate the perceived riskiness of investment projects, the interest rate across the market will rise as all investment projects are assessed in accordance with the least successful in the economy. That is to say, the interest will rise above the level that risk averse entrepreneurs with "sound investment" plans will be willing to pay for loans. The market interest rate will be determined by those investment projects that are "sure losers." Consequently, those projects that actually do seek loans at such a high rate of interest will most likely be perceived as risky business—after all, why would a risk averse entrepreneur with a sound business plan be willing to pay the usurious rate of interest that the market charges? Therefore, a market for industrial loans would according to this logic cease to exist.

This model is of course formulated upon the idea of a market for loans that envisions participants related solely by contract—i.e. a stock market as imagined in relation to the Anglo-American typology of market based finance. Those providing loans do so without any previous knowledge of the borrower; a situation which does not hold for universal banks. Economists have mobilized this simple deductive exercise in order to suggest that the universal programme of banks—the combination of investment and commercial business is simply a way of reducing the units of risk incurred in relation to the price of loan contracts (cf. Cable, 1985). When banks have better information about their clients, they can price loans (set interest rates) higher or lower based on a better assessment of the risk that the loan carries, as well as assess whether or not such clients present potentially profitable long-term investments for securities flotation.

Richard Tilly has mobilized this logic in order to explain the combination of "mixed-banking" activities of even the earliest private financiers in the Rhineland (Tilly 1986; *idem*, 1989; *idem*, 1992; *idem*, 1999). Quite simply, by combining current

account facilities (commercial banking) with large scale loans and securities business (investment banking) early private bankers were able to better assess the riskiness of specific investment projects. By developing the institution of "mixed-banking" private bankers overcame the conditions of capital "market failure" in the early nineteenth century Rhineland and thereby spurred industrialization by facilitating market transactions.

54

In some ways this does seem to provide a rational core to the institution of "mixed-banking." This interpretation suggests that universal bankers were indeed rational market actors. Despite being confronted with a situation that might impede their continued or expanded profitability, they inaugurated an entirely new economic practice to help them overcome this setback. On the surface, this is relatively appealing as a parsimonious explanation. It does not reduce the institution of universal banking to an externality of the economic process. Indeed, it specifically brings it within the purview of the theoretical framework. Nonetheless, it is misconceived insofar as it purports to capture the rational core of "universal banking," because it reduces this rationality *a priori* to a strict market rationality.

This explanation is a far cry from Tilly's earlier recognition that credit, amongst other economic institutions may not be politically neutral. Indeed, the explanation in relation to information asymmetry specifically reduces the political or social input into the construction of this particular institution and deepens the sequestration between the economic and the political that Tilly created with his initial explanation. Tilly seemingly overlooks the evidence that the early railroad financiers he himself highlights as the progenitors of "mixed-banking," while they may have wished to reduce the uncertainty of speculation, most likely engaged in this financial practice for multiple other reasons as well.

Early railroad financing was a wildly expensive endeavor, and surpassed the limited means of individual private banking houses. In order to amalgamate the required capital, individual private banking houses would form together in syndicates that could pool large amounts of financial resources (Tilly, 1989; *idem*, 1986; *idem*, 1966). This pooling served the function of being able to underwrite enormous amounts of equity from these early railroad companies. Subsequently, the syndicates would then undertake to find purchasers for all of this equity (this is the business of floating equity). In many cases, not all of the shares could be necessarily immediately subscribed, in which case the remaining shares would be kept by the bankers in the syndicate in their own

portfolios until they could sell them to securities markets. While holding these shares, however, their price could fluctuate in the secondary market based on the fortunes, or business prospects of the company. Ideally, these banks preferred to retain these extra shares until such a time as they could sell them for a greater amount than the intial issue price (what the first round of shareholders paid for their equity in the firm). Bankers would not want the price of the share to decline as this could then involve enormous losses for them. By maintaining current account and deposit business (commercial financial practices) with these same firms, banks could indeed monitor the "riskiness" of the firm in order to assess whether underwriting a securities issue would be a safe bet. Essentially, combining commercial banking and investment banking allowed banks to gain informational economies of scope. With the extra information provided by regular commercial banking business, banks could assess whether firms paid their bills in a timely manner. However, this does not hold in relation to early railway companies in the Rhineland. These firms needed investment finance before they could be founded, and they had no commercial credit relations prior to foundation. Ergo, Tilly's explanation can present a potentially ex post facto activity of risk reduction, after the firms were founded, but not before. Consequently, this logic is no explanation for the combination of investment and commercial finance in one bank.

In extending his analysis of the foundation of "mixed-banking" into information asymmetry, Tilly has also augmented his account of the role of the state in relation to these financial institutions. While Tilly's early work was largely focused on the 1815-1870 period, his later writings also aim to account for the period up to the First World War (Tilly, 1986; *idem*, 1989) and sometimes even the Second World War (Tilly, 1992; *idem*, 1994). In particular Tilly argues for a central role of the Prussian state in creating financial legislation in the last quarter of the nineteenth century which consecrated universal banking in the financial system more generally (Tilly, 1999; *idem*, 1986). Here the role of regulations introduced in 1881 (stamp tax on securities), 1884 (tighter regulations for securities issuing), 1896 (the Stock Exchange Law), secured the role of the universal banks vis-à-vis other actors in the financial system (stockjobbers, private bankers, savings banks and credit cooperatives). The universal array of services provided by the big Banks became further enshrined when the *Reichsbank* was made an effective lender of last resort: this created a division of labour between the universal banks who engaged in industrial finance, and the *Reichsbank* that focused on pure

56

payments. Moreover, the Reichsbank provided a liquidity guarantee allowing the universal banks to rediscount when a lock-up of their assets was threatened.

Despite Tilly's early recognition of the sociological significance of credit, and the permissive role of government intervention in the economy, he has consistently aimed to explain the actions and behaviours of financiers as a function of the "economy," or as subject to an "economic" rationality separated from the rest of social reality. Tilly's analysis warrants such extended coverage because it has proved largely persuasive for many economic historians, and is the accepted explanation for universal banking in contemporary economic history (Burhop 2006a; Da Rin, 1996; Ziegler, 2005a; Guinanne 2002; *idem*, 2001).

CAROLINE FOHLIN: MARKET-LED REVISIONISM

As I have demonstrated thus far, the literature suffers a serious lacuna in its ability to provide a theoretically controlled explanation for the form of German finance as a universal banking system. While the rise of Tilly's "information theoretic" casting of the history of "mixed-banking" has gained a certain level of distinction, in a number of papers since the mid-1990s Caroline Fohlin has begun to cast doubt on this interpretation. In particular, Fohlin has laudably aimed to increase the attention which researchers give towards the political, legal, social and cultural forces in the constitution of the financial system and Germany's in particular (Fohlin 2012; 2007; 2000; 1999: 335). Despite this admirable advance, if we are to espouse the conclusions of Fohlin's writing, then we should be drawn away from financial system differentiation itself. This has arisen because on balance Fohlin has concentrated her scholarly efforts on testing hypotheses about German growth in a strictly economistic fashion. In other words, problems of methodology prohibit Fohlin from directing her attention towards the most significant interpretation of the evidence. While she accurately highlights the need for more sustained research into the social aspect, on balance her work reaches a cul-de-sac in recognizing the importance of social, political and legal aspects, without being able to account for them.

To begin, Fohlin has made the critique of the Gerschenkronian paradigm perhaps the central animating idea of her work (Fohlin, 2007: chapter 1 & 2, 330; *idem*, 2002a; *idem*, 2002b). In particular, one of her key arguments is that "German banks may have developed as a result of such factors [social, political and regulatory environments], rather than as a *natural* response to economic backwardness" (Fohlin,

1999:306, my emphasis). Chief among the faults that Fohlin finds with the Gerschenkronian paradigm is the historical anachronism that "universal, relationship banking developed after the first wave of industrialization" (Fohlin, 1999: 311; cf. *idem*, 2007: 45). Furthermore, Fohlin advances in particular the idea that the joint-stock form is a key element of the historical continuity of "universal banking." Prior to this legal-institutional innovation there was no securities business—no shares or equities to float. Moreover, the accumulation of supervisory board seats by German banks was impossible prior to joint-stock banking because this element of corporate governance was a key aspect of limited liability from the 1870s onwards through the proxy voting rights (*Depotstimmrecht*) awarded to banks that held shares deposited with them on behalf of customers. Finally that extensive branching also occurred during the last quarter of the nineteenth century (although she suggests that this is not inherent to the concept of universal banking).

Fohlin argues that Tilly's connection of the early private "mixed-banks" with the "universal banking" characteristics à la Gerschenkron is problematic because the majority of early private bankers engaged more consistently in government finance and mercantile credit (Fohlin, 1999: 311). This is indeed accurate, but sidesteps the marginal few private bankers which Tilly highlights to have definitely engaged in this practice. In Fohlin's more recent work she does not even return to this earlier proposition. Indeed, she attaches so little weight to Tilly's argument for the commencement of an early form of "mixed-banking" in the 1830s that she later begins her revisionist chronology specifically with the early joint-stock banks in the 1850s (Fohlin, 2007: Chapter 2).

Fohlin might argue that early "mixed-banking" does not itself require an account because it clearly did not occur under the "joint-stock" form of legal organization and it was clearly not the early "mixed-banks" that Gerschenkron hypothesized had the monumental impact on the German economy. Arguing that a strict interpretation of the Gerschenkron "paradigm" is anachronistic in this way presents a couple of problems. Firstly, in relation to the development of financial system structure, Fohlin has actually failed to make a strong case that there is no "economic" argument for the development of a differentiated system. When Fohlin argues that the joint-stock form of banking is the most significant element of continuity, she is implicitly choosing this particular characteristic because it most closely matches with Gerschenkron's own account. Nonetheless, Tilly's account which links a continuous form of organization between the early "mixed-banks" and later joint-stock banks may still present important insights into

the development of German universal banking. Fohlin's dismissal is only legitimate if we are attempting to examine the Gerschenkron hypothesis, and universal banking *per se*. Fohlin has also missed the potential significance of the early "mixed-banks" because she so strongly aims to disprove Gerschenkron. Recall that in Gerschenkron's account he places the significance of financial structure differentiation on its functional ability to raise large volumes of capital and therefore bring about industrialization. Fohlin, attempting to test this proposition as equivalent to the ability of our late nineteenth century "joint-stock" banks singularly ignores the earlier "mixed-banking" institutions.

Fohlin leaves us with only an implicit, anodyne, narrative in relation to the development of universal banking in Germany: the universal banking system arose in tandem, and evolved with the changes in the industrial system (Fohlin, 2007: Chapter 4, 331-333; Fohlin, 1997). Moreover, Fohlin argues that securities markets were an integral part of Germany's banking system (ibid: Chapters 6 and 7, 336-341; Fohlin, 2002). Consequently, and therefore against the idea of bank-based finance, Fohlin argues that the dichotomy between banks and markets is a false one. In dismissing this depiction of German finance, she simply implies that markets were prevalent, and the driving force behind the development of universal banking.

In summation, the historical narrative of, and explanation for, the origins of universal banking that Fohlin provides us with as a revisionist critique of the existing literature fall short. Crucially, her narrative relies on problematising the role of legal-political and social externalities in influencing the development of the universal banking system, without explaining what or how exactly these might function.

CONSTRUCTING GERMAN UNIVERSAL BANKING

In direct opposition to the naturalizing tendencies of the above evaluated approaches, Richard Deeg has attempted to present a social constructivist account of the development of universal banking in Germany. By putting social and political conflict at the centre of his account (Deeg, 2003; cf. *idem*, 1999). Deeg has specifically aimed to avoid functional explanation, by incorporating sociopolitical struggle, and context in his account of the rise of a system of universal banking.

The primary criticism of Deeg's analysis is the overwhelming emphasis on the Big Berlin Banks (*Berliner Großbanken*) that occurs throughout the other literature here discussed (Deeg 2003; *idem*, 1999; *idem*, 1996). In particular, Deeg advances the idea that it is the competition that occurred between the three pillars of the German financial

industry that ultimately brought about the form of a universal banking system where all banks provided both commercial and investment business. Deeg further argues that the differences in customer specialization between the different banking industries corresponded to spatial and class cleavages (the former marked by centre and periphery). Deeg posits that "conflicts across these cleavages promoted the formation and extension of alternate banking systems" (Deeg, 2003: 101).

59

Deeg is careful to outline the fashion in which the institutions of universal banking were spread from one segment of the German financial industry to another; however, his account pays very little attention to the genesis of the practice of universal banking in the corporate banking sector. The struggles between the different pillars are indeed a requirement to chart the diffusion of universal banking throughout Germany's financial landscape, however, Deeg simply accepts the information asymmetry account for why it is that universal banks arose in the for-profit sector. Laudably Deeg delineates the way in which the unintended consequences of adopting various institutional measures or responding to market competition altered the practices of the different banking sectors as they reacted to newfound competition.

Deeg's account brings us slightly too far in the opposite direction from the other authors discussed in this chapter. It is commendable that Deeg aims to inject a greater amount of agency into the history of "universal banking," by following social and political contestation between regions and socioeconomic groups. Unfortunately, here as well we do not get much of a proper sense of the historical necessity of why it is that "universal banking" was the outcome. In fact, Deeg reduces his account to such a strict focus on the different types of banks, that we are left in some cases with a seemingly voluntarist understanding of different financial system outcomes.

For example, Deeg largely ascribes to a similar account of the development of "universal banking" practices as the early Tilly insofar as he posits that the key prerequisite for the "joint-stock" banks to become universal lay in the liquidity policy of the Prussian Bank (Deeg, 2003: 97). As I pointed out previously, this is little more than a permissive condition and says very little positively about why it is that this practice was adopted. Similarly, when Deeg discusses the adoption of investment banking functions by the savings banks he simply notes that the legal prohibition (by Länder governments) was removed from such activities because the hyper inflation of the 1920s had eroded their traditional savings business. Why is it that they began financing industry? Why not engage in any other number of short-term commercial financial

activities? The adoption of any strategy other than industrial investment business would not have classified them as a "universal bank." Consequently, there needs to be further specification of why such a strategy was taken.

Deeg avoids many of the pitfalls of a "naturalizing" logic in order to explain the development of the German financial system. His strategy of a loose constructivism that postulates social and political conflict fails to identify the specific reasons why "mixed-banking" developed as it did first amongst private bankers before being transmitted to joint-stock banks and ultimately graduating to its universal moniker. Without an explanation for why for-profit banks originally adopted universal banking, an essentialist conception of "the economic" is maintained at the heart of this constructivist account.

THE NARRATIVE COMPONENT

Historically-empirically, the discussion of the literature on German banking therefore identifies four key transformations pertinent for the development of universal banking. The establishment of (1) early "mixed-banks;" (2) the transposal of "mixed-banking" from private to corporate banks; (3) the generalization of joint-stock "mixed-banking;" finally, (4) the introduction of the deposit business. These transformations are differently stressed in the scholarship dependent on scholars' focus on necessary or sufficient features for the operation of universal banking as either abstract or concrete. As this thesis treats both abstract and concrete universal banking as explananda, all of these historical conjunctures require delineation.

Firstly, (1) private bankers in the Rhineland initially developed "mixed-banking" around the 1830s. This initial foray of combining commercial and investment banking was undertaken so that investment might flow to building Germany's railroads—the leading sector of industrialization. This practice supposedly "made economic sense" because it allowed bankers to prevail over existing information asymmetries. The regular flows of information provided about customers by insight into their short-term credit needs (through current accounts), allowed "mixed-bankers" to judge whether the same borrowers would be a credit risk, or potentially lucrative enterprises worthy of investment in the long-term.

These private bankers supposedly experienced difficulties underwriting equities issues, requiring them to form coalitions of financiers (in syndicates) in order to underwrite securities floatations. This *necessarily* led to the two subsequent "foundation

waves" of joint-stock universal banks: the first from (2) 1848-1857, and the second from (3) 1869-1873. These foundation waves saw the transposal of "mixed-banking" from private banks with unlimited liability to corporate banks with limited liability. According to Tilly's reasoning, these banks were established as joint-stock companies to (a) increase their available capital in relation to the (b) exponentially augmented needs of large industrial firms (like railroads), and (c) thereby forego the difficulties of organizing syndicates for underwriting on an *ad hoc* basis while institutionalizing their advantages in one organization. In short, this institution was adopted because it reduced transactions costs (Tilly, 1989; Ziegler, 1997; Dahlem, 2009). In the process of corporate consolidation following the second foundation wave, (4) the large corporate universal banks in Berlin began to introduce deposits as a manner through which to increase their capital.

In order to chart the influences institutionalizing universal banking over these four separate conjunctures, it is necessary to turn to a historical sociology of financial development. This entails principally recognizing that economic and political behaviour are always rooted in dynamic social relationships. To study these social relationships in their historical dynamism, it makes more sense to chart them in relation to concrete contexts rather than prejudge them in relation to an *a priori* theoretical framework. In other words, the "history is the theory" (Knafo, 2013). Following this maxim, the discussion pertaining to each of the above-itemized four conjunctures tightly intertwines theoretical reflection *within* the historical narrative. Through this recounting of pivotal conjunctures, the operation of power amongst historical social actors, can be made visible, and thereby accounted for every step of the way. In short, this thesis traces the historical social relationships of the German corporate banking sector and its forebears in long-term historical perspective.

CONCLUSION

This chapter has surveyed the literature that theoretically considers the development of universal banking in Germany. The balance of the analysis delivers us with a theoretical puzzle that plays itself out over four different historical conjunctures. Beginning with Gerschenkron, the authors studied here all, in one way or another, presume what they seek to explain. Gerschenkron assumes the automaticity of universal banking's emergence in relation to backwardness. Tilly forwards an efficiency justification for universal banking in terms of asymmetric information, but then simply

projects this onto the action of Rhenish financiers. Caroline Fohlin presents some important historical inconsistencies in the information theoretic account, namely, the later emergence of features like deposit banking, and the dynamic nature of securities exchanges. Moreover, she also accurately posits the importance of social, political, legal and historical "factors." Nevertheless, she never spells out why it is that deposit banking emerged when it did, or how the aforementioned extra-economic factors concretely came to play a role in shaping the institution of universal banking. Indeed, despite the overt tribute to factors extra-economical, Fohlin never discusses them, except as exterior forces buffeting market dynamics. Consequently, Fohlin presumes—or perhaps very strongly implies—that the development of universal banking was ultimately a market-led affair. Finally, Richard Deeg has provided a very worthwhile first cut of a constructivist account of universal banking's development; however, because he assumes that the hard economic core of this institution more or less matches the asymmetric information justification, he fails to provide a constructivist account of the emergence of universal banking. Furthermore, his account of the spread of universal banking to the savings and cooperative banks is accordingly not "constructivist" enough. The competition between the different pillars of German finance that Deeg describes helped to shape the ongoing evolution of universal banking in the corporate financial sector: universal banking was not yet a discrete coherent institution ready for export from the for-profit banking sector until at least the outbreak of World War I. Ergo, Deeg also presumes exactly that which he seeks to explain.

PART II

STRUGGLE OVER INDUSTRIALIZATION

CHAPTER 2

Universal Banking avant la lettre, 1750-1844

The early development of "abstract" universal banking

"The speculative merchant exercises no one regular, established, or well-known branch of business. He is a corn merchant this year, and a wine merchant the next, and a sugar, tobacco, or tea merchant the year after. He enters into every trade when he foresees that it is likely to be more than commonly profitable, and he quits it when he foresees that its profits are likely to return to the level of other trades...men of speculation, whose trade it is not to do any [one] thing, but to observe every thing; and who, upon that account, are often capable of combining together the powers of the most distant and dissimilar objects." 31

"Under the term 'Speculation,' he understood not risky, but rather *long-term* transactions. 'Speculative' was not a synonym for irresponsible, hazardous, or likely to generate losses...the negative connotation of the term speculation was less common to contemporaries [of the early 19th century]."³²

INTRODUCTION

The focus of this chapter is the earliest episode in the historical evolution of Germany's universal banking system. It examines the unintended development of abstract universal or, "mixed-banking," by private bankers in the Prussian Rhineland during the German Pre-March (*Vormärz*) era.³³ "Mixed-banking" was that successful combination of long- and short-term lending that, according to Tilly (1986; *idem*, 1966) would eventually be practiced by the *Berliner Großbanken*. While recent scholarship has demonstrated that "mixed-banking" does not correspond to the concrete practice of universal banking as it existed during the Kaiserreich (Fohlin, 2007: 4-5), this earlier, more informal combination of commercial credit with issuing services for industrial firms nevertheless exhibits powerful continuity with those financial practices of the incorporated universal banks in the late 19th and early 20th centuries.

64

According to asymmetric information theory, the combination of commercial and investment banking was undertaken in the context of railway finance because of the economies of scope in information gathering that could be garnered through the amalgamation of short and long-term financial services (Tilly,1998; *idem*, 1995; *idem*, 1992). This explanation grounds the mixing of these financial services in their economic

³¹ Adam Smith (1776, quoted in Engel (2013)).

³² Fritz Seidenzahl (1960: 86-7), describing David Hansemann's understanding of "speculation" viz. financial activities

³³ This was the period following 1830, but before the outbreak of revolution in March 1848.

efficiency; however, in the case of financing for Germany's "leading sector," railroads, such strictly economic efficiency is likely only to have been gleaned after the fact. Railroads as a form of technology in the 1830s were beyond novel. In the 1820s, rail lines were used with horse drawn carts (which was apparently faster than horses travelling over paved roads), and the idea of steam trains seemed to contemporaries beyond bizarre (Brose, 2013; idem, 1993). The promotion of the first railroad companies involved not only a largely untested technology, but also persistent failures to accurately project costs, and a great deal of skepticism that those costs could ever be amortized over normal operation (Brose, 1993: 216-220). In short, investing in railroad companies was a highly uncertain prospect during the 1830s. Contemporaries of this period did not possess the formalized mathematical or technical knowledge to calculate risk as the information theoretic position suggests. Moreover, the untested nature of railway technology would have prevented any potential calculation if they had had the means to do so! Most problematic of all, however, is that the key mechanism highlighted by Tilly and others (inter alia Tilly, 1998; Ziegler, 1997) to have provided the informational window on firms' potential profitability, the current account, could not have played the role suggested by the theory. When Rhenish bankers undertook to found new railway firms, those firms had no prior or existing current account relationship with these banks. Therefore, the promotion of new railway companies, and the concomitant issuing of their securities was undertaken blindly. In fewer words, information asymmetry puts the cart before the horse, and ergo presumes what it seeks to explain. If bankers were as rationally calculating actors as the asymmetric information theory presumes, and they did not unduly accept risk, then why did Rhenish bankers, in particular from Cologne, engage in securities issuing for a highly untested, wildly uncertain endeavour such as the founding of railroad companies? To recount the historical development of abstract universal banking in a theoretically sensitive manner, requires understanding why it would have made sense for bankers to perform such investment banking services ex ante, before they knew that railway investment would certainly pay-off. The accepted historical details of railway company foundation suggest there is little way to understand such behaviour if we limit our analytical lens to economic efficiency.

The asymmetric information scholarship has also made much of the geographical origin of "mixed-banking" in the Prussian Rhineland, yet without explaining why it crystalized in this particular region. Why did it not develop in the

66

more "advanced" financial centre of Frankfurt? Scholars in this tradition have implied that the relative density of industry in the hinterland around Cologne helped to support the turn towards the most efficient means of industrial financing (e.g. Ziegler, 2005a), whereas Frankfurt had already specialized in government finance. The hinterlands around Frankfurt, while further from areas such as the Ruhr, nevertheless had industry and some bankers in Frankfurt even tentatively began investing in industry in the 1830s (e.g. the Bethmanns, see below). However, the predominant business model for private banks in Frankfurt remained that of government issues (Holtfrerich, 1999; North, 1997). Why did the bankers of Cologne, and not Frankfurt, pioneer the combination of short and long-term financing characteristic of "mixed-banking"?

In order to fully appreciate how it is that the first "mixed-banks" originated, it is necessary to situate the activity of German financiers in their specific historical social context. Pivotal for achieving this is dissolving the a priori theoretical assumptions that have guided research heretofore. In particular, it is crucial to jettison the assumption that an economic institution such as universal banking might only be connected to, or influenced by, economic aspects of social action, and not the social world more broadly. Doing so, and casting a wider net into the connections of German financiers to their surrounding social milieu underscores that the struggle over social change in Germany, namely the struggle over the direction, extent and form of industrialization, was the defining aspect of financiers' social purpose. This was not an economic struggle in the marketplace conducted by means of price and quantity changes, or reduction in transaction costs, but rather a sociopolitical struggle over the future shape of German society. Curtailing the search for an efficiency based answer to the question of why Rhenish bankers added investment banking to their palette of commercial financial services allows us to understand this activity through the category of speculation. Indeed, it is the ironic leitmotif of this chapter that by abandoning a devoutly economic conception of Rhenish financiers' railway promotion for a political one, we might be better able to see it as an act of speculation. The grave uncertainty, and possibilities for failure associated with such speculation can nevertheless only be made sense of in relation to the social pay-offs that would be incumbent with long-term industrialization.

The chapter argues that the social context of the struggle over industrialization provides the critical foundation upon which an understanding of the first practices of abstract universal banking can be based. In order to develop this idea, the chapter is divided into several sections. Firstly, it outlines the fault lines of transformation in

Germany's social order during the period between roughly 1770 and 1848. This section adumbrates generally the change that occurred in the organization of political space, the growth of social classes vis-à-vis feudal-corporate estates, and the basic normative political programmes that have been the fodder of historiographical literature on the period. In the second section, sense is made of the struggle over industrialization itself. Finally, the chapter examines the development of financial intermediaries in Cologne and Frankfurt.

SOCIAL CHANGE BETWEEN REVOLUTIONS

To grasp the political activity of financiers and bankers between the French revolution and that of 1848, it is necessary to understand something of the changing constellation of social forces in German Central Europe during this time. This was a period of generalized upheaval and transformation. The "old" Germany of the 18th century was composed of myriad different forms of feudal social organization. (Vierhaus, 1988). The basis of this order in hierarchical personalized political relations of fealty and distinct corporate estates began to come under pressure for reform in the 1780s (Shilliam, 2009). This pressure became a more persistent one for modernization during the Napoleonic period (Wehler, 1987), before reaction firmly set in following the Carlsbad decrees. The entirety of the period 1750(89)-1848 can be characterized by an uneasy co-existence between the social institutions of the ancien régime in their persistence with emerging social praxis and forms centred around abstract authority relations (to state and market rather than specific individuals). This was a Germany of growing bureaucracy, "middle class occupations," market relationships, participatory political movements and the impersonal state, with its "subject-citizens." The political activity of German social actors can be sketched under three rubrics: (1) the shifting organization of political space in the "Germany" of this time, (2) the changing nature of social collectivities, (3) the normative programmes of participatory politics. 35,36

³⁴ All of these categories—including the term "Germany"—are in some fashion anachronisms. Nevertheless, they will help assist propaedeutically to organize and understand the social transformations of that time, before we can safely jettison them in order to focus exclusively on financial actors (such outsourcing to historians safely allows them to continue their philological debates about the appropriate terminology while nevertheless giving us the coordinates and "sense" to let us move forward with our understanding of universal banking's development).

I use the term "participatory" here, rather than "formal" because the kind of politics associated with the conservative, liberal and socialist movements of this period were anything but formalized. Widespread state censorship, as well as a lack of representative public political institutions meant that much political thought and activity occurred "underground" or in informal fashion in salons, reading rooms. This also led to a generalized fragmentation of political movements. Consequently, even though it is possible to

The organization of Political Space

In the 18th century, "Germany" was not a solid geopolitical entity, but rather a "ramshackle, invertebrate entity…loosely draped over an array of independent highly diverse territories" with the name of "the Holy Roman Empire of the German Nation" (Blackbourn, 2003: 10). This was a pastiche collection of 350 different territorial sovereignties based on the social order of feudalism. The Napoleonic wars undid this motley assortment, by rearranging it into 38 states following the negotiations amongst the great European powers at the Congress of Vienna. Only four of these 38 political jurisdictions were not dynastic states, while the five largest states were monarchies (Austria, Prussia, Bavaria, Hanover and Württemberg) and the remainder were some form of duchy, grand duchy or principality (Blackbourn, 2003: 72).

There is some rough agreement amongst historians that the Revolutionary and Napoleonic era had initiated a period of reform, or "defensive modernization" (Wehler, 1987; Ullmann, 1987), whereby different groups within the absolutist state recognized the need to reorganize the basis of social and political life in order to better survive the social, political and economic challenges emanating from France and England (cf. Maiwald, 2005 for the latter). These reform activities were numerous. They included the reorganization of property relations through the "freeing" of the peasants; the removal of guild restrictions on employment; fiscal reform (including the creation of regular budgets and the keeping of government books, as well as the issuing of government bonds through markets for the first time (Holtfrerich, 1999; Ullmann, 1990); the "replacement of the personal debts of princes" with a "funded public debt which was based on a central government's legal obligation to pay" (Tilly, 1999: 135); agitation for representative political institutions, as well as the expansion of political institutions in the typical areas where states claimed authority—"security of the borders, public order, taxes, conscription, compulsory schooling, justice" (Blackbourn, 2003: 74). The reorganization of German territory in 1815 created a further reason for the expansion of state institutions as territorial gains needed to be incorporated into existing

talk about a liberal political movement during this time period, there was little of the coordination one would expect from an organized party system (cf. Brose, 1993: 259, 261, 266-9; Sheehan, 1989: 391-450, 588-603; Ritter, 1985).

³⁶ While these three distinct themes can all be analytically isolated to make sense of the field of politicoeconomic action, their delineation necessitates an overlapping, interwoven and crisscrossing presentation. Therefore, while the background history outlined below sequentially follows the enumerated themes, important information arises occasionally in different categories than the reader might anticipate.

administrative mechanisms ("digested"), which included the creation of new institutions, or the coopting of old ones, at the regional, district and municipal levels in the aforementioned areas (Blackbourn, 2003: 72, 74). The reorganization of political space that occurred between the 18th and early 19th century therefore not only exemplified the cementation of more cohesive forms of sovereignty, but was intimately bound up with a transformation in the feudal legal order.

While this "defensive modernization" had been spurred in almost all of the German states by a relatively similar position vis-à-vis the threat of revolutionary uprising,³⁷ not all German states carried through on reform projects with the same methods, nor were they evenly enacted within individual German states (Brose, 2010). Prussia's response to the crisis of revolutionary France began with agricultural reform and rationalization of state domains (including for example coal mines in the new Rhine Province) (Brose, 1993; Wehler, 1987); however, in order to avoid creating a legislative assembly it turned to a fiscal politics of austerity, and a relatively *laissez faire* industrial policy. 38 The southern German state of Baden conducted by contrast a highly interventionist industrial policy sponsoring industry and the construction of railways (Brose, 2010; Kitchen, 1978). In the area of "financial regulation," while Prussia was busy using its patchwork system of concession and royal privilege to effectively prohibit all forms of joint-stock banks in the 1830s (Ilgmann, 2011; Bösselman, 1939), King Ludwig of Bayaria founded a royal joint-stock bank with the intent of sponsoring industry (M. Pohl, 1982a: 35). Furthermore, the reorganization and amalgamation of formerly distinct political territories had consequences for sociopolitical constellations. For example, Prussia's acquisition of the Rhineland province at the Congress of Vienna provided it a political territory that had almost entirely dispossessed the aristocracy and nobility of its holdings of land over two decades of occupation.³⁹ Furthermore, under French occupation, Napoleonic forces had introduced the French Code de Commerce into operation in the Rhineland (1807), which remained in force even after its integration into Prussia. Consequently, Prussia exhibited an uneven regulatory landscape, with French Code de Commerce or "Free Enterprise Law" in the Rhineland, and the General States Law in Eastern Prussia. In practice this meant that there was a

³⁷ Some aspects of the modernisation and state-building projects had been begun already in the 18th century before the threat of revolution from France (see e.g. Ullmann 2005).

³⁸ Increases in state borrowing could only be approved by an elected legislature following Hardenberg's promulgation of the state indebtedness law in 1820 (Clark, 2007).

³⁹ 96 Percent of land was in the hand of "commoners" when it was ceded to Prussia in 1815 (Brose 2013: 112).

system of concession in place for joint-stock companies in the Rhineland, and a system of seigniorial privileges for the establishment of joint-stock companies in the East (Ilgmann, 2011: 14). Overall, the diverse nature of territorial size, natural resource endowment, domestic industries and their sociopolitical contexts across the German states led to a mosaic pattern of economic and business regulation across German Central Europe.

Corporate Estates and Classes

State-building and the institutional augmentations connected with the reorganization of territorial governance had significant consequences for the social power of different classes. Under the society of corporate orders that had existed prior to Napoleon's demolition of the Holy Roman Empire in 1806, social and political power had been organized through chains of personal authority and fealty running hierarchically from monarchs and princes, through the nobility and clergy down to craftsmen and peasants. According to the letter, this was an institutionally rigid social order, where distinct laws existed for different corporate estates that bestowed the rights and obligations of those different corporate orders. In practice there were significant differences in the balance of social power between the different corporate orders across the German lands. Most significantly for our purposes here is to note the hierarchical, and differentiated form of legal identity for different persons and groups under the ancien régime, of which the aristocracy and nobility were the primary legal (and for the most part, material) beneficiaries.

The thirty-four ruling families of the aristocracy—e.g. the Habsburgs, Hohenzollerns, and Wittelsbachs—were left largely unharmed in their direct standing by the state's growth (Brose, 2013: 111), and likely benefited from the expansion of administrative capabilities. The eighty former ruling families (*Standesherren*) of the higher nobility—e.g. Hohenlohes and Sayn-Wittgensteins—that had their right to rule

⁴⁰ The most remarked upon distinction was between forms of sociopolitical power in lands West and East of the Elbe: West of the Elbe, and in Southern Germany are typically referred to as areas of *Grundherrschaft*, and East of the Elbe as *Gutsherrschaft*. In the former, peasant labour duties had largely been commuted to payment in kind, whereas these persisted in the latter. The thoroughgoing direct control over peasant production in areas of *Gutsherrschaft* has been used to explain a myriad of different sociological outcomes, but it is important not to take these forms of authority entirely at face value. As Blackbourn notes, "domination and subordination" in areas to the East of the Elbe were challenged increasingly by revolt and litigation as early as the late 18th century (Blackbourn 2003: ch. 1). That is to say, even within this larger division of social property relations there were important regional settlements of corporate and class power that institutionalized different dynamics of socioeconomic development and transformation.

removed pursuant to the territorial reorganization of the Congress of Vienna had been well compensated by extensive rights and privileges and seemed similarly entrenched in their material and social power during the restoration and *Vormärz* periods (excepting that this was not the case in areas such as the Rhineland, see above). The lower nobility by contrast had been more forcibly extricated from their former corporate privileges. Many lost landownership owing to territorial reorganization in 1815, as well as the "freer" economic competition provided by the reforms that were being extended during the period. This process helped to pressure many lesser noble families to seek security for the status of their families in civil service—thereby further adding to the ranks of the bureaucracy as well as in this case the army (Brose, 2013: 113).

The state's expanding demands helped to swell the ranks of the bureaucracy surrounding German princes, first in the late 18th century, and then increasingly with the ever growing need for administrative machinery in the post-Napoleonic period. Whereas the society of orders had been comprised essentially of aristocrats, nobles, clergy, burghers, craftsmen, and peasants, the societies of restoration Germany saw the growth of a new social position in the group of salaried state officials. Instead of *personal* bonds of fealty to a specific prince, the bureaucrat's loyalty was primarily to the state *in the abstract*. Other state regulated professions also expanded during this period—university professors, school teachers, doctors, lawyers—which helped to fill out the ranks of a burgeoning "middle class" across the Germanies of the early 19th century.

Concomitant with the expansion of the state, was also the growth of "market" related activity⁴¹ leading to a numerical increase in that class of society which we can profitably understand as "bourgeois" (and thereby adding further to that nebulous category of "middle class"). The growth of rural industry in the form of the "putting-out" system, the reinvigoration of trade at the end of the continental blockade, the auction of ecclesiastical lands during the occupation, the increase in financial transactions from state loan issuing all helped to increase the number of people engaged in business: merchants, factory owners, bankers and financiers.

Related to this process was also the growth and transformation of the lower corporate orders, brought on by the complex of state-building, "market-oriented"

⁴¹ The "market" in the abstract is a highly problematic category. I employ the term "market-oriented" here to emphasize the growth of a social group whose primary occupation and regularized, habitual and materially directed activities and social interactions occurred in relation to specific concrete *marketplaces*, that were the focal points of larger networks of money or material exchange transactions.

activity, and crucially the emancipation of the peasantry (Bauernbefreiung). Peasant emancipation, while irregularly executed and implemented across the Germanies, helped to increase the number of those available for the "putting-out" system, menial labour, as well as agrarian wage- and factory work. The reason for this is that emancipation provided less obvious "freedom" than it implied. Feudal privileges like the right to hunting remained, while peasants were forced to reimburse their lords for subsequent lost dues. 42 In some cases, the aims of reforms careened off of the contesting social force of the nobility: e.g. in the 1820s laws to enclose and divide common lands amongst peasants were manipulated such that the Junkers appropriated 80% of such lands in areas East of the Elbe (Brose, 2013: 113). 43 Western areas of Germany had often commuted feudal dues from personal labour services to monetary compensation while Eastern ones had maintained serfdom. The timing of emancipation meant that the lords were on the defensive in the former areas, and peasants often came out better in the balance of sociopolitical power with the ability to purchase their plots. In East Elbian Germany where effective serfdom was still in place until the emancipation, peasants with small plots of land were often unable to satisfy the financial requirements to purchase their land. Moreover, peasants without possession of their own draught animals were also legally prohibited from owning their land. Consequently, many were reduced to dependency on the large latifundia of Junker estates through emancipation. The process of emancipation helped bring about a commercialization of agricultural production, land valuation and pulled the Eastern nobility further into the grips of market relationships for their material needs. Western peasants produced specialized goods for market like wine and flax. Conversely, the Eastern Junker nobility ruled over large estates of rye monoculture for export. Against the background of a "demographic explosion" (Blackbourn, 2003: pp. 79-80; Wehler, 1987: 8-25), this helped to swell the ranks of both the urban and agrarian underclass.

The effects of these changes were not limited to this group of direct producers, but also impinged on the material well-being and life prospects of skilled craftsmen. Under the ancien régime entry to handicraft trade production had been strictly regulated by the guilds. Beginning in the 1790s when the Rhineland guilds were abolished by the

⁴² This is a bit like being freed from slavery only to have a financial debt to one's former master for the sum of lost revenues.

⁴³ The unevenness of the process would most likely require an entire monograph, but suffice it to say that there were important differences within the Eastern Germanies as well: Junkers in East Prussia managed to guard very closely their privileges of police powers and tax exemptions; the Saxon nobility was less successful, and laws prohibited them from exploiting their peasants (Brose, 2013).

French occupational authorities, many further German states and cities followed suit and removed guild restrictions to entry of artisanal professions. The elimination of guild controls and their quasi ejection from special legal privileges under corporate society in connection with the growth of a new labouring poor helped to flood the ranks of those in skilled labour. This began to create something of a crisis however, as it strained the ability of journeymen to advance to masters, and many master craftsmen themselves were left effectively as jobbers.⁴⁴

73

Participatory, party and normative political trends

The German political field can loosely be broken down into a spectrum adumbrated by party positions not unfamiliar to contemporary readers: this extends on the "right" side from conservative, through liberal, to the "left" of radical democrats and socialists. The aim of conservatives was a mix of goals—ideological, political and material—related to perpetuating aspects of the feudal order. In stylized terms, that is to say the conservation of traditional, agrarian, feudal society and its commensurate norms, ideals, and unequal distribution of power and wealth skewed in favour of the aristocracy. The left-most end of the political spectrum was composed of those aiming for a radical alteration of German society, economy and polity. It should be noted that while liberal ideas began to be introduced already in the 18th century, it was not until the restoration period that a "liberal movement" began to grow. The "liberal movement" was the most important bearer of this political cause, even though to give it the cohesion implied by the term movement depicts a group with more unity than existed historically. This "radical" left aimed, in a stylized sense again of course, for a more democratic organization of society, along with greater autonomy in the ability of all sections of society to dispose of private property (Ritter, 1985).

The synoptic breakdown of the sociopolitical normative goals of different sections of German society can only help to orient us in a very general sense to the overarching conflict of the political imaginary during this period. The way in which different fractions of these normative groupings acted in particular situations was given often by the specificity of socioeconomic interests of small groups within their wider political affiliation. For example, it is not unsurprising that monarchs and princes across German central Europe were the physical embodiments of the conservative movement.

⁴⁴ In Berlin almost 80% of masters did not earn enough income in order to pay taxes, and figures were similarly grim for those of Cologne (Brose, 2013: 115; Blackbourn, 2003).

Nevertheless, it was members of the nobility, who had understood the end of the Holy Roman Empire and defeat at the hands of the French levée en masse as a crisis of the Absolutist State. The reforms initiated in the early 19th century at the hands of bureaucrats like Stein and Hardenberg, setting in motion the end of serfdom and liberalizations for trade and occupations, had begun at the hands of state officials nominally concerned with the preservation of the Prussian state. Similarly, many historians have labelled the failure of Germany "to turn at its revolution" as a problem of the bourgeoisie (or in other terms liberal businessmen) (e.g. Taylor, 1988 [1945]): that is to say, that the social forces that ultimately prohibited a further transfer of social power from agrarian conservatives towards liberally oriented merchants, bankers, and industrialists was that self-same group. As we will see below, sections of the "liberal movement" were keen to harness the general social power of the working and impoverished masses, but also deathly afraid that this force might become un-bottled and undo any further entrenchment of an industrial order. In any event, the general clash of social imaginaries about the future of German society was driven much by the axis between those social forces aiming to consolidate and retrench the powers of the feudal aristocracy, and those intent on deepening and expanding the transformation in the direction of industrial-capitalism.

THE STRUGGLE OVER INDUSTRIALIZATION

The struggle over industrialization was a conflict over the future shape of German society that began following the French Revolution. This is a somewhat purposefully ethereal way of amalgamating the different and often autonomous threads of social change underway in early 19th century German Central Europe described above. There are numerous other monikers for the kind of social change that was afoot during this period: modernisation (Wehler, 1987; Rostow, 1960), bourgeois revolution (Moors, 1991; Blackbourn and Eley, 1984) or a transition to capitalism (Byres, 1996) to name but several. Indeed, from an epochal-analytical perspective, discussing a transition to capitalism posits certain benefits when moving temporally past mid-century or analytically beyond the discussions of contemporaries; however, capitalism was not a term or concept used in the prevailing discussions in the early 19th century, and many aspects of state-formation and territoriality as well as of material reproduction can be intellectually disaggregated from capitalism conceptually in this era (cf. Lacher,

2006). 45 The concept of capitalism would become ever more prevalent in the battle over the future direction of German social change, especially through the aegis of associations like the Verein für Sozialpolitik that arose during the "Great Depression" of the later 19th century (cf. Krüger, 1983; Barkin, 1970). Nevertheless, in the first half the 19th century contemporaries were all acutely aware of the dramatic societal changes occurring around them (Lehmbruch, 2001: 50), and for the most part, these changes were made sense of by refracting them through concepts of, and discussion about, "industrialization" (rather than modernisation, bourgeois revolution, or a transition to capitalism) (Maiwald, 2005). It bears stressing that this is not the 21st century scholarly appreciation of industrialization, as a definite theoretical concept for the analysis of history (cf. Žmolek, 2013). Rather, this was an amorphous, discontinuous and unsystematised appreciation of the appearance of novel technologies (steam engines, smelting, machines more generally), innovations in the organization of work (factory work, specialisation of tasks, wage-work), alterations to the rhythms of daily life, and transformations in geopolitical challenges (emanating from France and England) to name but a few. The concept of industrialization was also very precisely mobilised in relation to specific topical issues such as, inter alia, the construction of railroads, the introduction of new legal forms like limited liability companies, trade tariffs, and "economic" regulation. Consequently, the phrase "struggle over industrialization" is used here as a placeholder for a more generalised association between competing forces over social change in German Central Europe in the early 19th century. It does not rule out the analytical tracing of connections between historical developments and capitalist dynamics, or "modernisation." Indeed, industrialization touched upon sociotechnical developments, political organization, social order and inequality, as well as economic issues (of acquisition, production, labour, etc understood in the terms of neoclassical parlance). Its analytical traction comes from the manner in which it stretches across the cleavages of different intellectual disciplines, or "spheres" and "domains" of social reality, and connected disparate concrete topical social struggles by being the referent or (indirect) object of practical activity. The potential to make connections between historical developments, e.g. financial transformation, and "the struggle over

⁴⁵ This is of course dependent on one's understanding of capitalism (cf. Wood, 2002).

⁴⁶ And in principle, it also does not rule out connections with bourgeois revolution, although this concept seems stretched beyond repair.

industrialization" therefore affords a manner in which to decode the sociopolitical purpose of historical agency.⁴⁷

The different actors and collectivities in early 19th century German Central Europe—expressed by different classes, corporate estates, businessmen, sectoral interest groups—as well as state agencies, ministries, and bureaucratic coalitions held potentially different and competing conceptualisations about the desirability, direction, extent and form of industrialization. For example, the early "progressive" reformers in the Prussian state were intent on promoting an "aesthetic" rural industrialization, wherein "factory" was understood as a workshop of often not more than 10 or 20 people (in comparison to the large factories of 500 people or more later in the century (cf. Kocka und Siegrist, 1979). Bureaucrats like Christian Peter Wilhelm Beuth, the director of the Business Department in Prussia (1830-1845), battled doggedly against other antiindustrial factions within the Prussian state in order to implement "industrial" reforms. He established Berlin's Technical College as an attempt to provide training for entrepreneurs, gave subsidies for manufactories and aimed to assist in the early surveying and development of railroads. However, what Beuth understood by industrialization—aesthetically well situated small factories in rural milieus, serviced by horse-drawn rail carts—was vastly different than that of Prussian businessmen. The Rhenish businessman Friedrich Harkort for example envisioned a future industrial society where "smoking colossuses," steam engines, crisscrossed and interlinked myriad (Brose, 1993: 210). Their mutually exclusive conceptualisations of conurbations industrialization brought them into conflict over their object of social action, but also brought their autonomous activities (e.g. routine ministerial work versus quotidian business transactions) in relation to each other as they related to these sites of dispute.

The triangular relationship between "different citadels of power" within the state (Brose, 1993) and between the state and market oriented classes (Diefendorf, 1980), highlights a primarily elite struggle. Working people and the lower orders of corporate society can also be incorporated into this intellectual scheme, even though they frequently did not often articulate, nor have the means to articulate, a conception of industrialization: agricultural day labourers who moved to urban areas in search of wage work in factories, peasants who had been freed under the agricultural reforms, or

⁴⁷ This is potential because not all social action was concerned with this struggle. This is the case in two ways For example, the activity of early entrepreneurs was in many ways very scientifically focused (cf. Kocka, 1975).

journeymen members of guilds whose formal education in trades put them at odds with the dreary division of labour in factories. In this way, it is clear that the material and socio-discursive struggles over industrialization applied equally to non-elite members of society, even if they couldn't articulate it themselves.

The struggle over industrialization provides us with the central fault line against which politics was fought during the early 19th century. Older historiographical literature highlighted the clash between a backward agrarian elite—the Prussian Junkers, whose control over the German state was near absolute—and a modernizing bourgeoisie intent on dismantling feudal institutions (often for material benefit) (cf. inter alia Tilly, 1966; Eichholtz, 1962; Veblen, 1915). In this view industrialization was impeded by conservative anti-industrial forces, and forwarded by the positive efforts of an ascending bourgeoisie. 48 The ideal-typical distinction between a modernizing class promoting social change and a conservative one attempting to preserve the status quo ante no longer seems accurate in light of the most recent historical scholarship (Brophy, 2011). The state, and in particular the bureaucracy, was not monolithic in its sociopolitical interests, but composed of different factions. These were played out through different ministerial portfolios. Moreover, not all businessmen were entirely in favour of industrialization. There was a widespread public discussion about the merits of industrialization, and in particular about the threat to order presented by the rise of an urban underclass (Shilliam, 2009; Maiwald, 2005). Nevertheless, the key fault line highlighted by this view captures something important: "German" society was generally animated by an intensifying struggle over the shape of industrialization from 1789-1848. The principal axis of conflict in this struggle was between those intent on establishing an industrial social order and those aiming to slow, or harness, ongoing social change to defend specific desired elements of the feudal social order. That is to say, it is now more widely recognized that conservatives aimed to make the most of the advancing forces of industry, e.g. by mechanizing agricultural production or taxing new businesses (cf. Torp, 2011).

Industrialization is often cast as the outcome of a disembodied economic process carried out by structural forces of a spatially separate "economy." This risks denuding the shape of industrialization processes of the historical agency that shaped their specific forms. Closer examination of the German case, for example, reveals that

⁴⁸ Compare the discussion in Brophy (1996: 1-22), Brose (1993: 1-8, 16-25, 250-265)

industrialization was charged with sociopolitical significance. That is to say, there were political stakes in the manner in which changes toward industrialization were enacted, and shifting, but nonetheless clearly competing coalitions of social collectivities attempting to advance or hinder different visions of industrial social change. These competing groups in the industrialization process conflicted over the nature of property forms, the extent of market dependence, the specific manner that innovative technology could be socially employed, the fashion in which institutional change could be properly introduced to a predominantly agrarian, rural society. The lack of clear division between "economic" and "political" under the feudal order helped to spread the potential transformative impacts of this social change unevenly across these "social spheres" (the latter understood analytically, rather than ontologically). The struggle over industrialization similarly exhibited no clear partition between these realms. Ergo, to fully appreciate the historical agency of contemporaries, no less for businessmen and financiers, it is necessary to break down the fortifications that have been erected for 21st century analysts to isolate behaviour that is "economic" from that which is "political."

The action of financiers in the early 19th century Rhineland, and German Central Europe more generally, was informed simultaneously by economic and political concerns. This was chiefly because in the course of carrying out financial business financiers in early 19th century Germany were also engaged in the struggle over the pace and direction of industrialization. Attempts to accumulate were not driven solely by chrematistic accumulative desires, but also by the aim to engender political reform and social change. Therefore the various activities of German bankers need to be understood in relation to a more basic associational logic that must be connected with this social environment in the midst of tumultuous change and articulated in terms of power.

ORIGINS OF ABSTRACT UNIVERSAL BANKING

The financial institutions existent in German Central Europe at the beginning of the 19th century were predominantly private banking houses. These private bankers were organically tied in their financial practices to the sociopolitical orders that existed prior to industrialization: namely, that of feudalism. There were a minority of other financial institutions, many of which were inspired by the mercantilist traditions of the 18th century. For example the Prussian *Seehandlung*, whose literally translated name means "overseas trading corporation" betrays its origins as an arm of government sponsored attempts to accumulate revenue for state-building. Similarly, there were some

mortgage banks developed in order to provide credit to aristocratic forces, the Prussian Landschaften, as well as a handful of Sparkassen, savings banks, established as quasialms houses in order to provide assistance to the rural underclasses. Similarly few were the number of securities exchanges. A "modern" exchange can be dated to roughly 1800 in Frankfurt (Ullmann, 1990). A lively exchange began to develop in Berlin as the Prussian state specifically attempted to sponsor a market for its debt during the Napoleonic wars (Spangenthal, 1903). This section compares the development of financial institutions in Frankfurt and Cologne during early industrialization. These two financial centres have been chosen because they represent financial institutions driven by competing social purposes in the struggle over industrialization. Frankfurt was the premiere centre for financing absolutist German states, while Cologne was at the heart of proto-industry on the Rhine. The comparative history here is presented propaedeutically, describing important background information for later chapters. Nevertheless, it also presents a different narrative for the establishment of abstract universal banking in Rhenish private banks, thereby highlighting the role of social struggle in the generation of the first necessary conditions for concrete universal banking to arise during the *Kaiserreich*.

Frankfurt: pre-eminent financial centre of the German ancienne régime

The development of Frankfurt as a financial centre, has roots that can be traced back almost 1000 years. The argument for locating this development so far in the distant past relates to the particular legal-political role that Frankfurt occupied in the Holy Roman Empire. Initially singled out as the location for the crowning of emperors, Frankfurt would develop special trade privileges as a result, making it a favourable location for the eastward extension of the Champagne fairs. This special political privilege was bolstered by the city's position at the confluence of the great overland trade-routes of Central Europe. During the early Modern period, Frankfurt's prominence as a location was largely determined by its role as a forwarding and distribution entrepôt, the position of which it had developed because of its special status in the Reich guaranteeing its freedom of trade (Holtfrerich, 1999: 90), before becoming a financial centre in the 19th century (Heyn, 1981). While the French revolution would incorporate Frankfurt into the Confederation of the Rhine from 1804 until 1815, Frankfurt would regain its privileges as a free city under the Congress system until 1866.

Throughout this period, the wealth and status of Frankfurt was attained through trade. Initially as a location for the staging of fairs that also served as an opportunity for the settlement of debts (and therefore as a rudimentary clearing centre). Subsequently, during the early modern period, Frankfurt's position was bolstered as an essentially trade and distribution centre. In the 19th century Frankfurt would begin to specialize in financial transactions that would assist in bringing an international reputation to families like the Rothschilds, and making Frankfurt the location for the issuance of government debt. Throughout the entirety of the period, however, only slightly less so in the 19th century, finance remained essentially an accompaniment to mercantile activity.

Holtfrerich (1999) argues that Frankfurt would begin already in the 18th century to differentiate finance from the other business activities of which it was an adjunct. Important mercantile firms like Metzler began to subdivide their banking business from mercantile concerns, by establishing separate distribution and banking firms already in the 1760s (Holtfrerich, 1999: 93, 95). Contrary to this position, Udo Heyn (1981) argues that during the early industrialization period, even the most powerful of the Frankfurt bankers were slow to give up their role in mercantile activities. In 1810, the Rothschilds (who were already on their way to "celebrity status" in 1815 within the international financial world) were "still storekeepers in the city," with commodity trade as their principal capital source and listing, in their partnership contract, "current trading capital" (set at f1. 800,000) as consisting of "goods, accounts receiveable, mortgages, bills of exchange, bonds or cash" (Heyn 1981: 159). Moreover, the Bethmann's, Frankfurt's number two banker, "though earlier in finance, left trade even later; in fact, the share of commodities in the Bethmann's net assets...in 1833...generated as much as four to five per cent of their gross profits" (ibid: 159).

The early development of a securities market, already in existence by the middle of the 17th century, assisted in stimulating demand for financial services. The initial activity of this security market was made possible by the acceptance of endorsements on bills of exchange. This practice, which allowed the carrier of the bill of exchange to sign his name on its back and thereby transfer it to another party allowed the initial holder of the bill to convert it into a means of payment. The bill was a means to facilitate trade that allowed a payee in one area to transfer funds to another, usually with a rate of interest included. With the development of an active market for bills of exchange already in the late 17th century (Kaufhold, 1994), Frankfurt merchants had ready access to liquidity in the event that they should need it.

With the importation from the Netherlands of partible obligations by the Bethmann firm in the 1780s, the Frankfurt Bourse set in train a new path for the development of finance in the city. Partial obligations were particularly well suited to issuing unprecedentedly large loans. In this epoch, the needs of state finance were the principal agents seeking creditors that might be able to employ such a function, and the Bethmann's issued their first such loan of partial obligations to the absolutist state in Vienna. The Dutch, who were the Masters of international finance in this era, had dominated the international market for state debt in the 18th century. Amsterdam continued to act as a centre for financing state loans right up until it was occupied by French armies in early 1794 (Kaufhold, 1994: 106). With the need to prepare for war in the face of the advancing *levée en masse*, the demand for state loans remained high, but their supply was now limited to Frankfurt, which became the chief centre for the issue of state-loans from that point until later in the 19th century (Holtfrerich, 1999; Gömmel, 1992).

81

While the primary market for state-loans remained a relatively small percentage of their overall business activity, they accounted for one of the most profitable single activities of Frankfurt bankers. That being said, the issue and underwriting of state bonds in the primary market could only ever provide transitory gains for banks through the commission fees, any difference between the par and issue price, as well as arbitrage between different markets. ⁴⁹ Once the securities were off the balance sheet, government debt was also a profitable business in the secondary market. Indeed, while the absolute level of profits from individual trades in the secondary market were smaller than underwriting and issuing, the high-level of turnover from brokerage commissions and speculation provided the regular income for Frankfurt bankers (Heyn, 1981: 300ff). The centrality of the government loan business consequently tied the private bankers of Frankfurt to social and political purpose of state in this period.

Even though some Frankfurt bankers like Gebrueder Bethmann would make moves towards financing industrial companies between 1815-1850, these would be impermanent stratagems—exceptions that proved the rule. In the case of Bethmann in particular, their engagement in industrial promotions and foundations was an explicit reaction to their short-term inability to participate in the government securities market

⁴⁹ The arbitrage trading of government securities relied on large issues of government bonds that were issued simultaneously in different securities markets across Europe. The Rothschild family was one of the few firms that could take advantage of this particular measure of speculation with connections in multiple different European cities.

(Heyn, 1981). In 1808 the firm had invested heavily in real-estate in order to rebuild the city after the razing of its walls from French Revolutionary troops. The Bethmanns found themselves overextended during the 1810s, without the funds to float further government securities until the mid 1820s. This turn of events allowed the Rothschilds to leapfrog into the first position for floating government securities, and cut the Bethmanns largely out of this market. When the Bethmanns' capital position had recovered in 1825 they attempted to break into the flotation of industrial equity believing that it was potentially more liquid than real estate because of their proximity to the Frankurt Bourse. Consequently, they issued securities for a steamship company on the Rhine, and railways in the area of Frankfurt. Following poor returns and inability to generate enough interest on the Frankfurt bourse they eventually returned to funding government paper.

The development of Frankfurt as a financial centre in Germany demonstrates that financial practices were at first organically integrated with mercantile activities. In the pre-industrial period, commerce itself was driven by the exigencies of the feudal order, and thereby also steered financial dynamics and development. The development of an active market for government paper tied the social purpose of Frankfurt private bankers to the existing political order.

Cologne: centre of Rhenish finance

Similar to Frankfurt, the financial intermediaries of the Rhineland, and Cologne in particular, in the early 19th century were not yet really "bankers" in the sense of an institution specialized in the money business. Before the 1820s, most if not all of the firms that participated in financial activities were also involved in mercantile, as well as "proto-industrial" business activities: long-distance freight shipping, wholesale trade, consignments and in some cases also simple forms of manufacture under the "putting-out" system (Born, 1983; H. Pohl, 1982; M. Pohl, 1986a; Tilly, 1966: Chapter 3). These multi-purpose mercantile-entrepreneurial houses had origins in the 18th century, when they began advancing credit to their clients as a side-aspect of their shipping and consignment business. There was a concentration of such enterprises in Cologne in particular because of its special legal privileges as a transit and distribution point along the Rhine, as well as its position as a free city within the Holy Roman Empire

(Diefendorf, 1980).⁵⁰ Geographical and legal-political reasons therefore gave the city of Cologne a similar, though less prominent, position within the Holy Roman Empire to Frankfurt during the early modern period. The more successful of these early mercantile enterprises began to specialize strictly in the money business (Ziegler, 2009: 161; Treue, 1980: 94).

Numerically fewer in the Rhineland were the former "court bankers" (*Hoffaktoren* sometimes *Hoffuden*). ⁵¹ The court bankers, who were mostly of Jewish religious descent, were charged with providing German Princes the furnishings, food, as well as general material trappings and supplies for courtly life. The need to often advance the cost of these goods, as well as the necessity of organizing their physical delivery to the court itself meant that the court factors straddled a similar boundary between financial and commercial activities as the other gentile merchant houses.

In both of these cases, the business of financing, did not begin as a particularly profitable activity, which was demonstrated for the merchants by their maintenance of primary lines of business in shipping, consignment and in some cases industrial activities. Moreover, both had relatively restricted spaces of social mobility in the institutional and religious order of the old regime. The court factors in particular often looked to the business of royal supply as one of the few means of social advancement for religious minorities like themselves who might be ennobled for their services. What commission charges they could garner from distribution and credit activities were a meagre source of profit in comparison to what they would become in post-Napoleonic Europe. The pursuit and engagement in these financial practices was ultimately for purposes related to their own intra-class development and power vis-à-vis those better positioned in the rigid religious and institutional order of the Holy Roman Empire.

The Eastward movement of the French Revolution's consequences ended the basis of the Court Factors' existence as servants to the German Princes. In the case of the most prominent financier to emerge from a background as a court factor, Salomon Oppenheim junior, this meant a change in city (Bonn to Cologne) as well as an expansion of his business into a similar territory as that of the gentile merchant houses

⁵⁰ The Rhine became ever more narrow and rapid upriver. Consequently, colonial and long-distance trade goods needed to be withdrawn from ships at some point along their progress up the river. Goods on their way to central Europe were therefore off-loaded and warehoused at either Cologne or Mainz.

⁵¹ The development of private banking through former "court bankers" was the predominant route in Southern Germany, especially in Bavaria (H. Pohl, 1982).

(Stürmer et al., 1994: 24ff.). The French occupation of the Rhine also provided the basis for the augmentation of capital reserves for the other major Cologne banking firms through real-estate speculation. This was only a temporary avenue of business (with the exception of *Schaaffhausen* which continued real-estate speculation up until its liquidity crisis in 1848). Beginning in the 1820s, Oppenheim as well as the other merchant financiers of the Rhineland had more or less begun to specialize strictly in financial activities. This process would be relatively complete for the six banking firms of Cologne by the 1830s. ⁵² In moving towards specializing in finance, these banks mobilized the capital they had accumulated from multiple different avenues of non-financial business into reserves for providing short-term loans.

What is key to stress, is that while this group engaged more and more only in banking and financial functions, they did not initially conceive of themselves, nor did their contemporaries, as "banks." Municipal records dating back to 1792 refer to Herstatt as a "banquier," and documents from the Revolutionary period apply the same term to Oppenheim (Steimel, 1957: 74; Stürmer et al., 1994: 43). Yet, Herstatt continued to operate a silk and florette manufactory until the last weaving chairs were shut down in 1812, while Oppenheim continued to be involved in the procurement of goods on a mercantile basis that accorded him his other most frequent title of "négoçiant" during the revolutionary period. While they occupied a considerable part of their time with providing credit, they were not prohibited from starting new businesses, investing in real-estate, engaging in government securities lending, ⁵³ founding newspapers, and generally becoming imbricated in almost every opportunity for speculative profit regardless of business sector. ⁵⁴

Distinctive of the private bankers in the Rhineland by the 1820s, was their essentially "commercial banking" character. Despite speculating on numerous different fields of business activity, they principally engaged in short-term loans. Their chief

⁵² Krüger (1925) posits that 9 banking firms were listed for 1835, of which 6 were worth mentioning, and four constituted the upper strata of the Cologne financial elite: JD Herstatt, JH Stein, Abraham Schaaffhausen and Sal. Oppenheim jun. & Cie were the top four, all with roots in the 18th century. The top six were rounded out by A & L Camphause and Seydlitz & Merkens ⁵³ This was given up before the 1830s. It is notable that Oppenheim however arranged to be involved in the transfer of reparations from France to Prussia shortly after 1815. While the Prussian state had envisioned large cargoes of specie being transferred from France to Berlin, they were furious to learn that Oppenheim had arranged the transfer as bills of exchange. Moreover, because of the amount of time that Oppenheim had arranged in order to execute the transfer, he was able to speculate on the different values of the transaction between its point of origin and delivery.

⁵⁴ Recall here Adam Smith's quote from the beginning of the chapter.

financial instrument for such loans was the current account advance. There exist significant lacunae of primary evidence in relation to this period of time, but there are some details that are relatively widely accepted. In principle, current account advances consisted of loans made for a short period of time: 2 to 3 months—in exceptional cases, 6 months, but no longer (Henning, 1980: 67). Loans were made at a "usual" or "traditional" rate of 5 or 6%, with most loans consisting of means of payment provided as an overdraft on the borrowers account (Perlitz, 1976: 148; Tilly, 1966: 83). In some exceptional cases, the rate of interest would be reduced to 4% for special clients, but this was rare (Krüger, 1925: 112-3). The interest rates charged on loans were not allowed to surpass the 6% mark because of the legal prohibition on usury. Remarkably, they did not fluctuate downward in connection with market rates. Even so, the interest rate was not what made banking a worthwhile economic pursuit. The profitability of the current account business arose from the commissions that the bankers charged for each turn-over of the current account overdraft. That is to say, every time the overdraft limit was reached and repaid, bankers would reckon their commission charges (Tilly, 1966: 88 ff.). In many cases, the original account agreements would be figured with a certain number of turn-over minima to ensure profitability for the bankers. The more often a loan was taken out and consequently repaid, the more profitable the account would be for the banker.

The Cologne bankers also operated as the primary intermediaries for liquidity and payments in the Rhineland through their dealing in bills of exchange. While a Bourse had been founded in Cologne as early as the 17th century, the level of activity there remained negligible even towards the end of the 19th century. Conversely to Frankfurt, which had already developed an active secondary market for bills of exchange by the end of the 17th century, Cologne channelled all of its dealings in bills of exchange directly through its private banks (Kaufhold, 1994). The private bankers of Cologne in this period were the first port-of-call for discounting services, and because of this may have inhibited the growth of an active securities market (Tilly, 1966).

As mentioned above and similar to the French case, Cologne bankers had operated, owned and founded early industrial establishments throughout the Rhineland. Cologne bankers were involved in this regard in the mining, metallurgical and textile industries along the Rhine (Krüger, 1925). There is evidence that these bankers had experience with government securities from as early as the Revolutionary period, but then turned away from this in the pursuit of financing trade and industry. The first activity in

relation to equity and investment began in the 1820s with participation in steamship companies along the Rhine as well as with joint-stock insurance companies (Krüger, 1925; Stürmer et al., 1994). The Cologne banking houses were active participants in the industrialization of the Rhineland, and identified their sociopolitical interests with its continuation (Ziegler, 1997).

Tilly argues that beginning in the 1830s the growing demands of capital for industry, in particular from railway companies, provided the impetus for Cologne bankers to begin floating securities on behalf of these companies in order to finance their large requirements for investment (Tilly, 1998; idem, 1994; idem, 1989). Despite the involvement of Cologne bankers in many different fields of business, their investments had always been short-term. Where they had had negative experiences, for example in relation to government securities, they turned away from this business branch. Why would a group of dedicated and rational financiers undertake the financing of railway companies that could represent their potential financial demise? Mainstream economic theory suggests that investing in railroad companies would not have occurred because financiers would not have had full insight into the business plans and intent of railroad company operators. Without knowing more about the potential of railroad companies—and railroad companies represented the epitome of untried and untested technology in the 1820s and 1830s, failing frequently—investment in these companies would not have occurred, representing a market failure. Mobilising the information asymmetry theory, Tilly posits that because the bankers of Cologne established shortterm credit relations through current account with their clients, they could get a better sense of the potential profitability of firms. Therefore, the combination of investment banking business—long-term, issuing of securities—with commercial, short-term, banking characteristic of universal banking was arrived at because of economies of scope in information.

This account puts the cart before the horse. Railroad companies needed first to be founded before they could be granted short-term credit, yet Cologne bankers were involved in the promotion of these companies, often subscribing numerous shares of the companies themselves, before the first tracks or construction work had even begun. That is to say, the short-term current account relation could not precede, but had to follow, the issuing of securities. Tilly's argument might be modified to suggest that it was on the promise of economies of scope that private bankers in Cologne helped

railway companies float securities; however, given the massive failure rates of railway firms, this would contradict the assumption of rational action on the part of the bankers.

It is impossible to ascertain the "true" motives for why Rhenish bankers invested in railway companies. This is so philosophically because of the difficulties of intention, but also because of the paucity of the archival historical record. However, more plausible, and less logically contradictory than the information asymmetry account is that Rhenish bankers undertook the foundation of railway companies because of their role in the struggle over industrialization. It is known that the Oppenheims and Schaaffhausen were active members in public debates in the Rhineland about the nature and extent of industrialization, especially in relation to the perceived social problems that would ensue from industrialization as in England (Boch, 1991: 145, 275). They were openly in favour of a self-sustaining industrialization, in part because it would transform the basis of Prussian society, which in turn would strengthen their position and wealth within that new social order.

In the struggle over industrialization Rhenish bankers were intent on bringing about a state of the world different from that which currently existed, but that would *ex post* justify the risks they had undertaken. This was concretely expressed in relation to the practicality of liquidity in the pre-March period. The Rhineland was an area where monetary transactions were steadily increasing because of industrial activity, the Prussian state's restrictive monetary policy constantly put Rhenish finance under a liquidity constraint. There was always a dearth of means of payment (see also Chapter 3 here). The railroad promoter Friedrich Harkort suggested how "the monetary pressures of the Rhineland's industrial growth" could be relieved by the "very supply of assets which represented those pressures" (Tilly, 1966: 32). Harkort highlighted the economic logic behind the role that railways could play in promoting self-sustaining industrialization when he posited that

One significant element of railroad promotion was that the additional demand for money connected with the construction and operation of railroads could be largely offset by the creation of credit they would encourage. He was thinking, above all, of the fact that bankers would attract takers of railroad securities—as they had takers of other forms of debt—by making such instruments eligible collateral for bank loans, and thus increasing their liquidity to holders. This was just one link in a system of interaction; for as more and more savers and / or holders of idle balances became willing to covert the latter into such securities, bankers—and other lenders—became more willing to accept them as collateral for loans or to purchase them outright. (Tilly, 1966: 132)

This plan did not work entirely as conceived. In part because the Prussian government began to restrict trading on markets where railway securities were traded in the 1840s (see Chapter 3 here). Furthermore, almost without fail, railway companies never managed to come into being without significant cost overruns and delays (Then, 1999; Ziegler, 1996). Nevertheless, Rhenish bankers continued to promote railway firms, because railways represented a clear material manner to cement industrialism in the material fabric of the land (cf. Brose, 1993).

It should not be forgotten that when bankers founded new industrial companies, they could make exorbitant profits. Indeed, they did not engage in this activity for charitable purposes. Nevertheless, even with exorbitant potential profits, the risks of failed investments threatened the survival of private bankers because of the unlimited liability of private banking houses. In order to establish railway firms, there were several steps that needed to be followed: (1) obtaining a government concession, (2) fashioning a market for the firm's securities and (3) collecting subscriptions for that equity (Tilly, 1966: 95; cf. Then, 1997).

The potential to make the process more lucrative through speculation was available at each of these steps. Firstly, in order to found a joint-stock company in Prussia during the 1830s and 40s, the founders required a state concession. The granting of concessions in Prussia during our period was a privilege seldom handed out with ease, in part because of anti-industrial interests within certain citadels of the Prussian state. Indeed, the Prussian government often employed tactics to stall the delivery of concessions. It especially attempted to hamper railway, and more generally industrial, projects that it believed posed a threat to agricultural finance. Another tool was the great deal of authority exercised over the type of financial instruments that could be used in financing. For example, Teichmann (1995) illustrates how the Oppenheim's participation in the Stolberg Zinc Mining Company (*Bergbau und Zinkfabrikation zu Stolberg*) was significantly influenced through the Prussian government's refusal to allow *au porteur* shares in the incorporation of the company.⁵⁵ In response Rhenish

⁵⁵ These were shares that did not require registration. They received a French designation in this period because of the influence of the Napoleonic code, but would later be called *Inhaberaktien*, what are today in English called "bearer shares." Such shares were the property of whoever physically held them (a bit like bank notes); whereas the alternative, *Namensaktien*, literally "name shares," or registered shares, had recorded on the share itself as well as in an official register the name of the owner. In order to sell such shares onward, it was necessary to apply for government approval. This is discussed further in Chapter 4 of this thesis.

bankers were effectively ruthless in their measures to influence the government in their favour for new industrial joint-stock concessions. These bankers employed "patriotic denunciations of foreign influence to the outright offer of participation in the profits of promotion. A combination of both of these extremes was used" in many cases of early railway companies (Tilly, 1966: 98). Opportunities for speculation arose in the 1830s as trading in interim certificates (essentially derivatives betting on whether a firm would be granted a concession or not) began to be traded on the Berlin bourse (Leiskow, 1930; Spangenthal, 1903).

Once companies had a concession to operate as a joint-stock firm, they were required to subscribe shares for the nominal capital of the firm before the foundation would be legally completed (and the company had the necessary capital to begin work). Because of the lack of an active domestic securities market in the Rhineland, the collection of share subscriptions was conducted by private banks themselves, rather than directly on securities markets. Private banks like the Oppenheims, Schaaffhausen, Herstatt and Stein, all of Cologne, would guarantee the value of the initial public offering (IPO),⁵⁶ the private banks would search for subscribers of the shares, while marketing the company aggressively in newspapers and financial journals. They would attempt to influence the prestige of the company by having it associated with a reputable name, or publish prospectuses, and information sheets, and even circulate rumours (Neidlinger, 1930). When there was a great deal of interest in the shares, the subscriptions could be sold above par.

The *Oppenheim* and *Schaaffhausen* firms occupied a relatively privileged place in their ability to carry out these operations. The Oppenheims had made contacts with other private banking firms professionally, and in some cases tied themselves to other firms through marriage. In 1812, the Oppenheims became connected to the Fould banking firm of the *haute banque* in Paris through the arranged marriage of Salomon's daughter. The Fould's would later assist the Oppenheims in the placement of many railway and bank shares on the Paris market, in the process helping them manipulate that market and speculate on the price shares issued there.

The engagement of Cologne bankers in the foundation of railway companies is therefore best considered as a speculative practice of finance.

⁵⁶ An anachronistic, but necessary term here for purposes of space.

Private banks strategies for acquisition were often intimately tied with their attempts to further expand the industrial order. The Cologne bankers for example also engaged in founding companies that would provide explicit up- or down-stream markets for firms that were already their customers. As Tilly puts it "a banker with sufficient connections could provide a new company with both customers and suppliers" (Tilly 1966: 108; cf. Born 1983: 90). For this specific reason, the Elberfeld banking firm of von der Heydt, Kersten & Söhne occupied this very role in relation to numerous Rhenish railways. Additionally, as Teichmann has speculated, this was most likely the reason for the Oppenheim's participation in the Stolberg Zinc Company and also the Wurms Coal Unification company (Teichmann, 1995: 22).

Rhenish bankers emerged in the 1820s as specialized financial institutions focused on the business of short-term credit. The question of the emergence of abstract universal banking, or the first combination of commercial and investment banking therefore requires answering why it is that these banks began adding investment banking activities. The asymmetric information answer is insufficient, because of historical evidence that contradicts the chronology of its narrative and underlying theoretical assumptions. A more decisive theory for why it is that Cologne bankers began adding investment financing to their raft of activities relates to their aim to industrialise the Rhineland, and greater Prussia/Germany.

CONCLUSION

The social order of the pre 1848 German states was one fragmented by large scale social transformation. This chapter has argued that this transformation is best understood in terms of a struggle over the direction and extent of industrialization. The business of credit, in the period to 1848, grew up in this environment of social transformation. Private banking practices developed as the *ancillary* activity of commercial activities from the feudal period: long-distance merchants needed to support their trade clientele, and religious minorities sought to curry official favour in a hostile social environment. In Frankfurt, finance specialized on providing government loans, and tied Frankfurt bankers to the social interests of the ancien régime. In Cologne, by contrast the first combination of "mixed-banking" or "abstract universal banking" was developed as the by-product of bankers aiming to foment social change through industrialization.

This was above all a *speculative* practice. Under such conditions of uncertainty, the activity of the financiers is most profitably conceived of as a wager, or bet, on the future. It can only be conceived of as efficient if the probabilities and variance of the different states of the world can be ascertained. Not only did Cologne bankers clearly not have any means for calculating such probabilities, but their social purpose related to something beyond calculation itself: the transformation of society. The motivations of Cologne bankers for so speculating were simultaneously sociopolitical, and politicoeconomic. They were sociopolitical insofar as the aim of founding new corporations especially in the case of railroads—was an effort to bring about industrialization, to transform German society. These aims were politico-economic inasmuch as they were concerned not only with material reproduction, or acquisitiveness, but also the aggrandizement of their economic power. Speculation when it is an irregular bet with the potential for large gain is not solely about reproduction, but about the production of new material social relations. Winners who win big have quantitatively changed their status to such a degree that their qualitative relationship to the other players has been altered.

The necessary condition for the emergence of universal banking arose as a byproduct of the struggle over industrialization, when Cologne bankers amalgamated
commercial and investment banking. This combination took place inside the walls of
private banking houses, with limited liability, and which did not collect deposits. For
concrete universal banking to exist, as per theory, these latter conditions needed to be
present. In the next chapter, the transmission of the Cologne Banks' practice of "mixedbanking" into the first joint-stock banks will be examined.

CHAPTER 3

The Significance of early Joint-Stock Banking, 1848-1869

The continuation of politics by other means

"In 1848, when Germany was in the throes of a political revolution, an event occurred in Cologne that inaugurated a very different kind of revolution. This was the reorganization of the Schaaffhausen Bank. **Few people realized at the time** that this was a new type of financial institution and that it heralded a new era in the history of banking".⁵⁷

"These founding activities can be interpreted as an attempt to institutionalize some form of cartel for those transactions which had become too large for a single banking house." 58

"We cannot narrate the beginning of joint-stock bank development from their later transformation into institutions of monopoly capital. It was only after 1873 that this tendency took hold. The 1850s were characterized by entirely different elements, as were the purpose and goals of their founders." ⁵⁹

INTRODUCTION

The wave of German joint-stock bank foundations in the period between 1848-1857, is typically taken as the first step towards the development of a distinctive form of German finance organized around universal banks (Born, 1983). Private bankers may have practiced a form of universal, or "mixed-banking," in the Prussian Rhineland, but the universal banks that fuelled German economic take-off and transformed it into an industrial society, were all incorporated joint-stock banks. How did the speculative "foundation business" and "mixed-banking" financial practices of these comparatively small private banks become generalized across the corporate banking sector?

As the previous chapters have argued there is a strain of the existing scholarship that has rather simply conflated the "mixed-banking" of the private banks with that of the joint-stock banks. This conflation obscures the temporal origins of "mixed-banking" and its roots in speculative practices aimed at social transformation in the struggle over industrialization during the 1830s and 40s in the Prussian Rhineland. Moreover, it far too easily imputes a linear developmental narrative of financial practice transposed from private to incorporated banks. The amalgam of these two analytically distinct aspects of

⁵⁷ Henderson (1975: 123), my emphasis added.

⁵⁸ Ziegler (1997: 137)

⁵⁹ Böhme (1965: 204), my translation

the later universal banking system—"mixed-banking," and the legal form of the joint-stock company—also obscure the geographical diffusion and spatial evolution of this system. Finally, failing to analytically separate these issues presumes what it seeks to explain when it comes to the evolution of the German system of universal banking. The emergence of a system of *corporate* banks engaged in *every variety* of financial service was not a foregone conclusion when businessmen and financiers first began contemplating the opportunities afforded by limited liability incorporation in the early 19^{th} century.

This chapter argues that the first foundation wave of joint-stock banks in Germany is best described as the unintended consequence of ongoing political conflict over the shape and nature of social change in Germany. It also demonstrates that the adoption of "mixed-banking" financial programmes by the banks of the first wave were not as a rule premeditated, but developed in the direction of "mixed-banking" over the course of the foundation wave itself. That being said, the adoption of a "mixed" palette of financial services did not take on any systemic formula in its arrangement. While none of the corporate banks founded in the 1850s specialized in the way that English banks specialized their financial services, they nevertheless developed distinguished specialties of service. Consequently, "mixed-banking" even after being assimilated into the corporate fold, must remain analytically distinct from the "concrete" universal banking that would develop in the *Kaiserreich*.

The chapter is divided into three sections. The first section delves into the key theoretical and methodological problems of the first foundation wave. This section highlights a peculiarly prevalent fallacy about the efficiency explanation, and underscores some logical problems with it. In the second section, the chapter examines the foundation of four key banks: the *Schaaffhausen'sche Bankverein*, the *Disconto-Gesellschaft*, the *Darmstädter Bank* and the *Berliner Handelsgesellschaft*. These banks have been principally chosen because they would all later become pivotal Berlin Big Banks (*Berliner Großbanken*) that stood at the centre of the corporate banking system. Moreover, their ubiquity in the historical literature helps to underscore the different significance attributed to them here. In the final section, the chapter accounts for the development of these banks' financial activities from the commercial and financial crisis of 1857 until the beginning of the second "foundation wave" in 1869.

THE FALLACY OF FOUNDING BANKS FOR EFFICIECNCY

The existing scholarship outlining the rise of the first joint-stock banks in Germany has generally submitted to a type of circular, functionalist argument in order to explain the emergence of the corporate banks in the 1850s. This argument posits that during the 1840s and 50s the German economy had shifted from an agricultural towards an industrial developmental trajectory. In order for the transformation to an industrial economy/society to be completed, larger amounts of capital were required in order to finance the more expensive fixed investment typical of the most advanced industrial technology. Consequently, private bankers created joint-stock banks to mobilise greater amounts of capital and bring about industrialization. This argument has become the common explanatory touchstone in much of German financial history.

94

The specific logic of this argument posits that the legal form of the joint-stock company, or corporation allowed banks to raise greater amounts of capital for their undertakings. 60 Joint-stock, in contrast to private, banks could issue equity in order to increase their access to long-term capital. That is, by collecting smaller investments from many different sources in exchange for shares, they increased the overall amount of capital to which they had access. This legal form achieved historical significance during the period between 1840-1873, which also marks Germany's first sustained period of industrialization (Brophy, 2011; Blackbourn, 2003; Wehler, 1987; idem, 1995; Henderson, 1975). German industrialization was led by the development of railways and those industries forward- and backwardly linked to them—metallurgy, mining, shipping (Ziegler, 2005b: 230-235; Sheehan, 1989: 733, 740-1; Fremdling, 1977; Tilly, 1978). As the story goes, with the exception of shipping, the amount of money needed to found and establish new firms in these industries was very high. The private bankers, working only with their own accumulated capital, did not individually have enough resources for the astronomical amounts of fixed capital required for the scale of new industrial techniques or equipment. Consequently, in order to provide the capital necessary in order to establish the new industrial order, new (financial) institutions—the joint-stock banks—needed to be created (Fohlin, 2007: 19; Pierenkemper and Tilly, 2004: 111; Deeg, 1999: 33; Ramm, 1997: 70; Ziegler, 2005a: 283). This position is so

⁶⁰ It is also sometimes implied that the limited liability of joint-stock companies was an additional factor motivating their necessity; however, during the 19th century limited liability was not already a fixed feature of the joint-stock company or corporation see Johnson (2010) for the debate in England, Ilgmann (2011) for Prussia. For an important historical materialist position on the historical significance of joint-stock banks see Bryan & Rafferty (2009).

prevalent that it has been accepted into the survey literature and general histories of Germany during the nineteenth century (Blackbourn, 2003: 141-2; Sheehan, 1989: 736; Wehler, 1987: 102-3, 638, 652; Kitchen, 1978: 87, 92).

This received narrative jars with other details commonly known about the time period. Three widely accepted facts about the operation of joint-stock banks and private banks during the 1850s and 60s contradict the "efficiency understanding": firstly, banks like *Schaaffhausen* (the first joint-stock bank) were prohibited from increasing their equity capital until the 1870s; secondly, private bankers remained the (successful) chief financiers of industry during this period; finally, incorporation was only one institutional form chosen to deal with the issues of securities flotation.

Discussed in greater detail in the next section, the Schaaffhausen'sche Bankverein was the first Prussian joint-stock bank foundation, and was also a "mixed bank" operating under the principles established by the Rhenish private banks. The Bankverein was established on the illiquid remains of the Schaaffhausen private bank, in the course of the revolutionary crisis of 1848. The transformation of the bank into a joint-stock company was undertaken in order to alleviate the payment insolvency of the bank (the bank had a positive balance of assets, but these were insufficiently liquid to pay off its creditors). Effectively, the debts of the bank were transformed into shares in the bank. Trivially, it is obvious that the *Bankverein* was not immediately founded in order to provide *more* capital for industrial undertakings. If, however, the bank would have served as a demonstration effect, or made use of its corporate legal status to better engage in collecting capital for industrial investment then it would have needed to increase its capital base to do so (as the transformation of its debts into shares only made its liabilities liquid, but did not give the bank any additional financial resources). Part of the condition of the Bankverein's foundation was a seat for the Prussian government on the firm's supervisory management. Using this lever, the government prohibited the bank from increasing its capital until the issue of the New Company Law of 1870 was promulgated (Tilly, 1966: 113).61

⁶¹ Tilly uses this example to suggest the exact opposite argument: that the foundation of the Bankverein indicates rather the "successful adaptation of the "mixed-banking" principle to joint-stock banking" (Tilly, 1966: 113). The issue seems to be less whether successful adaptation after the fact occurred, and more what the reasons were for the amalgamation of this legal form with the financial programme of "mixed-banking." Moreover, Tilly also replicates the "government interference" trope by suggesting that the Bankverein's operation would have been "even more successful" had the Prussian government not prohibited the increase of Schaaffhausen's equity capital.

Many scholars oddly also recognize that even *after* the emergence of the joint-stock banks, *private bankers* continued to be the primary financiers of industry (*inter alia* Fohlin, 2007: 229, note 10; Ramm, 1997: 70; M. Pohl, 1982: 159). That is to say, the literature argues that private bankers were inadequate to the task of financing industry, necessitating the foundation of joint-stock banks, but nevertheless, private bankers remained the principal source of financing for exactly those industrial branches whose fixed-capital needs supposedly exceeded the private financiers' means. This is especially problematic for the first twenty years of the joint-stock banks' existence. Yes, Germany's "take-off" to industrialization occurred during this period, and the joint-stock banks played a major role; however, private bankers remained the chief patrons of industry during this period, financing firms despite their reportedly meagre finances(!). Either their financial means were not dwarfed by the growing needs of industry, or they found alternative solutions other than incorporation.

If private bankers could employ alternative techniques—other than founding joint-stock banks—in order to finance new industrial concerns, then conceivably *these techniques* might also have been able to promote industrialization. One such method was the use of banking syndicates or consortia. Syndicates were organized on a contractual basis between legally independent banks, usually to undertake the flotation of new issues of securities. For private bankers this meant finding other private banks that would be interested in a share of a new equity flotation. The bilaterally agreed contracts with individual bankers allowed an amassing of financial resources comparable to that of a joint-stock bank, but lacked the organizational permanence of the latter. Moreover, the *ad hoc* nature of syndicates involved more negotiation in the mobilization of the necessary capital for a share issue. The NIE and information theoretic approach suggest that syndicate banking "suffered" problems of coordination impeding its adoption as an institutional solution to industrialization (Burhop, 2006b: 54; Ziegler, 1997: 137; Tilly, 1989: 191; *idem*, 1986: 119, 127-8). This sits uneasily

⁶² Following a period of time when corporate banks began to be downplayed for their role in industrialization (e.g. Edwards and Ogilvie, 1996), they are once again—especially during this earlier period—being recognized as having been indispensible for Germany's socioeconomic transformation from agrarian to industrial society. Burhop (2006a) has even demonstrated this using econometric techniques that had earlier helped to downgrade the role of large banks in industrialization.

⁶³ This is argued here in a counterfactual, but also in a comparative historical sense; one need look little further than France where private bankers in the provinces organized a cooperative organization in the form of the *Societé Centrale des Banques de Province* specifically in order to achieve these kinds of goals (Reitmayer, 2001b: 139).

with the historical record, which suggests that banking syndicates, were regularly used even by the first joint-stock banks (M. Pohl, 1989).⁶⁴ Syndicates and consortia were even used following the relaxation of the government law on concessions for banks, so that the large Berlin joint-stock banks frequently used them in Germany's "second" industrial revolution post-1870. Beginning in the 1880s the chemical and electrical industries, in a similar fashion to the railroads of mid-century, required external sources of finance that were beyond even the increased financial means of individual corporate banks with capital reserves fed by the shares of the joint-stock form, leading the Berliner Groβbanken to form banking syndicates as their private banking predecessors had (M. Pohl, 1986a: 55).⁶⁵ Clearly, the corporate form did not definitively resolve the problem of the quantitatively insufficient financial means of banks.

For that matter, nor were syndicates so unwieldy that bankers shied away from employing them. The continuing existence of syndicates presents a problem to the institutional account for the rise of joint-stock banks. No *lasting legal organizational* form replaced the syndicate agreements used by the corporate banks post-1870. Therefore the received narrative presents a theoretically arbitrary justification for the rise of joint-stock banks on its own terms. The difficulties of syndicates in the context of mid-century private banking represented market failure because a new organization emerged that functionally replaced private banking syndicates. Later, when corporate banks used the practice of syndicate banking during the second industrial revolution, this was not indicative of market failure, because no new institutional form replaced the consortia among the corporate banks. Consequently, the quantitative incapability of even the corporate banks to singularly provide the financial means asked by government

⁶⁴ For example the *Darmstädter Bank für Handel und Industrie* made use of a syndicate arrangement as early as 1860—just seven years after its supposed founding in order to circumvent syndicate arrangements amongst private bankers (!)—in order to issue shares of the Rhine-Nahebahn bonds (Knips, 1912: 150). Indeed, it was commonplace that the balance sheets of German joint-stock banks during the Kaiserreich maintained entries for consortia business (*Konsortialgeschäfte*): assets and liabilities of securities acquired and placed through different consortia (see *inter alia* Burhop, 2004).

⁶⁵ The foundation of AEG between 1883-1887, and the expansion of the Harpener Mining Company between 1888-9 are just two examples given in the literature (see e.g. Ramm (1997: 74)). It should also be noted that government loans had similarly reached a proportion beyond the capacity of even individual joint-stock banks. Key examples in this regard were the "Prussian Consortium" established in 1859 between the *Disconto-Gesellschaft* and numerous private bankers like Bleichröder (also with the assistance of the Finance Minister von Patow (see Kleeberg, 1989: 166)) as well as the Rothschild Consortium (see Knips, 1912: 157). Further contextualization on the Prussian Consortium can be found in Stern (1977: 10, 108) for some details in a non-specialist account, or Reitmayer (1999b) and Stuebel (1935: esp. 30-33) for more scholarly treatments.

loans, as well as machine, chemical and electrical industries *did not* represent the necessity for a new institution, because no new institutions arose. Joint-stock banks were the highest form of institutional evolution in solving the quantitative collection of financial resources, therefore *they must have arisen to solve this problem*. Not only is this arbitrary, but it is also circular.

The emphasis on the potential purpose of these banks to efficiently industrialize has principally underscored only those elements of their foundation concerned with the adjudication of profit, loss, and monetary transactions. Wider social forces, e.g. the state, play only a latent and exogenous role by *hindering* the full development of the pre-existing economic dynamic of institutional creation. Narratives of German finance delineate the novelty of joint-stock banking and its conflation with universal banking, as a contingent, but potentially foreseeable affair given the economic logic of industrialization. In Prussia, the joint-stock legal form required a concession from the state. The Prussian state's anti-industrial agrarian interests made it highly reticent to award concessions for joint-stock banks. The first *bank* to be permitted the privilege of incorporation as a joint-stock company—the *Schaaffhausen'sche Bankverein*—may only have been permitted to do so because of the extra-economic context of the 1848 revolutions; however, the prevalent assumption in the extant scholarship is that this only consecrated an existing trend within the German political economy.

"Mixed-banking" had already proven itself as the necessary instrument of a backward economy in need of capital, and the joint-stock legal form simply delivered the compulsory institutional form for the quantitative scope necessary for industrialization to take full effect. This widespread assumption overlooks two key facts about the pre-revolutionary period because of its teleological analysis of history. Firstly, there was a myriad of different *types* of joint-stock bank that were founded during this period: issuing banks, "mixed-banks," and commercial trade banks. Secondly, this assumes intention where there was not always. Businessmen and private bankers in the pre-revolutionary period predominantly wanted to found banks that could issue banknotes, and believed joint-stock banks were the only feasible way to do so (Achterberg, 1984: 326). The predominant financial concern of the time was how to

⁶⁶ In this way, Tilly (1998; 1989; 1966) has maintained that the early vision of a "railway" bank drafted by Ludolf Camphausen in 1838-9 demonstrates that the "mixed-banking" programme had already been proven as the way of the future, and required only the greater capital strength of the joint-stock form.

improve the desultory dearth of liquidity and the payments system. The issuing of banknotes along the model of Scottish banks was the chief manner that financiers believed could solve the problem (Bösselmann, 1939: 78). The desire to found joint-stock banks for promotional investment purposes grew during the 1850s, but led only to a situation whereby there was a multiplicity of banking models undertaken by different corporate and non-profit financial institutions.

The adoption of "mixed-banking" by corporate banks, and the foundation of corporate banks specifically for "mixed-banking" purposes is better understood in political terms. The joint-stock banks founded between 1848-1857 were related in complex, nonlinear ways to the intense social conflict of the time—the faltering hegemony of a feudal-aristocratic order, a dearth of liquidity, the fear of revolutionary masses, and geopolitical rivalry between different German states—all of which were in turn autonomous from each other, but internal to the struggle over industrialization. The received narratives reduce the conflict over joint-stock banking to the resistance of Prussian regulation. That is to say, the state was capable of *obstructing* the secular economic forces driving the development of economic institutions; however, state action in no way played a *constitutive* role in the process of generating distinctive financial institutions.

This view also implies that had the need for a political concession not been necessary, many more joint-stock banks would have been founded in order to satisfy the financial needs of an economy changing paths to industrialism. The received narratives effectively assume the existence of a generalised demand for corporate "mixed-banks" prior to the first contingent foundation of such a bank in 1848. For the history of Germany's universal banking order, this presumes exactly what must be explained: how the relatively atypical practice of "mixed-banking" in the Rhineland was transformed from a peculiar regional anomaly into the accepted form for corporate banks.

Theoretically the received narrative fails on methodological grounds for ontologically separating politics and economics into compartmentalized phenomenological social spheres. This view presupposes the *interference* of politics in the operation of the market. Here politics and power operate from a position regionally *external* to the economy. The genesis and generalization of German commercial banking on the joint-stock legal organization is explained strictly through the functional needs of the economy. These functional requirements are themselves constituted prior to all extra-economic forces. Relegating power and politics to a different register of

explanation as this does, suggests that these categories can have no fundamental constructive influence on lived "economic" history. These assumptions have helped to direct study of this important chapter of German financial history away from the social agency propelling its institutional changes.

In contrast, this chapter highlights the paramount importance of state, (geo-) politics and society in the initial constitution of this new class of economic institutions. It endeavours to underscore how an agency considered principally "economic," is better understood by a more complex narrative including the concerns of social and political history. These coalesce around the revolutions of 1848 in the German states.

THE FIRST FOUNDATION WAVE OF JOINT-STOCK BANKS, 1848-1857

Crisis began to manifest itself for the pre-March Prusso-German social order when crop failures and a downturn in the trade cycle coalesced between the years 1844-1847 (Tilly, 1990). In the period leading up to the revolution, rapidly expanding market relations and a demographic boom had helped to ensure that there was an enormous proportion of German society living in near destitution—peasants, agricultural day labourers, craftsmen—(Wehler, 1987: 664), as well as a group of those engaged in marginal occupations and trades—small shopkeepers like grocers, taverns and print shops—that suffered a near permanent threat of falling into penury (Sheehan, 1989: 638-9). The crop failures across Germany in 1845-7 not only reduced the overall amount of food available for those eking out an existence on the perimeters of society, but also increased the price of basic foodstuffs. This was disastrous for the aforementioned marginal and threatened groups who already spent the overwhelming majority of their income on such goods: the poorest in the countryside were reduced to eating grass, clover and potato peelings (Blackbourn, 2003: 104-5). The downturn in the trade cycle added fuel to the fire of social discontent by pushing many marginal businesses into bankruptcy.

The collective violence sparked by widespread hunger and privation was matched by the qualitatively new phenomena of labour unrest in industrial work. Incidents of unrest related to wages, timeliness of pay, hours and security of employment (Sheehan, 1989: 642). These latter typically "modern" forms of protest were also accompanied by social tumult perpetrated by artisans and craftsmen that were unable to compete with the new industrial production techniques. In its least intense expression, this took the form of political agitation for the reinstatement of the guilds. In

its properly violent manifestation, craftsmen would harass merchants and factory owners (or sometime just foreigners), as well as burn, smash or destroy industrial equipment. Contemporaries in Prussia were only slowly recognizing the arrival of this "social malaise" as a result of the incompatibility between industrial society and the traditional order (cf. Jaeger, 1988: 85ff.).⁶⁷ The increasing inability of the lower orders of German society to feed themselves, the demands of new industrial workers for more secure work, and the pleas of artisans for relief from industrial competition, may not have been glaringly obvious to contemporaries, but all helped to establish protest and rebellion as a nonetheless common feature across Germany in the period leading up to the revolution (Hamerow, 1958:84).

Running concomitant with the periodic mayhem and upheaval prior to the revolution in the 1840s was the more formal political agitation of moderate liberal politicians. There was at this time a diversity of positions within German liberalism. To stylize the movement's key political demands we could focus on the call for constitutional-monarchy, freedom of the press, the right to gather and form associations, and trial by jury (Henderson, 1975: 80). Beyond the overt political demands, central to social composition of the liberal movement were Prussian businessmen and financiers. In addition to their constitutional demands, they were locked in conflict with the Prussian state over the regulation of business practices. Of principal interest to this chapter was the conflict over the financial and monetary regulation in burgeoning securities markets and the Prussian state's stranglehold over monetary matters. The latter resulted in a well-known dearth in means of payment in the late *Vormärz* period (Tilly, 2003; *idem*, 1966; Martin, 1967).

The Prussian government had initially been very keen to spur the development of an active market for government paper allowing securities markets to trade in government paper. The fear of the government that unconstrained trading would divert capital from its own finances arose already in the 1840s. In the mid 1830s, forward transactions on Spanish state bonds began trading with particular intensity, feeding an inflationary dynamic in their prices. The Prussian state banned forward transactions of Spanish paper in 1836. This had the effect of shifting speculative dynamics to other foreign government securities. Consequently fearful that state securities from abroad

⁶⁷ The perception of a systemic problem often arose only obliquely: for example, the relatively late perception of growing shantytowns on the peripheries of industrial centres, like the "Vogtland" in northern Berlin (Clark, 2007: 453).

would soak up demand for their own paper, the Prussian government banned the trading of all foreign government securities in 1840 (Gömmel, 1992). 68 At the same time as trading in government paper was growing, issues of railway company shares were also growing. The Prussian state had in part helped to influence the speculation in such securities by guaranteeing dividends on railway shares and interest rates on railway bonds (of 4%, which was higher than Prussian state paper at 3.5%). This was a type of half-way house between full private financing for railway development or complete government subsidization. The concession system in place however necessitated the request of potential railway firms to apply for a government concession. "Interim certificates" (Interimsscheine) were a type of security used to advance funds on railway projects that would be approved before the concession was granted.⁶⁹ Of course the issue of an interim certificate was no guarantee that the project would receive a concession, so trade in these instruments amounted to speculation on the government's administrative process. The amount of funds piling into trading of these certificates, and the mercurial fluctuations thereby generated for prices of railway securities, frightened state officials at the prospect of diverting resources from more stable investments (especially mortgage backed loans in *Pfandbriefe* that provided the backbone of credit to East Elbian estate owners), leading the Prussian state to ban the trading of these securities as well in 1844 (Bösselmann, 1939: 22; Lichter, 1999; Kubitschek, 1962; Leiskow, 1930).

Securities market regulation was a thorn in the side of financiers, however, it did not compare to the more pressing matter of the lack of means of payment (Lichter, 1999; Kubitschek, 1962: 75-6). The Prussian monetary system, like other Continental European political economies, was based on precious metals. Under such a system increases in the supply of money could only occur directly through increases in the supply of gold or silver, and indirectly through the increase in money surrogates (Sprenger, 1982). While bills of exchange, and giro accounts, had been used with moderate success as surrogates in places like the Rhineland in order to ease the strain on the payments system (Tilly, 1966a: Ch. 3), such substitutes were ultimately founded on the flexibility of issuing bank notes that could travel in wider circulation. Bills of

⁶⁸ The effect of the ban was mostly to push the trading of these securities underground away from state certified Bourse brokers, and towards black market dealers "*Puschmakler*" (Kubitschek, 1962).

⁶⁹ In this sense, *Interimsscheine* operated like a futures contract on whether the railway firm would be founded or not.

exchange and other forms of credit were also limited in their usefulness by the Prussian decree of 1830 that any certificate to be used as means of payment needed to be licensed by the state (Kubitschek, 1962). Further, following a Prussian government decree in 1833 any institution wishing to issue banknotes was required to seek the permission of the government (H. Pohl, 1982: 82). So, money surrogates were tenuous replacements, and financiers were unable to concession banks of issue because of restrictions from the Prussian government. Consequently, the ability of financial institutions to generate liquid means of payment was severely limited.

The problem of money shortages and liquidity was perhaps *the* central problem occupying Prusso-German financiers during the first half of the 19th century (cf. Berghoff, 2002: 57-61; H. Pohl, 1982: 83). Indeed, the question of liquidity creation through the issue of bank notes was seen as the definitive quality of "bank-*ness*." It might be generalized that therefore the concept of "bank" was itself intimately tied to the idea of issue banking during this period (Schumacher, 1908: 10-25). The foundation of joint-stocks banks for contemporaries was therefore "right from the beginning, mostly concerned with appropriating the right to issue banknotes" (Achterberg, 1984: 326).

The problem of finding adequate means of payment worsened steadily between the Carlsbad Decrees and the early 1840s, as the number of monetary transactions steadily rose within Prussian territory (cf. Ziegler, 1997). When the Prussian government prohibited futures trading of railway shares in 1844 it anticipated that this would help to redirect funds back towards mortgages for East Elbian Junkers and help to reduce the interest rates on government bonds. The consequence of withdrawing huge amounts of liquidity from circulation was rather to bring the situation of means of payment shortages to near crisis proportions in 1846-7 (Kubitschek, 1962).

The First Joint-Stock Bank—the Schaaffhausen reorganization, 1848

"Questions of credit and revolutionary politics could not have been more tightly intertwined."⁷¹

⁷⁰ This was even extended to the State-run *Seehandlung* and Royal Bank via cabinet order in 1836

⁷¹ Böhme (1965: 199, my translation)

The transformation of the *Schaaffhausen* private bank into Germany's first joint-stock bank occurred in the context of the European social crisis of 1848. Banking history often recounts this foundation in passing as a contingent event, worth noting for how it would foreshadow the trend towards the foundation of other joint-stock universal banks during the early 1870s, and the *Schaaffhausen's* position later as a *Berliner Großbank*. It is frequently assumed that all banks aiming to incorporate during this period of time sought to engage in the type of universal banking programme undertaken by *Schaaffhausen* (Tilly, 1986; *idem*, 1966). Rather, the actions and self-understandings of contemporary financiers suggest that short-term credit, and above all liquidity, was the conceptual and practical linchpin of their social action in the German political economy. Moreover, the general concern with liquidity for making payments that underlay the concerns of commerce and finance during the revolution would engender, in a completely unforeseen manner, the transformation of the *Abraham Schaaffhausen Private* Bank into a joint-stock company.

In January of 1848, revolution broke out in Italy, before spreading to Paris in February and overturning the government of the French King Louis-Philippe. News of the French revolutionary fervour travelled from the Southwest of Germany and spread North and East practically carrying revolt with it. Tumult broke out first in Baden, and after travelling through Wurttemberg, Bavaria, and Saxony demonstrations eventually erupted in Berlin in March. Harvest failures had ceased in the Autumn of 1847, of course this was little comfort to those peasants who had already consumed their seed crop (Blackbourn, 2003), but the reduced demand for textiles—itself likely an outcome of the earlier crop failures—helped to spark a commercial crisis in England at the end of 1847. The crisis in England was transmitted to Germany at the same time as unemployment and inflation had been mounting in German commercial centres. Despite this recessionary pincer movement, noticed mostly obliquely by contemporaries with an eye for expensive apartments left unrented in some city centres while there were growing numbers of homeless (cf. Clark, 2007: 460ff), the Berlin Bourse still managed to reach impressive heights in trading at the end of 1847. Indeed, even in January with the business climate deteriorating and unrest mounting amongst all groups with any

reason for opposition to the "semi-feudal" *status quo*, the "monarchical-bureaucratic condominium" failed to take notice of the mounting business crisis in Germany.⁷²

News of the revolution in Paris however changed this situation dramatically by influencing a sudden and widespread search for specie and "hard currency." Subsequently, numerous businesses and banks were thereby forced into illiquidity or insolvency (Rachel and Wallich, 1939: 261-2), undoubtedly due to the poor opportunities for rediscount available (Ziegler, 1997: 138) and the institutional structure as well as strategies of many private bankers for dealing with such crises (Tilly, 1966; see also Ch. 4 here).

The ruling elites in Central Europe were deeply unsettled by the economic chaos, threat of revolutionary violence, and the palpable expansion of the revolutionary crisis from popular constitutional, to generalized crisis of the *politico-economic* order as a whole. Karnival celebrations had delayed the influence of news from France setting things off immediately in Cologne, but already by the 3rd of March the leader of the league of Communists was calling for "[the] people to take up arms, protection of labour, unlimited freedom of speech and press" (Stürmer et al., 1994: 118). The Cologne City Council felt so threatened that it was forced to call in the troops. Indeed, the fear amongst the established bourgeoisie there was so palpable that Dagobert Oppenheim commissioned a private force of mercenaries to protect the properties of the Oppenheim brothers (those of the Cologne Bank). In Berlin, the weather had become unseasonably warm on the 13th of March, and large crowds began gathering in an area North of the Tiergarten called "the Tents," in order to read broadsheet newspapers, discuss the events of the revolution across Europe, make speeches and sign petitions demanding political change as well as governmental relief for the masses of unemployed (Sheehan, 1989). Frederick William IV understood the gathering of these crowds as a choice between channeling their energies into moderate reform or allowing them to erupt into radical revolution. After some indecision between these options, on the 17th of March the King agreed to proposals that met some demands of the opposition in order to avoid bloodshed: the immediate recall of the United Diet, a constitution for Prussia, initiatives to reform the confederation and freedom of the press (Sheehan,

⁷² In 1846, the Finance ministry conducted a wide-ranging survey of the effectiveness of its 1844 legislation prohibiting futures trading in railway shares via correspondence with all the major Chambers of Commerce across Prussia. The selective reading of the response is quite telling of the ostrich-like strategy of key members in the Prussian state administration (cf. Kubitschek, 1962).

1989: 666-7). On the 18th of March, a crowd gathered to celebrate the promise of these reforms in the *Schlossplatz* outside of Frederick William's palace in Berlin, but was very quickly fired upon by the Prussian military.⁷³ Barricades were built and fighting carried on through the night before the ensuing violence had left 300 (the majority of which were craftsmen of some sort or another)⁷⁴ dead. In an attempt to restore public faith in his reformist intentions, the King watched a funeral procession of all 300 bodies from his palace balcony while explicitly wearing a tricolour armband the following day. The royal display of contrition, the appointment of a liberal ministry,⁷⁵ and the promise of a constitution had managed to diffuse tensions temporarily, but the underlying issues driving the upheaval were far from resolved. The business crisis continued unabated as liquidity remained frozen and the Bourses lifeless, while manufacturers continued to respond to their difficulties by cutting labour, and artisans and craftsmen continued their appeals for a return to the stability of guild life (Hamerow, 1958).

The tensions wrought by the social transformation from an agricultural society founded in a legal order benefitting a feudal aristocracy to an industrial capitalist one with an "egalitarian" legal standing for all citizens were at their most acute. Social scientific and historiographical debate about the European revolutions of 1848, no less the transformation of German society in the 19th century continues to provide fodder for intellectual debate about the grander constitutive significance of these events (or their causal origins). What can be highlighted with more certainty is the professed self-understanding and normative political goals of contemporary actors: monarchs, bureaucrats, businessmen, and revolutionaries. The conservative forces of the revolution—monarchs, aristocrats and state bureaucrats, were keen to preserve the agrarian basis of their power, but were also ardent about the fiscal advantages of an expanded tax base, and fearful about the uncertain extent, and violent potential, of the "social danger" animated in the dispossessed underclasses.

⁷³ The reasons for this outbreak of violence are lost to historiography, but are usually attributed to a mixture of antinomy from the Prussian Military (Blackbourn, 2003) the military's misunderstanding of the nature of the gathering, interpreting it as less celebratory and more threatening (Sheehan, 1988), or perhaps simply the itchy trigger fingers of soldiers (Brose, 2013).

The most represented professions were cabinet-maker and tailor for some reason (see Hoppe and Kuczynski, 1964).

⁷⁵ Berlin first appointed a liberal Ministry headed by Arnim, which would last only 10 days, followed by the Rhenish contingent detailed below.

Faced with similar choices, monarchs across German, no less all of, Europe were keen to provide tokens of their reformist intentions and invited members of the moderate liberal opposition to join government. In Prussia, Ludolf Camphausen and David Hansemann—two Rhenish businessmen and prominent liberal political figures were called forth as Minister of State and Finance respectively. They entered office in Berlin 10 days after the massacre, on the 29th March 1848. Accompanying the two Rhenish businessmen to Berlin was Gustav Mevissen, another Rhenish entrepreneur and financier who was sent on behalf of the Cologne Chamber of Commerce in order to influence and report upon the outcome of the proceedings (M. Pohl, 1982b: 44-5), ⁷⁶ as well as the banker August von der Heydt of Elberfeld who took a position under Hansemann in the finance ministry (Böhme, 1966a). All four of these men were key members of the Rhenish economic elite, 77 and pivotal figures in the Pre-March opposition movement against the conservative state. Despite some financial involvement in founding and supporting the *Rheinische Zeitung*, for which a young Karl Marx published radical articles against Prussian conservatism, these Rhineland liberals were emblematic of the liberal business elite: their chief political goals within the political movement of liberalism were largely to promote conditions conducive to business. Moreover, while they wished for significant change to the politico-economic regulatory order, they also feared the depths of social transformation that might be unleashed by continued unrest from social underclasses (Wehler, 1987). With their call to office, the forward movement of the revolution was for them essentially over (Sheehan, 1989: 668), and they wished to make changes enough to preserve their socioeconomic positions, but avoid the disruption to business engendered by violent unrest.

Crucial to their actions while in office was their assessment of the politicoeconomic terrain, and especially the roots of the crisis. Hansemann and seemingly
Mevissen as well as, identified the key problem of the crisis as the lack of liquidity and
short-term credit. As merchants and financiers of the industrially active Rhineland they
understood the problems engendered by the lack of means of payment generated by
Prussia's monetary politics. Hansemann reasoned that the revolution itself was a result
of this lack of liquidity: if short-term credit could be made available, e.g. through
rediscounting, then this could be extended in such a way as to breath life back into
businesses that could then rehire unemployed labour. Workers that were employed were

⁷⁶ Mevissen had no formal role in the government.

⁷⁷ Indeed, all of them could be named members of the Cologne financial elite.

unlikely to take to the streets, become involved in violent altercations or revolutionary fervor. While Hansemann's interpretation of the crisis, and its potential solution, was more or less accepted—the quantitative extent of the means to solve the revolution through the provision of credit would not go undisputed. The eventual "solution" to the crisis—given its understanding, could not have been foreseen as it involved the innovative adaptation of a changing institutional environment.

March 29th, the day that the liberal opposition entered office in Berlin, was also the same day that the *Schaaffhausen* Private Bank of Cologne⁷⁸ was forced to stop payments to its creditors. The assets of the bank were greater than its liabilities on paper; however, after writing down several loans that had gone bad owing to the commercial crisis, and the illiquidity of almost 1 Mil. Thaler worth of assets locked into real estate, the bank was very clearly insolvent (Stürmer et al., 1994; M. Pohl, 1982a: 55-8). The *Schaaffhausen Bank's* relations of credit and debt were intimately, and very widely, interwoven with Rhenish industry: the yearly turnover of the Bank accounted for roughly 50 Million Thaler;⁷⁹ the Bank was responsible for providing credit and advances to 170 different manufacturers and industrial operations throughout the Cologne region and its hinterlands accounting for roughly 40,000 workers. The possible collapse of the bank deeply frightened the bourgeois elite of Cologne, with the head of the Chamber of Commerce writing directly to Hansemann in Berlin to plea for assistance (Böhme, 1965).

Concomitant with *Schaaffhausen* shutting its counters, the financial situation across Prussia was also deteriorating. The Berlin stock exchange suffered daily losses between 30 to 45% in the value of listed securities (Rachel and Wallich, 1967: 261). In that city, there were no bankers left offering discounting services, with only the Prussian Bank standing between the lack of short-term credit, a generalized crunch in liquidity and the likely implosion of all business activity requiring credit. By the 28th March, the Prussian Bank was effectively the only institution offering discounting services, and had been forced to increase its discount rate to 5%. On the 31st of March it was forced to increase again to 6%, as its available means had been reduced to 258,000 Thaler and it needed to protect its reserves (Rachel and Wallich, 1967). The liquidity situation was so

⁷⁸ See the previous chapter for the significance of this bank vis-à-vis early "mixed-banking."

⁷⁹ One can get a sense for the quantitative relevance of such a figure from the average annual income per capita across the various German states from 1845-1850 which was about 233 Taler per year. I have calculated this statistic with information from Pierenkemper and Tilly (2004: 14) and Ziegler (2014: 173).

dire that a group of 32 businessmen and bankers wrote to the Prussian Finance Ministry requesting a grant of 1 Mil. Thaler, that they would match with their own funds in order to establish a discount bank in Berlin that would provide liquidity for the ailing medium and small businesses for whom credit was too expensive (Böhme, 1965: 200). A different group, of the oldest, businessmen in Berlin wrote directly to the finance Ministry in order to demand that 5 Million Thaler be delivered immediately to the Prussian Bank otherwise the consequence would be the complete freeze-up of all monetary circulation (Rachel and Wallich, 1967: 262). The quantitative assessments of the extent of the crisis by Berlin businessmen fell on deaf ears in the royal cabinet.

The aristocracy may have understood the dire need for funds amongst commercial establishments of its political domain, but its full quantitative extent was either not fathomed, or respected. At the behest of Camphausen and Hansemann, on the 30th of March the King agreed to provide an advance from the Treasury to the Prussian Bank of 2 Million Thaler over 6 months at 4%, and another 2 Million Thaler worth of Treasury Bonds were made available for 3 months (Stürmer et al, 1994: 120). With these finances Hansemann ensured that the funds were made available to banks in Cologne and Berlin immediately, while keeping 1 Million Thaler for the Prussian Bank. This residual sum Hansemann used to establish emergency banks in important commercial and industrial centres across the Rhineland—to cities such as Düsseldorf, Krefeld, Elberfeld, Barmen and Solingen. Crucial to his plan was also to use these emergency banks as centres to diffuse liberal political goals through his financial politics (Böhme, 1965: 201). Unfortunately for Hansemann, by the 6th of April the Düsseldorf Chamber of Commerce wrote to him to report that while his liberal "commissions" had been successfully established, the branches of the Prussian bank were almost entirely depleted. The grants and advances that had been made from the dispersed funds were little more than a "drop in the bucket" compared to the liquidity needs of the Prussian Rhineland. The Düsseldorf Chamber of Commerce further reported that there was no bank house in the Rhineland province that would provide any kind of advance, and consequently implored Hansemann to establish "local discount banks" that might alleviate the lack of liquidity (Böhme, 1965: 201). The Chambers of commerce in Elberfeld, Krefeld, Barmen, Duisburg, Cologne, Aachen and Memel similarly wrote to Hansemann to implore for the establishment of the latter, or even better for the foundation of permanent discount banks on joint-stock basis that might not assist solely the reestablishment of the flow of short-term financing, but then also serve as more permanent institutional fixtures in the future (Böhme, 1965: 201)

The relationship between the Chambers of Commerce and the Finance Ministry were conditioned in part by a certain reticence on the part of the former in demanding measures that might have truly solved the liquidity predicament of early April 1848. This can be inferred from a memorandum written by Mevissen and sent to Hansemann that exhibited a much more frank assessment of the crisis. Mevissen outlined what he understood as essential to solve the liquidity crisis, and did it in a clearly admonishing tone (Böhme, 1965: 200). The plan was adumbrated in six points:

- (i) "The immediate dispersal of 5 Million Thaler from the state Treasury to shore up the finances of the Prussian Bank" (M. Pohl, 1982a: 54)
- (ii) "The use of the state railway fund in order to purchase railway shares in an effort to revitalize the value of securities: 1 Million Thaler should be made available for this purpose" (M. Pohl, 1982a: 54). 80
- (iii) "The increase of the Prussian Bank's legally agreed maximum banknote issue to 5 Million Thaler above its current limit" (M. Pohl, 1982a: 54).
- (iv) "The establishment of Provincial Discount Banks in Berlin, Breslau, Danzig, Königsberg and Cologne on a 'Public-Private' basis whereby 1 Million Thaler from the State's amortization fund would be matched by 1 Million Thaler of private funds. The State's contribution would be held liable for losses, and the private capital invested would be paid an interest rate of 6%, and the government would not be permitted to withdraw its capital" (M. Pohl, 1982a: 54; cf. Böhme, 1965: 201)
- (v) "The formation of mortgage banks in the Rhineland" (M. Pohl, 1982a: 55).
- (vi) "The issue of banknotes payable to 1/3 the value of assets in mortgage and discount banks, as well as the full amount of cash deposits in private banks" (M. Pohl, 1982a: 55).

The ambition and scale of the above plan was sure to fail royal approval. Despite the promise of a constitution, it seemed more and more evident that the conservative authorities of the Prussian state were in fact loath to grant a constitution to the uppity masses. More importantly, the letter from the Düsseldorf Chamber of Commerce had unsettled Hansemann about the reliability of using the established institutional structure of credit and debt relations in order to execute a solution to the credit-crisis as a way to

⁸⁰ This should be compared with Böhme's delineation, where he suggests that Mevissen's demand was in fact 2½ Million Thaler (Böhme, 1965: 201).

resolve the revolution. The Düsseldorf government wrote of the private banking houses "as the sole connection between the Prussian Bank and the needs of industry, the private banking houses had crystalized as insufficient and unreliable" (Böhme, 1965: 202, my translation). It would not be surprising to imagine that banks threatened with massive insolvency would have used the discount facilities created for emergency purposes in order to solidify their own balances without then passing this on to industrial clients. ⁸¹

Hansemann continued to be convinced of the necessity to solve the problems—from the perspective of the liberal movement—of the revolution by reforming the credit system. However, the Düsseldorf message had made him skeptical about the ability of the private banking order to pass increases in liquidity on to industry. The majority of private bankers across the German lands were after all, unlike those in Cologne and a few other areas in the Rhineland like Hansemann's hometown Aachen, ambivalently tied to the conservative cause: the bread and butter of most private bankers was the intermediation, negotiation, issuance and trade of government debt contracts and securities (Ziegler, 2005b; North, 1997). Hansemann did not trust such an interest group to properly forward the liberal cause in the post-revolutionary order—he saw this role as better carried out by those members of the opposition movement that had been mobilized by liberal rhetoric: the small factory owner, the trader, and the craftsman.

Hansemann did not favour Mevissen's strongly worded suggestions. Mevissen's plan was unlikely to receive government financing, and risked undermining what Hansemann saw as the goal of the liberal movement's revolutionary credit politics. Establishing joint-stock discount banks across five major cities, as well as pumping cash into the stock markets and opening the maximum note-issue of the Prussian bank was too expensive for a Prussian government still exercised with avoiding the promulgation of a proper constitution. Furthermore, the pleas of the major Chambers of Commerce for the establishment of discount banks risked simply turning more financial power over into the hands of the financial establishment: in all of these cities other than Cologne the reigning financial institutions were likely to either fail to pass newly created liquidity onto industry (using it to bolster their own balance sheets)—no less small and medium sized enterprises and entrepreneurs—or instead channel it back into the speculative purchase of government paper.

⁸¹ Indeed, in our contemporary period, many banks did just this when receiving government monies in the wake of the 2007-8 "Credit Crunch."

There was no tidy solution to the catalogue of problems confronting the Rhenish financial elite that had entered government. Hansemann's ultimate decision reflected a certain level of postponement on some fronts. The commercial centres that had written to Hansemann requesting assistance would continue to be assisted through small amounts of grants and subsidies dispersed through emergency discount houses, their further rolling out approved on 15th April 1848. Simultaneously, Hansemann worked diligently with other members of the Finance Ministry in order to develop a new legal infrastructure for the concession of note-issuing banks. He would finally succeed in gaining approval for this measure in September of 1848. The significance of this initiative was its attempt to solve the liquidity problem within parameters conducive to further industrialization. The new note-issuing banks would be limited in the amount of capital they could employ, the number of banknotes they could issue, subject to very stringent reserve requirements as well as prohibited from engaging in other "normal" banking or speculative activities (M. Pohl, 1982a). The aim was to both satisfy the liquidity needs of the major commercial centres, while also ensuring that these banks would avoid lucrative speculative activities and instead fulfill their role as providers of liquidity and discounting functions (Böhme, 1965: 207-8).

Lastly, in partnership with Mevissen, Hansemann developed a special plan for digging Cologne out of its impending potential financial morass. Rather than establish a further temporary discount house there, the two Rhenish financiers decided to convert the Schaaffhausen Private Bank into a joint-stock bank and thereby solve the problem of payment stoppage (Böhme, 1965). By converting the outstanding debts of the bank into shares it became no longer necessary to repay those debts immediately in the short-term (for those creditors needing immediate liquidity, their shares could be resold without affecting the balance sheet position of the bank). Some creditors of the Bank were not entirely enthused by the idea (M. Pohl, 1982a: 59). Consequently, the 4.3 million Taler of shares were divided between two groups: share group A, for creditors of the bank, received shares guaranteed an annual dividend of 4.5%. Further, the government agreed to guarantee the value of these shares as well as the dividend payment until 1858, while 10% of these shares were meant to be paid back annually to these shareholders (M. Pohl, 1982a: 59). Those in share group B, were the newly envisioned partners and owners of the Bank proper, who would receive a 2% annual dividend on their shares, while the value of their equity was allowed to fluctuate on the market.

The trade-off for the transformation of the bank was a role for the state in the operation of the bank. As the Minister of Finance, Hansemann used his governmental powers to block the possibilities for a "completely free unfurling of the bank's capabilities" (Böhme, 1965: 205, my translation). Hansemann ensured that the government would have a right to determine quite a significant amount of the bank's operations. It would be able to nominate the director of the bank, as well as the naming of a special "state inspector" for the bank. This state inspector would negotiate all interactions between the state and the bank, could ask any information of the bank's director, and would be involved in all business of the bank's administration and the annual general meeting. The statutes of the bank allowed it, much like it had previously done before it was transformed into a joint-stock bank (see Chapter 4), to engage in almost all banking activities except the issue of bank-notes—although its chief activity at the time of its "re-foundation" would be "the provision of credit for the ailing and distressed manufacturers along the Rhine" (Böhme, 1965: 206). That is to say, while the immediate purpose of the restructuring of the bank was to help solve the liquidity problems associated with the commercial crisis occurring simultaneously with the revolution, the pre-existing business policies of the bank were formally instantiated in the new joint-stock bank statutes. A Rhenish "mixed-bank" was officially, legally, and finally, made into the first German joint-stock bank by royal assent on the 28th August 1848 (cf. Riesser, 1910: 507-8).

The Disconto-Gesellschaft—a Joint-Stock Bank by other means

"Hansemann...was able to reconcile the profitable with the eleemosynary." 82

The agreement between creditors, Rhenish financiers, and the Finance Ministry (Hansemann) to transform the *Abraham Schaaffhausen* Private Bank into the *Schaaffhausen Bankverein* had been effectively concluded by the end of April (27th) 1848; however, between the settlement over the form of the new bank and its official foundation in August 1848 the revolution continued to advance. In addition to the attempt to solve the crisis through the provision of credit, the Finance and Trade Ministries had been authorized to engage in a form of "demand stimulus" (*avant la lettre*), employing people to literally "move dirt" in large cities with unemployment

⁸² Kleeburg (1989: 138)

problems like Berlin (Boch, 1991). Nevertheless, the liquidity crisis continued, and threats to the existing order from the "red spectre" (Hansemann, as quoted in Böhme, 1965: 208) continued and threatened to become even more radicalized along lines of those "who had and those who wished to have" (von der Heydt, quoted in Böhme, 1965: 200). Solingen reported to Berlin on the 12th of May 1848 that "the desperate situation of our workers becomes worse everyday, as does the threat of an outbreak of disorder and illegality," while the city of Kempen reported that "masses of unemployed workers are moving by force into isolated farming communities and extorting money and victuals from the inhabitants" (Böhme, 1965: 208).

At the same time, the conservative movement began to react against the early policies of the Camphausen-Hansemann ministry as the state subsidies, grants and advances distributed via the emergency discount centres threatened to drain available funds from the East Elbian mortgage market. The Landschaften were first established in 1770 as a way to assist East Elbian farmers without charity. These institutions were mortgage banks the sole purpose of which was to make loans against the collateral of real-estate and transform these loans into marketable securities called Pfandbriefe (effectively mortgages) (Tcherkinsky, 1922: 9-13, 28ff.). Many elements of the private banking order, especially in Eastern Prussia had become more and more apt to purchase Prussian state, as well as foreign government, securities, especially as the *Pfandbriefe* of the Landschaften had appeared as safer investments vis-à-vis other securities beginning in the 1840s as the prices of other securities appeared more turbulent. The market value of the *Pfandbriefe* actually remained at par over the course of the revolution, 83 but conservative elements within the government nevertheless felt threatened. The East-Elbian region was the subsistence motor of the Prussian Monarchy, as well as the conservative movement within Prussia, and the system of mortgage credit represented a way "to maintain continuity in the ownership of land" (Brophy, 1998: 97). The potential for falling purchases of *Pfandbriefe* might indicate the potential for greater fungibility in that land.

The policies of Hansemann would ultimately lead to his dismissal from the Finance Ministry on the 15th September 1848, but not from his position as head of the Prussian Bank. In his capacity as the leader of the Prussia's chief public credit institute,

⁸³ Indeed, as Brophy has shown (1998: 219, note 50), the Prussian cabinet would later employ similar arguments by mobilizing statistics showing the increased number of purchases of Pfandbriefe during the period up to 1851.

Hansemann would carry on a two-year political battle with August von der Heydt, ⁸⁴ the Prussian Minister of Trade, and Hansemann's other successor, ⁸⁵ Finance Minister Rudolf von Rabe, over the nature of the future organization of private credit and debt within Prussia. Von der Heydt, like Hansemann, was a member of the "wild and radical Rheinlanders" who entered into government office in March of 1848 (*Frankfurter Oberpostamts Newspaper*, quoted in M. Pohl, 1982: 51). A banker by trade, from Elberfeld, and associated with the liberal movement, von der Heydt might have appeared to have been a supporter of reform and social transformation and the liberal movement more generally. Despite being an advocate for expanded political rights visà-vis private property, he was counter intuitively a thoroughgoing supporter of the monarchy and the conservative order (Böhme, 1966a: 35). As Minister of Trade, von der Heydt managed to acquire the responsibility for the concession of all new banks under the new government, and with this aimed to prop-up the status quo relationships of credit provision within Prussia (Brophy, 1998; Böhme, 1965; Bergengrün, 1908).

The new normative statutes for note-issuing banks worked out under Hansemann's aegis as Finance Minister, and passed on the 15th September 1848, allowing the concession of joint-stock note-issuing banks provided the first points of struggle over the shape of Germany's financial system during the post-revolutionary period. The responsibility for assessing the applications for concessions had prior to September 1848 resided with the Finance Ministry (which, under Rother and Hansemann, had also been the nerve centre for the Prussian Bank and the Prussian Overseas Trading Corporation). When von der Heydt took over the Ministry of Trade, he also appropriated the prerogative to assess new requests for concessions. As a supporter of the monarchy, and the traditional financial order in Prussia, von der Heydt voiced a keen "inclination to endorse" concessions for joint-stock banks that would benefit the traditional concerns of the private banking order (government securities and loans, as well as credit for larger commercial operations), and especially those that demonstrated a potential to increase the flow of funds to the lands East of the Elbe (Böhme, 1966a: 35). Von der Heydt turned down the opportunity to provide

⁸⁴ It was only after two months that von der Heydt was promoted to the position of Minister of Trade within the Cabinet.

⁸⁵ Hansemann's immediate successor in the Prussian Finance Ministry was Gustav von Bonin. While von Bonin achieved little during his two months in office, it is erroneous to state, as Böhme does (1966: 34), that the Ministry of Finance remained empty before being occupied by von Rabe.

concessions for note-issuing banks in Krefeld, Gladbach, ⁸⁶ Ruhrort, ⁸⁷ Duisburg (all prominent industrial oriented cities along the Rhine and the Ruhr) *precisely because* "there was a deficit of banks" there (Böhme, 1966a: 36): in other words his aim was to starve those regions of credit. Despite having entered Berlin with the "wild Rhineland radicals," von der Heydt's Ministerial tenure was marked by a strategic operation in favour of the aristocracy and monarchy. ⁸⁸ Hansemann, aiming to continue his liberal political project of an industrial—as against a feudal order—collided head-on with this inclination.

The new opportunity to concession joint-stock banks of issue was first taken advantage of by the *Berliner Kassen-Verein*. The *Kassen-Verein* was essentially a discount bank, founded in 1824 as a private partnership by prominent Berlin Bankers (Rachel and Wallich, 1967: 238ff.), in order to assist the commercial groups of the city to find rediscounting opportunities by issuing banknotes. Following the restriction of the opportunity to issue banknotes imposed by the Prussian government in the 1830s, the business of the *Kassen-Verein* had become significantly limited as it was forced to discount with cash payments (H. Pohl, 1982: 42). The promulgation of the new normative statutes allowed the *Kassen-Verein* not only to apply to issue banknotes again, ⁸⁹ but to reorganize its private partnership as a joint-stock company.

Even though Hansemann had worked quite hard in order to promulgate the new normative statutes, and similarly assiduously in order to establish other means to solve the liquidity difficulties that occurred during the revolution and had marked the commercial crises in the run-up to the revolution, he presented formidable resistance to the transformation of the Berliner *Kassen-Verein* into a joint-stock company with the ability to issue banknotes. In numerous memoranda, reports, official statements and writings, Hansemann outlined several arguments against the concession for a transformation of the *Kassen-Verein* into a joint-stock company: firstly, the

⁸⁶ Gladbach was renamed in 1960 to Mönchengladbach in order to distinguish it from another German city, Bergisch Gladbach also in the vicinity. During our time period it was known simply as Gladbach.

⁸⁷ Ruhrort is today a district within Duisburg, having been incorporated in 1905, but during our time period was a distinct, and heavily industrialized, port city.

Indeed, von der Heydt was also responsible for dealing with all railways that had received state guarantees, and became involved in a debilitating series of conflicts over the operation of night trains during his tenure (as a specific strategy to make certain railways unprofitable and thereby worsen their financial positions so much that the state might take them over and operate them publicly) (Brophy, 1998).

⁸⁹ Up to a maximum of 1 Million Taler.

establishment of a second bank in the capital that could issue banknotes would provide too much competition for the Prussian Bank and would complicate the State's overview of credit affairs in the capital and its surroundings; secondly, this would negatively impinge upon the overall circulation of money and capital; finally, that there was no incentive for the *Kassen-Verein* to dedicate any of its services to the small business or craftsmen during times of crisis (Böhme, 1966a: 37; Rachel and Wallich, 1967: 275). Rather than concession a further discount bank that would work only for the largest commercial ventures in the capital, and thereby further concentrate the financial wealth and resources in particular hands, Hansemann argued that it was finally time, especially in light of the events of the revolution, for an institution that could provide for the masses of small to medium sized craftsmen and traders of Berlin (Rachel and Wallich, 1967: 275). Promoting as it did the advancement of credit for East Elbian Junkers, von Rabe and von der Heydt supported the application to grant a concession to the *Kassen-Verein*, which was subsequently agreed and signed by the King on the 15th April 1850.

Hansemann "attached a draft" (idea) for a different kind of bank to his arguments against providing a concession for the *Kassen-Verein* that would, without his intent at the time, germinate later into the *Disconto-Gesellschaft* (Rachel and Wallich, 1967: 275; Poschinger, 1879: 227). Hansemann proposed that rather than allow the *Kassen-Verein* to be transformed into a joint-stock note-issuing bank that would only serve the further concentration of wealth in the region, it would be better to concession a new bank that would specifically serve the needs of craftsmen, small business and wage-workers (Böhme, 1966a: 40). Hansemann justified himself at length, stating that

the solid small tradesmen find personal credit more difficult to come by, and much more expensive, as compared to the large tradesmen—sometimes they cannot even come by it at all. It would be a much bigger achievement [than the transformation of the *Berliner Kassen-Verein*] if this social ill could be remedied and thereby the rise of the small tradesmen encouraged, not through public charity (which as a rule brings aspiring people down rather than lifting them up), but brokered instead through a good business orientation. In the event that one could establish such an institution, it would also have the not undesirable advantage that solid tradesmen would not have guaranteed personal credit—as so often happens—removed or denied with the onset of political and commercial crises. (Hansemann, as quoted in Bergengrün, 1901: 663, my translation)

The envisaged form of this new bank was similar to what we would today call a credit co-operative, and drew inspiration from the Belgian *Union de Crédit* founded in Brussels in 1848 (Kleeberg, 1988: 137). Hansemann envisioned his "*Berliner Credit*-

Gesellschaft" as a joint-stock company whereby the share-capital of the members would constitute the working capital of the firm. Members of the association would be able to receive credit on current accounts up to the amount of the capital they invested in the institution, in the form of discounted bills of exchange, or on current account credits (Däbritz, 1931: 9; Bergengrün, 1901: 663). Even though the revolution was clearly over by May 1849, Hansemann was still exercised to solve the political problems of an industrial order for Prussia through credit. The desire to provide credit to craftsmen and "tradespeople" was to co-opt their allegiance, and incorporate them into a commercial-industrial (capitalist) order, thereby solving the problem of the "social danger" (soziale Gefahr) (Böhme, 1966a).

By planning to found his new credit cooperative in the form of a joint-stock organization, Hansemann set the stage for a protracted battle with the Prussian bureaucracy. The first draft proposal of the bank's statutes was only completed on 28th May 1850, a year subsequent to Hansemann's original appendix against the Kassen Verein. Hansemann used his position as the chief of the Prussian Bank to reserve the largest conference room in the Bank's headquarters for the first general meeting of the proposed credit institute in June 1850. The attendees confirmed the proposed statutes, and built a committee for the elaboration of business policies and plan (Däbritz, 1931: 9). In May of 1851, a year after the submission of the initial proposal Rabe and von der Heydt issued their rejection for the proposal. They would only concede to allowing the new credit institute a 10 years concession, instead of the requested 25; secondly, the proposed acceptance of members' deposits in return for interest payments was denied (Däbritz, 1931: 11). The latter, Rabe and von der Heydt with the Minister of State Flottwell argued would have put the bank at an advantage vis-à-vis the private bankers in Berlin who were not allowed to collect deposits for which interest was paid (Böhme, 1966a). Hansemann responded by pointing out that the acceptance of deposits was a crucial factor for the existence of the credit institute (Däbritz, 1931: 11), because it would allow the institute the proper leverage to attract wealthy customers who would support the credit needs of the smaller and medium craftsmen. It was indeed

the actual purpose of the association [the planned *Berliner Kredit-Gesellschaft*] to provide artisans, craftsmen and especially the small and medium sized tradesmen a facilitation in the terms of acquiring credit, in such a way that it would also inspire their industriousness, skill and their own acquisition of wealth. Indeed, the aim is to achieve such a facilitation under conditions where the small tradesman can access credit on proportionally similar terms as the large manufacturer or trader" (Böhme, 1966a: 47).

At the same time that von Rabe and von der Heydt were attempting to shut down Hansemann's efforts to open his credit institute in Berlin, Friedrich Harkort "the Father of the Ruhr"—who was an industrial pioneer and prominent member of the liberal political movement, opened an inquiry into the banking system in early 1851 where he praised the goal of Hansemann's endeavour (Däbritz, 1931: 10). Von der Heydt, noting the popularity of Hansemann in Berlin (Bergengrün, 1901; cf. Bergengrün, 1908), as well as the need to pacify resistance to his various political projects in favour of the Monarchy and aristocracy, began granting concessions for joint-stock mining companies in the Rhineland and especially the Ruhr (Böhme, 1966a) in order to appeal to liberal businessmen on different, less problematic terrain. Furthermore, von der Heydt also reduced the level of taxation for mining companies by half, and eliminated royalties stemming from their operation. 90 The facilitation of concession granting for joint-stock mining companies successfully helped to placate the members of the liberal movement. For example, Gustav Mevissen, who had been integral to the transformation of the Schaaffhausen Bankverein (and afterwards become its director) was of the belief that it was better for the advance of an industrial order to move forward with the building and construction of joint-stock mining companies. Indeed, the amount of activity that the Schaaffhausen Bankverein conducted with such companies over the 1850s was tremendous (M. Pohl, 1982b).

Hansemann appeared to be effectively routed at the rejection of his proposal. Despite his popularity, the base of his support in the Rhineland was more or less placated by their new relative ease in obtaining concessions for mining companies, and private bankers—with strategic links to the East Elbian nobility—seemed bound to grab hold of the credit system to further entrench an agrarian feudal order. Shortly after the decision against his credit cooperative, Hansemann stepped down from his position as head of the Prussian Bank. Free from his obligations as a Minister, he devoted himself to establishing his institute. With the assistance of prominent lawyer Justizrat Geppert, Hansemann found the first of many loopholes that would allow him to pursue his project. Under Geppert's advice, Hansemann established the company as a "commandite trading company" (Kommandit Handelsgesellschaft), which did not require a specific concession from the government, but would allow Hansemann to engage in all of the planned activities with the members of the co-operative (Brophy,

⁹⁰ Mining industries had previously been operated privately, but only by the indulgence of the crown.

1998: 99; Däbritz, 1931: 12). Organizing the company on this legal basis required that there be both "active" and "silent" partners in the firm. The active partners were the only ones with a "legal personality" as far as the law was concerned—that is to say, the active partners were the only ones that could be held legally culpable in an unlimited sense for the debts of the firm. The silent partners were only responsible for the cash equivalent that they had paid into the firm's capital stock. Therefore, unlike a jointstock company, the firm would only exist legally so long as the active partners lived, or remained attached to the firm. Further, the active partners of the firm could be held responsible for any debts or financial obligations of the firm in the event of something like a bankruptcy. The similarity with the joint-stock company was that the "silent" partners were only legally liable up to the amount of their paid in shares.⁹¹ Hansemann, freed from his formal political obligations at the Bank of Prussia, agreed to be an active partner of the firm, where the "Direction" should have no less than 3 and no more than 9 members; however, the unlimited liability of the endeavour was apparently a too heavy risk to take as Hansemann was the sole "active" partner at the firm's outset. This nevertheless enabled the other 236 members who transferred from the original plan for the Berliner Kreditgesellschaft, to engage in this institution with limited liability.

The foundation of the company was completed, and business operations began, on the 15th of October in 1851, under the name "*Direction der Disconto-Gesellschaft*." The primary business of the Direction was the discounting of bills of exchange from its members, but it also accepted deposits from non-members (this was a further benefit of the legal structure that allowed it to circumvent the regulations for joint-stock banks) (Däbritz, 1931). Members could discount bills on favourable terms up to the value of their paid-in capital, while the deposits of non-members would help to keep the institution liquid for the membership.

The response of the Prussian government was to instruct the Prussian Bank to neither recognize the *Disconto-Gesellschaft* as a credit institution, nor to discount any of its bills (Brophy, 1998: 99). To be sure, this action was one of political contempt for a project that symbolized a vision of the credit system not espoused by the government. The *Direction der Disconto-Gesellschaft* had only 500,000 talers of reserves when it began, operated only on a membership basis, and was forbidden from any kind of

⁹¹ This is "share" in the strictly proportional sense of paid in capital, not equity shares that were initially issued on a market, nor ones that could be transferred then via further sale on another market.

speculative activities (Brophy, 1998: 99). That is to say, it could not purchase, sell, or hold any securities: even in the event that it had wanted to (it was forbidden from doing so by its statutes), the amount of business that it engaged in via its members was hardly adequate in order to undertake such speculative endeavours. Therefore, it hardly represented any kind of threat to the established institutions of Prussian finance at the time.

The operation of the *Disconto-Gesellschaft* in its first years was not entirely successful. Business was circumscribed because of the restrictions on its ability to discount at the Prussian Bank, which "neared a boycott" from the latter public institution (Däbritz, 1939: 19). While the number of members from the small and medium sized businesses grew, as well as deposits from wealthier clients, the actual amount of loans made at the institution remained well below a level that would turn the institution a profit (Dahlem, 2009: 122). The initial purpose of the redistribution from wealthy "non-members" to the smaller clients had been envisioned as a simple necessity to keep the business going. As the membership made relatively little use of the *Disconto*'s discount window, the proportion between the "special" membership and non-membership business required adjustment in order to balance the books.

Hansemann was also no longer a young man, already at the founding of the bank 61 years old, his health had begun to repeatedly fail from numerous ailments in the early 1850s. While in Bonn recovering from sickness in early 1855, Hansemann discovered that one of his representatives had made some disastrous choices leading to losses of 12,000 thaler (Bergengrün, 1901: 671). As the solely liable figure, this was a first wake-up call for Hansemann about the survival possibilities of the bank. Further, over the previous five years, Hansemann had remained the only active partner in the firm, having failed to attract any further interest from capable businessmen and financiers who might be able to lead the bank with him and accept the legal responsibility for the enterprise.

Since the foundation of the *Direction* in 1851, the Prussian, and more generally the German economies had begun an economic expansion. Financiers in France and the Rhineland had begun to change the terrain of commercial and industrial finance with the foundations of the *Crédit Mobilier* and the *Darmstädter Bank* (for the latter see the next section). These two foundations, properly universal banks aiming at sponsoring industrial foundations, were brought to life against the backdrop of a decreased general need for liquidity and means of payment in the German economy. This owed in part to

the large discoveries of gold in California and Australia which loosened monetary constraints across Europe (Hobsbawm, 1975: 49-50). The increased supply of precious metals flooded the continent and helped to reduce the pressure on the payments system that had so characterized the pre-revolutionary political economy of Prussia and the German states. Furthermore, a general increase in confidence following the cessation of revolutionary violence assisted in doubling the number of deposits at the Prussian Bank over the first six months of 1851 alone (Kitchen, 1978: 87). These developments almost single handedly transformed the considerations of financiers interested in promoting new financial institutions. The dearth of liquidity might still become a threat, but the sudden relative ease with which railway and mining companies might be concessioned opened a new window to push towards the industrial future.

In this context, and against the confluence of these influences, Hansemann was began contemplating the extension of the *Direction*'s business beyond simply discounting bills of exchange for small and medium sized businessmen (Bergengrün, 1901: 671). Hansemann began working on a set of statutes, and new legal organization for the bank that would allow it to engage specifically in more "irregular" banking business (securities issuing and purchase) as a way to support the "special business" of the bank (its provision of credit to small and medium sized businesses), as well as attract capable businessmen to join the ranks of the active partnership (Bergengrün, 1901: 671). It should be emphasized that despite the change in direction, Hansemann was still intent on supporting the institute's original purpose of credit provision to the membership (Dahlem, 2009: 122-3).

Hansemann was undoubtedly influenced in his thinking about the new shape of the *Disconto-Gesellschaft* by the business program of the *Darmstädter Bank*. Shortly after its foundation in 1853 the Oppenheims offered Hansemann the opportunity to serve as the new bank's managing director. Thereby Hansemann's familiarity with that bank's design, as well as his familiarity with the *Schaaffhausen'sche Bankverein* (M. Pohl, 1982a) and the highly publicized founding of the *Crédit Mobilier* helped to forge his thinking about the future of industrial finance. Together with his son (Adolph Hansemann), Justizrat Geppert I, and Karl Mathy, Hansemann worked out a new set of statutes (Bergengrün, 1901) that was presented to the annual general meeting of the membership on the 28th April 1855. The statutes would allow the bank to engage in all banking activities, including the purchase of state paper, securities and provide advances against equity paper as well as engage in business with non-members and

increase the maximum share capital to 50,000 thaler (Burhop, 2004: 84). Most significantly, while the bank had originally been founded as a "commandite trading company," those working out the new statutes, undoubtedly influenced by the legal expertise of Justizrat Geppert I once again, decided to found the firm as a "commandite share company" (*Kommanditgesellschaft auf Aktien*). This organization followed the same principles outlined above, but with the added benefit that silent partners could be attracted with resalable shares. The statutes were approved on 9th January 1856, and by the summer of that year the *Disconto-Gesellschaft* was, with the small proviso of Hansemann's unlimited liability, a joint-stock universal bank.

Hansemann's reworking of the *Disconto-Gesellschaft*'s statutes transformed an institution that was, for all intents and purposes a credit cooperative, meticulously constructed to provide short-term credit to small tradespeople, into a credit institution capable of universal banking. The transformation of the *Disconto-Gesellschaft* into an institution capable of the full palette of financial services was driven principally by Hansemann's desire to provide a reliable source of credit for small and middle sized industrialists: this was a political goal in the sense of aiming to bolster the transformation of Prussia towards an industrial society.

Founding the Bank of Darmstadt

"The appearance is, in this case, not the entire truth. The provision that the founders participate by pledging their own capital [and reputations], and thereby guarantee the majority of equity shares, is, when carefully scrutinized, only the guarantee of a profit. The rule is that the founders will for the most part sell their shares as soon as the share price has increased enough that they can make a tidy profit. They wouldn't engage in a foundation if they did not expect a profit as reported by the general opinion of the Bourse."

This new legal form offered many risks for Hansemann, as well as any active partners associated with the firm. Indeed, the legal form of the commandite bank while providing similar benefits as the joint-stock banking company might, had existed under the *Code de Commerce* of the Rhineland, ⁹³ but had not often been employed because of the risks associated for the full partners (Bösselmann, 1939). Hansemann was willing to engage these risks because he had experienced first hand the hostility of the Prussian

⁹² Poschinger (1879: 208-9), my translation.

⁹³ The commandite form of company had also been widely used in France at the time that Justizrat Geppert advised Hansemann to deploy it for his credit company.

government in granting concessions to new banks in Prussia (Brophy, 1998: 99) and had become frustrated with the conservative politics that he saw as threatening the basis for an industrial-capitalist society in Prussia. Hansemann's singular dedication to the political vision of an industrial order free from the "social danger," as well as the failure of his own businesses in Aachen during his ministerial tenure, compelled him to pursue this project (Böhme, 1966a, 1966b), beyond the potential fiduciary gains that it offered. Other entrepreneurs had not been willing to take on the risks involved to found such institutions.

Shortly after Hansemann had originally founded the Disconto-Gesellschaft in 1851, Gustav Mevissen (who had been involved in transforming the Schaaffhausen private bank), and Abraham Oppenheim (a major partner of the Salomon Oppenheim private bank in Cologne (see Chapter 2 here)), had submitted a request for a concession for a further joint-stock bank in Cologne. Needless to say, in its avowed support for industrial—and not East-Prussian agricultural projects—the Prussian government rejected the proposal (Stürmer et al. 1994: 136). The business policies of this bank would later be considered those of the first Crédit Mobilier bank in Germany—that is to say the first universal bank intentionally founded as a joint-stock company. Indeed, the proposal put forward a bank that would ostensibly operate on universal bank principles without the simultaneous aim of issuing banknotes. In other words, without aiming to solve payments and liquidity problems, but specifically for the purpose of providing long-term credit to industry while also dealing with their short-term credit needs.⁹⁴ Despite declaring in the statutes the universal character of its intended financial practices, the aim of the bank's founders was in actuality to sponsor the foundation business, and more specifically, to devolve the foundation business from their own private banking practices (Reitmayer, 2001a: 172). That is to say, the founders aimed to create an institution not unlike an investment bank. If the vision of this intent were successful, it would effectively provide for the specialization of their private banking business on short-term credit, while they could use their joint-stock bank to focus on large, irregular, and speculative financial ventures. This can be seen as a reaction to the changing political-economy of Germany at this time: the private financiers who wished to bring about industrialization were also concerned about maintaining their wealth in

⁹⁴ Although it should be noted that the original proposal included the possibility of the bank's capacity to issue promissory notes, which in some ways might be considered similar to issuing money substitutes. Even after its successful foundation in Darmstadt, the statute remained effective but a dead letter (Cameron 1956).

that new social order. Tightly imbricated in the process of founding the new bank were therefore sociopolitical, as well as economic concerns: neither of which can be given precedence.

The fragmented geopolitical order of German states would also play a role in the evolution of this new institution. Following their failure to secure a concession in Prussian territory, Mevissen and Oppenheim tried their hand at founding the bank in Frankfurt, a location that was outside of the regulatory remit of Prussia and its restrictive concession system and where the close proximity to the Bourse would allow them to engage in the flotation and foundation business that they envisioned as central to the bank's activities. The Frankfurt senate in conjunction with the Rothschilds (who were a major power in the city), similarly turned down the request for a concession (Cameron, 1956: 119). This was in part because the statutes of the bank resembled very closely those of the *Crédit Mobilier* in France, as well as the "mixed-banking" statutes of the Schaaffhausen'sche Bankverein. This principle represented a threat to the Rothschilds because it promised to dislodge their very profitable "old bank" ways grounded on the government loan business (Landes, 1956; cf. Chapter 2 here). At the end of 1852, the Cologne financiers were faced with opposition from both Berlin and Frankfurt, where the interests of the existing financial and politico-economic order founded on the government securities business mobilized their powers in order to block an institution that threatened its continued operation.

December of 1852 presented Mevissen and Oppenheim with a solution to their location problem, when Moritz von Haber—a relative of Oppenheim's through marriage—offered to sell his concession for a discount and issue bank valid in the Grand Duchy of Darmstadt (not 20 miles from Frankfurt) to them at a discount (Stürmer et al, 1994: 136; Hansen, 1906: 649; Knips, 1912: 24). Haber was unable to take advantage of the concession that he had been granted because he had been driven into liquidation proceedings during the commercial crisis early in 1848. By locating in Darmstadt, the bankers would be able to conduct business with relative ease in Frankfurt owing to its proximity, and thereby use the Bourse there in order to issue and

⁹⁵ It is interesting to note that the Haber private bank had not been catastrophically insolvent during this period. Rather, owing to its location in Karlsruhe, it had limited options for rediscounting and was forced to turn to the Rothschilds of Frankfurt for this purpose. The Rothschilds "arbitrarily," but most likely because of their dislike of bankers that supported that supported industrial undertaking (cf. Landes 1956), refused the Haber private bank any rediscount facilities (M. Pohl 1982a: 68).

place stocks for the new companies that they aimed to found through the bank. Moreover, they once again evaded the strict concession system of Prussia, but being along its borders would be able to conduct business within it.

On the 6th January 1853, Haber met with the two Oppenheim partners of Sal. Oppenheim & Cie bank, brothers Abraham and Simon, as well as the directors of the Schaaffhausen'sche Bankverein Gustav Mevissen, Victor Wendelstadt and Wilhelm Ludwig Deichmann and concluded a contract for the transfer of the concession. The concession was itself not a legally fungible commodity, and required the acquiescence of the relevant authorities in Darmstadt. 96 Mevissen worked out the new statutes for the bank drawing on those of Schaaffhausen and the Parisian Crédit Mobilier so that Haber could submit them to the government for agreement on the 25th January 1853 (M. Pohl, 1982a: 69). Absolutely crucial to the speedy approval of the plans was the agreement of Prime Minister Dalwigk, who was an avowed opponent of Prussia (Seidenzahl, 1961: 254). This opposition stemmed from the landlocked position of Hessen-Darmstadt between two larger pieces of Prussia and its essentially forced entry into the Zollverein. It was only with the agreement of the Hessen Parliament that the concession could be (1) transformed into two concessions—for both a joint-stock "mixed-bank," as well as for a note-issuing bank—and (2) transferred from Haber to the Cologne financiers. Without this background of German geopolitical conflict it is possible that the concession would not have been agreed, or that less favourable terms might have been asked of the Cologne bankers. The statutes for the Bank für Handel und Industrie zu Darmstadt (commonly known as the Darmstädter Bank, or the BHI) were presented to, and signed by, the Grand Duke Ludwig von Hessen on the 2nd April 1853.

This was not the end of conflict over the bank's foundation. On 13th April 1853 the government officially publicized the opening of the bank; however, despite the heavy secrecy of the process up to that point, the conservative banking clique around the Rothschilds in Frankfurt managed to get wind of the developing situation on their doorstep. Still fearful of the competition this new institution would afford, they began to arrange difficulties for the *Darmstädter Bank*. The group around the Rothschilds organized resistance in Frankfurt by cajoling those under their influence not to purchase any of the initial share offering of the Bank. Only the Bethmanns, long a rival to the Rothschild bank and one of the exceptional few cases of a Frankfurt private bank

⁹⁶ One aspect of the contract was the obligation of Haber to undertake all necessary efforts to ensure the transfer of rights from himself to the group of Cologne financiers.

adventuresome enough for industrial undertakings, purchased a relatively small portion of the initial share offering (but had difficulty in placing it in Frankfurt). The Rothschild group also contacted their sources in Berlin and helped to influence a relative lack of popularity for the shares of the bank there as well. Although, this was perhaps superfluous as the Prussian government attitude towards the bank was similarly venomous: "apart from the demoralizing commercial effect, which would eventually destroy prosperity...such a bank would undeniably also exert the most disadvantageous political influence" (Stürmer et al., 1994: 136; cf. Brophy, 1998: 92-3). The Prussian government consequently unsuccessfully attempted to prohibit the *Schaaffhausen'sche Bankverein* from participating in the initial flotation of shares through its advisory seat on the bank's board (Stürmer et al., 1994: 136).

The importance of share price increases also illustrates the central role of speculative activity in the foundation of the bank. Speculative profits could be accrued from the price differentials in the par and sale price of bank shares, as well as through the "founders rights" for preferential prices (usually at the original par value) on any shares issues from capital stock increases. In the same manner as founding industrial corporations, corporate banks provided an avenue for speculative gain⁹⁷ that would also assist to institutionalize an industrial society: holding corporate shares effectively tied the interests of those shareholders to the fate of the bank, and to its project for industrial promotion. Nevertheless, this would only work if interest could be aroused in the share offerings of the bank. In the event that the founders could not place shares on any securities market, e.g. in Frankfurt and Berlin, the bank would not have any capital, the value of the shares would fall, and the bank might need to be liquidated. The endeavour would, in short, lose any purpose. The Oppenheims, who appear to have contemplated such an outcome from as early as 6th January 1853 from correspondence records (M. Pohl 1982a), decided to resort to their connections in Paris given the resistance for a joint-stock bank from the existing powers in Frankfurt and Berlin. Through the banking firm of B.L. Fould & Fould-Oppenheim, who were stockholders in the *Crédit Mobilier*, the founders of the Bank für Handel und Industrie arranged an adequate placement of shares to begin the company. The bank was founded with a capital of 25 Million

⁹⁷ The statutes of the bank are renowned for how they prohibited speculation in securities market transactions, but the background of the Oppenheim brothers as well as the early history of the bank, recounted below, indicates that the statutes of the bank projected an image different than its practice (Reitmayer, 2001a: 172).

florins 98 broken into 100,000 shares at 250 florins a share. The initial share offering would see 40,000 of those shares offered to the public, whereby 4,000 were given at par to Gebrüder Bethmann in Frankfurt, 4,000 for the directors of the Darmstädter Bank, 10,000 sold at par to the stockholders of the Crédit Mobilier and the remaining 22,000 shares split half between the founders and the other half with one quarter each at par to Fould-Oppenheim and the *Crédit Mobilier* (Cameron, 1956: 121).

Obtaining the assistance of their Parisian connections did not completely allay difficulties in issuing the stock however. The Rothschilds, who also operated a familial branch in Paris, organized a large syndicate of conservative private bankers who were opposed to the foundation of the Darmstädter Bank (cf. Riesser, 1912: 51). This Rothschild group orchestrated price turbulence on the Parisian and Frankfurt markets. This syndicate of financial agents would buy many small allotments of BHI shares. Subsequently, they would then combine these many small parcels into large blocks to be sold off simultaneously, at a financial loss to the Rothschild consortium, but successfully driving down the market price for the *Darmstädter*'s securities (Cameron, 1956: 121-2; Stürmer et al., 1994). The Rothschild consortium also engaged in rumour spreading and negative word-of-mouth publicity about the *Darmstädter*, alleging for example that the entire executive board had resigned because of its lack of confidence in the venture—which similarly helped to depress demand for and prices of the BHI's paper (Stürmer et al., 1994: 138). This type of financial market competition was not unknown to the Bank's Parisian associates, who established a course of action to deal with the Rothschild obstacle. This involved setting a high repurchase price for the shares, and waiting for the market price to respond to this bid. The Cologne members of the operation became panicked about the potential losses if they repurchased shares at higher than par and could not subsequently resell them. Consequently, they began selling short on the Parisian futures market in an attempt to hedge against potential losses, which helped to further depress the price of shares.

The entire opening gambit ended only slightly in the black for the Darmstädter bank, 99 but ultimately resulted in the dissolution of working relations between the Darmstädter leadership and the Parisian group. The first two years of the Bank's operations did not prove to be especially profitable. The first year ending with a "smear

⁹⁸ Talers were the currency of Prussia, florins of Florence (a respected currency of account in precious metal poor Germany). The rough equivalent of 25 Million florins would be today about 5 Billion Dollars US (author's calculation).
99 The net profit on the endeavour was just slightly above 300,000 Francs (Cameron 1956: 122).

of red ink," while the second allowed the Bank to engage its relations with the *Crédit Mobilier* to piggy-back on certain issues of State paper and some railways. At the end of the second year, the remaining shares of the bank's initial capital still remained to be issued, for which the initial contract signed with Fould-Oppenheim and the *Crédit Mobilier* were in force. Reticent to engage in the same kind of process, the managers secretly established a "silent partner" (*Kommandit*) in the Parisian firm Leiden, Primsel et Cie (Cameron, 1956: 125). This involved investing capital, on a long-term basis, in the firm such that the BHI was effectively a partner of the firm with a stake in its operation, but of which the public was not aware. Such a partner gave them more control over the operations of their connection to the French capital market because of the pliable nature of this smaller firm vis-à-vis the *Darmstädter*. Nevertheless, the *Darmstädter* was forced to pay Fould-Oppenheim and the *Crédit Mobilier* 15,000 shares at par to annul the original contract that it had made with them.

The foundation of BHI demonstrates several important features of the foundation of joint-stock banks. Firstly, the principal aim of its founders reveals the intimate intertwining of political and economic goals, of which solving for potential "market-failure" can only be regarded as a crude metaphor for the power struggle over the shape of the credit system. The founders of the BHI were engaged in a speculative process—ironically to enhance and further entrench their possibilities for future speculative business—that is best understood in the terms of politics and power. This was competition that occurred in part through the medium of securities exchanges but extended beyond the anodyne, depersonalized realm of profit and loss calculations. It is difficult if impossible to disaggregate the political aim of social transformation from that of speculative gain. Indeed, to understand the speculative side of the founders' operations, it is necessary to consider them in a political light: the high potential for loss was balanced by the potential gain to extend the basis of industrial society. Secondly, the otherwise "contingent" role of political geography was necessitous for the foundation of the bank. The instrumentalization of minor geopolitical rivalries owing to the fragmented nature of political space opened the door to a concession for the bank. Finally, the foundation of this important joint-stock "universal bank" was intended as more of an investment bank, to augment the speculative capacities of its founders while allowing them to maintain a secure toe-hold in the already existing industrial order through their short-term private banking practices.

The Berliner Handelsgesellschaft

"[By 1855] the trend toward joint-stock banks seemed irreversible, and Prussian businessmen believed that their government would eventually capitulate and recognize such institutions as indispensable to industrialization and economic growth." ¹⁰⁰

The foundation of the *Darmstädter Bank für Handel und Industrie* represented a certain danger to the politico-economic establishment in Prussia. The early problems of the bank were countered by growing success and the expansion of its promotional investment activities. The Prussian government had been traditionally worried about joint-stock banks of issue and their ability to channel sources of credit away from East-Elbian agriculture. This new joint-stock bank represented a different kind of threat insofar as it was unconcerned with the issue of bank-notes, and seemingly poised to sponsor industrial projects that might menace Prussian agricultural finance in a new manner. In the words of King Friedrich Wilhelm IV "[it would] have an undeniably disadvantageous political influence" (Quoted in Brophy, 1998: 93). For the private bankers, especially those in Berlin and Eastern Prussia, this new form of joint-stock bank represented a potential challenge to their ability to collect and invest capital along the tried and tested channels of government securities and discounting paper.

Nevertheless, the success of the BHI after its early tribulations, as well as the *Crédit Mobilier* in France, had begun to shift the tide of opinion amongst businessmen. This was also encouraged by the slightly more liberal shift in the policy of granting concession for joint-stock companies in the 1850s. This change of opinion is especially evident in the changing practice of former "old bank" financiers: the Rothschilds, who had so vigorously opposed the foundation of the *Darmstädter Bank* especially because of its threat to the "old banking order" (Landes, 1956), seem to have recognized that "if you can not beat them, you should join them." The Rothschilds consequently began founding joint-stock banks of their own marking a shift away from their traditional focus on the flotation and issue of government paper and currency speculation, e.g. the Österreichische Creditanstalt in 1855 in Vienna, and then in 1864 the *Société Générale pour favoriser le développement du Commerce et de l'industrie en France* in Paris (Born, 1983).

¹⁰⁰ Brophy (1998: 93)

In February 1856, the struggle over control of European finance came to Berlin. The founders of the *Darmstädter Bank* (the Cologne financiers Oppenheim, Mevissen et al.) as well as the Crédit Mobilier, and the Rothschild house with its attendants P.L. Ravené and Gerson Bleichröder both submitted proposals for joint-stock financial institutions to be founded in Berlin (Brophy, 1998: 94). The publicity of the proposals, the prestige of the banking houses associated with them, and the important provision for the sponsorship of agriculture helped the proposals to receive an initially positive greeting from the Prussian state. The camarilla around the crown was divided over the potential of the banks, and months of debate about the merits of the proposals ensued. As David Hansemann had only in January of 1856 effectively transformed his Disconto-Gesellschaft into a joint-stock company by means of its conversion to the commandite form, it appeared to some cabinet ministers that the battle against jointstock banks had already been lost and that the concessions should be granted. As von der Heydt would argue: "it would be easier to control promotional investment banking with the direct government oversight provided by allowing concessions" rather than allowing joint-stock banks to be founded through the legal means of commandite companies (Brophy, 1998: 94). Eventually, the position of denying the concessions won out, again for fear of displacing financing for agrarian mortgage financing. By denying either group of applicants a charter the state "sent a powerful signal to the Prussian business class, and it was this decision that most likely convinced the financiers of the need to employ the commandite principle" (Brophy, 1998: 98). Subsequently, the two groups of financiers conjoined and founded a "trade company" (Handelsgesellschaft) in the commandite form. ¹⁰¹ In July 1856, private bankers representing both the entrenched financial order and those from the Rhineland, aiming to sponsor industrial activities, founded the Berliner Handelsgesellschaft. The statutes of the bank endowed it with the power to engage in financial activities of all kinds (Lüke, 1956: 15); however, its chief raison d'être would be to advance the industrial investment and promotional business (foundation activities) in the Berlin region (Dahlem, 2009: 165).

Circumventing the concession system through the commandite company form alarmed the Prussian authorities. Within months of founding the *Disconto-Gesellschaft*, the *Berliner Handelsgesellschaft* had been founded, as well as several other banking

¹⁰¹ The foreign parties left the proposal at this time, possibly because of their apprehension at the commandite form.

institutions in the commandite form. While the literature on German banking and finance has largely treated the acceptance of the commandite form as unproblematic amongst Prussian businessmen, it is actually the case that the Prussian state reacted allergically to the denigration of its regulatory authority. In the summer of 1856 the Prussian crown drafted a decree (*Oktroi*) to ban the use of commandite legal form (Brophy, 1998: 94ff.). The decree was never promulgated because forces in the court camarilla surrounding the crown successfully argued that the elimination of the already existing commandite banks would be too troublesome from a constitutional and legal standpoint (and would therefore hazard further unwanted attention from liberal forces) (ibid). Nevertheless, the intensity of debate, and the avowed threat that such institutions appeared to pose for the existing order was clearly apparent in the discussion around the issuance of this decree.

The government was also highly reluctant to simply ease the way for legal circumvention of its concession policy because it had also liberalized the note issuing abilities of the Prussian Bank in March of 1856. A fraction of the financial elite had turned their eyes towards a form of "mixed-banking" in joint-stock form to sponsor industry. However, despite the increase in the supply of money, many other private bankers had continued with the project of founding banks of issue. In particular, because of Prussia's already high use of foreign currencies, and the *Darmstädter Bank*'s instrumentalization of Germany's political fragmentation, a trend developed whereby joint-stock banks of issue were increasingly founded in German states with borders contiguous to Prussia. These numbers kept increasing until there were 29 joint-stock banks of issue within wider Germany in 1856 (M. Pohl, 1982b: 155). In the eyes of the state, the use of foreign notes within Prussia's borders risked its control over financial developments, leading the state (with August von der Heydt leading the internal struggle within the camarilla parts of which opposed such an augmentation) to increase the note-issuing ability of the Prussian Bank (Lichter, 1999: 201ff.).

The foundation of the *Handelsgeselschaft* represents a convenient way to mark a significant change in the social configuration of the Prusso-German political economy of the 1850s. In relation to the development of German finance, it presents a pacification of the tripartite political conflict that had raged over the institutional configuration of finance in Germany during the middle years of the nineteenth century.

¹⁰² These included institutions in Stettin and Königsberg, neither of which would survive long enough in order to be of continuing relevance for the development of German finance.

Whereas the struggle over the shape of finance had originally been between three parties—the state, "old régime" financiers engaged in issuing state securities, and new industrially focused financiers—the axis of conflict over the *Handelsgesellschaft* was reduced to that between the state and financiers as two coherent groups because of the consolidation of the two proposals for a joint-stock firm into one foundation as a commandite bank. The issue of the decree to ban commandite firms—but which was never promulgated—represents the last attempt of the Prussian state to control the political-economy in an authoritative manner (Brophy, 1998: 105). Furthermore, the successful evasion of the Prussian concession system highlights how members of the liberal cause managed to achieve socioeconomic goals without the need for further democratization, and through extra-parliamentary means. As Brophy (1998: 106) has argued, this is a concrete example demonstrating the socio economic interests behind the "aristocratization" of the German bourgeoisie, or their "betrayal" of the revolution.

The establishment of the Berliner Handelsgesellschaft is also an important historical moment because it identifies an uptick in the establishment of joint-stock, and commandite, banks across Prussia and the other German states. It was the refusal to charter joint-stock banks by the Prussian state that lead financiers in Hansemann's footsteps to adopt the commandite principle and accept higher risk than in a typical joint-stock company for the added leverage that these associations provided for speculative activities (Brophy, 1998: 98). Consequently, hot on the heels of the *Berliner* Handelsgesellschaft, commandite banks were opened in Breslau, Königsberg, and Magdeburg (Brophy, 1998: 90). Moreover, other joint-stock banks of regional importance were founded in 1856, like the Norddeutsche Bank in Hamburg, the Mitteldeutsche Credit Bank in Meiningen, and the Allgemeine Deutsche Creditanstalt (ADCA) in Leipzig (M. Pohl, 1986a: 35). Like the other foundations examined in the chapter, these banks exemplified the extant reasons for adopting the joint-stock principle: the Mitteldeutsche Credit Bank in Meiningen was founded principally as a note-issuing bank, in order to taking advantage of the joint-stock principle to facilitate its use of bank-notes. The Norddeutsche Bank, was something of a simulacrum for the

¹⁰³ The establishment of the Norddeutsche Bank in Hamburg is an interesting story insofar as it was also originally intended to be a note-issuing bank; however, in the long struggle to attain a concession from the senate of the free city of Hamburg, the interested parties were forced to concede the issue of bank notes as part of the bank's programme. It was in the wake of the foundation of Schaaffhausen and the BHI that the bank's founders decided to change their aims to one of more "universal" intent, much in the way that Hansemann was similarly influenced (see Ahrens, 1972).

German financial class as a whole. After a long struggle with senate of the free city of Hamburg to found a joint-stock bank that might issue bank notes, the founders of the Norddeutsche Bank relented on this aspect of their plan and adopted a universal banking *avant la lettre* (Ahrens, 1972). Unlike the foundations examined in this chapter, these banks never managed to attain more than regional significance, and played only an ancillary role in shaping the further evolution of German universal banking.

THE EVOLUTION OF FINANCIAL PRACTICES, 1857-1869

Just as the joint-stock bank foundations were becoming a popular trend among German businessmen, they came to a halt with the commercial and financial crisis of 1857. Beginning in the United States with the collapse of the Ohio-Life-Insurance & Trust Company, a chain reaction of insolvencies was unleashed, spreading across the connections of American industrial and financial centres to England, and then to Hamburg (Wehler, 1995: 94-5). The crisis in Hamburg was brought about because of its role in financing the overseas trade of the German states, and its consequent relationship with England, which was the principal center of financing for world trade. The financial panic in London, which had resulted in an increase in its domestic discount rate was translated into a panic in Hamburg where the private banks specializing in mercantile financing were left less able to meet their own obligations because of the higher rates for acceptances. This resulted in the bankruptcy of 150 firms in Hamburg, among them some of the oldest and most distinguished banks (Henderson, 1975: 120). The panic in Hamburg was then passed on to multiple trading entrepôts across the German states. While industry was not the most severely hit, commercial firms suffered the highest bankruptcy rate, and many woolen manufacturers suffered failures.

Simultaneously with the crisis, there was a drain in silver specie from the Continent. The heavy import of gold from the New World in the early 1850s had helped to increase the money supply and ease liquidity and payments problems on the Continent. The import of gold from Australia and California had thereby assisted in precipitating the economic boom; however, the increase in economic activity had also led to further imports from the Far East, which was on a silver standard (most German states had a dual gold and silver money standard during this period). The increase of imported goods—like silk—from Asia was matched by a concomitant export of silver specie from the German states to pay for those goods. This ultimately led to a drain in the continental supply of silver, and again to decreases in the money supply (Henderson,

1975), leaving the German states in a similar, though less precarious position in terms of the liquidity problem. This helped to ensure that the foundation of joint-stock banks was not exclusively generalized on the "mixed-banking" model.

The commercial and financial crisis of 1857 influenced very important changes of business policy for the joint-stock banks discussed above. As the previous sections detailed, with the exception of the Disconto-Gesellschaft, they were all principally motivated by the speculative aims of the foundation business. 104 Without exception they were all empowered in their statutes to engage in banking business of any kind. 105 In other words they all had the potential for a universality of financial services. Nonetheless, even though they were all nominally empowered to execute a "universal" range of financial activities, they were all influenced by the irregular nature of income streams from the foundation business. Income accrued from successful foundations could be extremely sizable, but it was also transitive, and tied to the specificities of specific industrial projects. After all, corporations are founded, or converted to jointstock companies from private businesses, only once. That is to say any income accrued from the successful placement of equity can only be achieved for a particular firm once. Consequently, these "mixed-banks" balanced the proportions between the "irregular" investment business—foundations as well as other securities issuance business—and the "regular" business of providing commercial credit, in varying proportions. The crisis of 1857 was significant in this respect, because it made the prospects for the further establishment of industrial joint-stock companies across the German political economies seem less likely. Moreover, the timing of the crisis was important because it occurred just as many of the joint-stock banks founded in 1856 were beginning to operate. For example, the Disconto-Gesellschaft, which might otherwise have become heavily involved in the foundation business, had only just effectuated the changes to its statutes enabling a universal palette of financial activities before the crisis broke out. Consequently, it engaged in so few industrial foundations as to not have been involved in it at all (cf. Burhop, 2004). The Berliner Handelsgesellschaft, by contrast, even though it as well was permitted to engage in banking activities of every kind, had been founded with the explicit intention of favouring the investment side of the financial activities mix in order to advance the foundation business (Dahlem, 2009: 196; Lüke,

 $^{^{104}}$ And the Disconto-Gesellschaft had been moving in this direction in the year prior to the crisis.

¹⁰⁵ Banking business of any kind did not, however, include the real estate or mortgage business, as there were specialized intermediaries for this in Germany at the time.

1956). The crisis of 1857 made the future terrain for new corporate foundations seem so unpropitious, that the bank restricted itself to the processing of trade finance (Lüke, 1956: 18). The *Schaaffhausen'sche Bankverein*, which had been very actively engaged in the foundation business, especially in establishing mining concerns in the Rhineland, pulled back from this endeavour following the crisis (Whale, 1930: 12). 106

The most drastic reaction to the crisis was the change in business policy of the BHI. Following write-downs from the industrial firms and participations in which it had engaged as the central plank of its financial activities during the 1850s, the *Darmstädter Bank* desisted and moved away from the foundation business altogether (Burhop, 2004: 82; Reitmayer, 2001a: 172; Knips, 1912: 145, 148, 178). The BHI would continue to engage in the issuing business, and would further develop its short-term current account commercial credits, but it would shy away from further engaging in industrial promotions as a "founder." Even as the promise of the foundation improved, for example during the early 1870s, the BHI shied away from engaging in the foundation business

Indeed, perhaps one of the most significant consequences of the crisis was that the securities market expertise of the *Darmstädter Bank* developed for the foundation business—organizing consortia to place and issue different stocks and bonds, the promotional control of information and strategic selling to influence prices—would now be used by the *Darmstädter Bank* for placing *government paper* of different kinds. During the period from 1858 until 1870, the BHI would be heavily involved in the issuing of bonds as well as loans, for the communes and states of southern Germany. The *Darmstädter Bank* for *Trade and Industry* was no longer involved in promoting trade and industry from the ground up as its original purpose had been. The BHI continued to float the securities of existing joint-stock companies, and conduct commercial credit operations for them, but withdrew from its active role in forging the industrial order. Compensating for the high, but transitive returns of the foundation business, the BHI partially moved into the safer field intermediating state securities—the business segment of the "old bank" bankers from Frankfurt and Berlin who had

¹⁰⁶ Without then neglecting the firms it had already founded. Moreover, the *Schaaffhausen* would recommence its participation in the foundation business during the early years of the *Kaiserreich* (see next chapter).

traditionally provided the financial undergirding for the conservative agrarian forces of the German states.¹⁰⁷

This was a momentous change in financial activity for the Darmstädter, but it was not singular amongst the banks examined here. Both the Schaaffhausen'sche Bankverein and the Berliner Handelsgesellschaft would begin underwriting securities for governments of all kinds. The Disconto-Gesellschaft, where the battle against the state had been especially aggrieved in Hansemann's early struggles to establish that institution, would become so deeply involved in the issuance of government loans and securities that by the end of the 1860s it would become known as "the state and railway paper bank" (Reitmayer, 2001a: 164, my emphasis). In 1859, the Disconto became centrally involved in a consortium responsible for floating a loan to Prussia for potential mobilization as Austria and France battled in Piedmont. This was not seen as especially auspicious at the time, but would be the beginning of the "Prussian Consortium." This group of private and corporate banks would become responsible for floating all Prussian loans, and eventually become synonymous with "German high finance" (Reitmayer, 1999b). From the 1870s the Prussian Consortium would be effectively led by the Disconto-Gesellschaft, that would determine admission to the consortium's ranks and quotas of bonds for those participating. By the end of the 1860s the Disconto-Gesellschaft and the BHI would permanently give up on any active role in the foundation business, but would remain involved in both short-term credit provision and the flotation and underwriting of equity. By contrast the Schaaffhausen'sche Bankverein would maintain its original programme, continuing to exhibit the traits that it had developed as a "mixed-bank" in the Rhineland, biding its time for a propitious environment in which to begin its campaign for industrialization. The Berliner Handels-Gesellschaft would similarly go into waiting, although its array of financial services appeared much more heavily weighted to what would be considered an investment bank.

By the end of the 1860s the corporate banks that had been founded in the 1850s were not yet standardized on a similar form of universal banking. Three of the corporate banks would operate a truly "mixed" palette of short-term and long-term finance, while one was moving towards specialization in investment services. Two corporate banks had given up entirely on the foundation business, while the other two postponed their

¹⁰⁷ And had attempted to prohibit the BHI from being founded in the first place.

engagement in industrial foundations for a better investment climate. Common to all of the joint-stock banks founded in this period was their high reliance on their own equity capital for their financial operations (Holtfrerich, 1981). This was similar not only for the four banks examined in this chapter, but also for the other banks (of lesser renown that would not go on to earn a place among the ranks of the *Berliner Großbanken*). The quantitative increase in funds available from the joint-stock corporate form belies the prevailing social purpose behind the foundation narratives of the banks: the political struggle to inaugurate social change towards an industrial order, played out between liberal businessmen and an agrarian state. Moreover the details of organizational foundation read against this struggle better illuminate the dynamics of universal banking's development as an indirect consequence of social conflict. This conflict is in turn best delineated in terms of power rather than simply in terms of efficiency, cost, or profit.

CONCLUSION

The foundation of joint-stock and commandite banks was a process that involved much more than the creation of economic institutions to fix problems of market failure, or to minimize the transactions costs and coordination problems associated with issuing securities through syndicates. Private banks continued acting alone and through consortia even after the early foundation of joint-stock banks to provide finance for industry. This indicates that there was little threat of "market failure," nor that the transaction costs of consortia were too high to prohibit their use in in the relative absence of joint-stock banks. Furthermore, joint-stock banks continued to mobilise issuing consortia because even their augmented financial means were insufficiently large in some cases for new share issues. ¹⁰⁸

Central to the drive for incorporation, as well as the amalgamation of "mixed-banking" with the joint-stock form, was the struggle over the shape of Prussian, and more generally, German society. Rhenish financiers, as well as liberal businessmen more widely, were concerned to industralise German society against resistance from a feudal-agrarian state. The melding of the joint-stock corporation and universal banking occurred as the unintended consequence of attempts to solve liquidity problems during the revolution of 1848. The issue of liquidity in pre-March Germany was intimately tied

 $^{^{108}}$ This was especially the case in terms of government loans that could be considerably large in size.

with the attempt to inaugurate an industrial order, but it also represented one emerging strand of the contemporary common sense about how best to make financial operations most profitable. The fusion of Rhenish "mixed-banking" with the corporate legal form began to appear as a rewarding financial institution as the political economy of the German states was transformed over the 1850s. The successful foundation of the Crédit *Mobilier* in France helped to entrench the appeal of "mixed-banking" by demonstrating its promise for forwarding the production of an industrial order in a profitable manner. Schaaffhausen, and the Crédit Mobilier thereby revealed the potential of "mixedbanking" as an instrument to spread industrialization by founding new corporations and institutionally and materially entrenching capitalist social relations. This was the incentive behind the foundation of the BHI, and the Berliner Handelsgesellschaft. Hansemann's Disconto-Gesellschaft had been founded for a different political purpose—but one which was all the same related to this overarching struggle (and only appears idiosyncratic insofar as this more specific conflict reflected Hansemann's individual assessment of the role of credit for small and medium sized traders in the Prussian political economy). Nevertheless, the threat to his fledgling business presented by the antipathy of the Prussian Bank's discounting policy, and the need to make the Disconto profitable enough to pursue his programme for credit influenced Hansemann to alter the Disconto's official statutes in line with those that were slowly becoming conventional. This opened the door for Hansemann to engage in a more lucrative organizational form that might continue his specific project of sponsoring an industrial order in a manner proven more widely.

The first foundation wave of corporate banks introduced the potential of amalgamating universal banking with the joint-stock company to the German states. It must be stressed that this was an *unexpected* development for contemporaries of the period. Moreover, it did not immediately engender the generalisation of "mixed-banking" into all joint-stock banks. In 1860, more than 20 percent of the market in financial assets continued to be held by note-issuing banks (Burhop, 2011: 168, table T 20). Liquidity, and the desire for note-issuing continued to remain one of the chief interests of actors involved in finance following the crisis of 1857 (Achterberg, 1984). For the history of universal banking, this episode highlights the generalized inscription into corporate banking statutes of the possibility for corporate banks to engage in all variants of financial activity. When the 1860s closed, most corporate banks had statutes that permitted any kind of financial activity. However, this generalized symbolic

codification was more a form of conventional parlance for bank statutes, and did not yet reflect a specific institutionalised practice. "Universal banking" was still avant la lettre for the banks that mixed commercial and investment banking—it did not incorporate deposit-taking, and the proportions of business share between commercial and investment banking were highly in flux—some of these "mixed-banks" appeared to be on developmental paths towards specialization in either investment or commercial banking. The corporate banks that had been founded were firmly part of the Prussian and wider German political economies, but the differences in their business programmes—the different proportions of short and long-term lending, and their affinity for the foundation business—distinguished them from one another. At the beginning of the 1870s, the corporate sector of German finance continued to represent roughly only a tenth of all assets in the "German" financial market taken as a whole (Burhop, 2011: 168, table T 20; Guinnane, 2001: 81, table 1). Private banks continued to dominate the market for financial services in 1860 with 35.3% of the entire market share. The savings banks had a share of 12% and the special mortgage banks 16%. That is to say, the corporate sector—or those banks incorporated as joint-stock banks taken as a whole—barely made up 10% of the total banking sector. Even though the statistical material is lacking for rigorous analysis, we know at least that not all joint-stock banks were equal in their degree of universality. Ergo, the "universal banking" was in no way firmly entrenched in the German political economy. The formal-legal ideal of a permissibility of universality in financial practices had become more or less accepted as a norm institutionalised in German corporate finance; however, the practice of universal banking, as Gerschenkron described it and subsequent scholars have aimed to understand it, had not yet crystallized.

As Helmut Böhme has written, we cannot understand the foundation of the early corporate banks from their later development (Böhme, 1966: 56). This does not mean, however, that we must recount this history as though there is no unifying thread. Each bank foundation was not an island of accidental historical forces coalescing in the form of an organization, but rather the (indirect) product of a larger sociopolitical contest over the shape of German society.

PART III

SPECULATING ON INDUSTRIAL SOCIETY

CHAPTER 4

From Foundation Boom to Crash, 1869-1873

The construction of a speculative imperative

"Never was economic euphoria among businessmen higher than in the early 1870s, the famous *Gründerjahre* (the years of company promotion) in Germany, the era when the most absurd and obviously fraudulent company prospectus found unlimited sucker-money for its promises. Those were the days when, as a Viennese journalist put it, 'companies were founded to transport the aurora borealis in pipelines to St Stephen's Square and to win mass sales for our boot polish among the natives of the South Sea islands." 109

"[I]t seems probable that the choice between the two methods of promotion has in fact been influenced by certain legal requirements which cannot easily be derived from the economic circumstances of which we have already taken account." 110

"[B]anks were motivated both by the aim of paternally fostering newly established firms and by purely speculative considerations." 111

INTRODUCTION

The years of the German Empire, or *Kaiserreich*, 1871-1914 are one of the most studied periods of German financial historiography. This is partly because the establishment of a new national state and many consequent legal changes helped to introduce regulatory requirements of reporting for many financial firms that produced the archival substance that has served as the primary source material for later historiographical research.¹¹² This period is also the focal point of a great deal of financial history because it is so often considered the decisive era in which the concentration of the banking industry occurred, the tight links between bank and industry developed, and—most importantly for our purposes—the practice of universal banking crystallized in the for-profit banking sector, and began to permeate the entire

¹⁰⁹ Hobsbawm (2006 [1975]: 62).

¹¹⁰ Whale (1930: 41)

¹¹¹ Wellhöner and Wixforth (2003: 156)

Although even for this period a full picture of banks' business philosophies, balance sheets, and firm financing are an ongoing research desiderata. In many cases, the most important archival material has been lost owing to the take-over spree at the end of the 19th century wherein the records of many amalgamated banks' were discarded. Moreover, where records did continue to exist they were often destroyed from the damage incurred during two World Wars. Nevertheless, this period remains much better researched than for example the preceding period of early industrialization (Wixforth, 2002: 16-8; M. Pohl, 1982a: 13-19).

financial architecture of Germany's political economy *systemically* (Ziegler, 2005b; Tilly, 1998). This thesis on its own cannot do justice to the wealth of materials that have been produced on this singular period, no less even when restricted solely to the theme of German universal banking. Nevertheless, the aim of the next two chapters is to radically reframe the meaning of the Imperial period for German finance by recasting the emergence of "concrete" universal banking. They do so by connecting the emergence of the form of concrete universal banking, that bundle of practices infamously foregrounded by Gerschenkron, to the speculative culture of "mixed-banking" that had developed before the *Kaiserreich* as a result of the struggle over industrialization. The present chapter picks up the narrative chronologically from chapter 3, and discusses developments in the German political economy from 1869 until 1873. Chapter 5 follows chronologically with developments occurring from 1874 until the eve of the First World War.

The relative weight given in this chapter to such a short period of time, owes to the importance of the "Foundation Years" in German history. Not only was the German Empire founded in 1871, momentously rearranging political authority in Central Europe, but a gargantuan number of corporations were founded between 1870-1873. Concomitant with this "Foundation Boom" (*Gründerboom*) was a speculative mania on the securities exchanges of the Empire. It was followed in 1874 by the "Foundation Crash" (*Gründerkrach*, or sometimes, "Foundation Crisis" *Gründerkrise*), which inaugurated a period of depressed economic activity and the elimination of many of the recently founded corporations. The Foundation Years are typically considered the zenith of "Manchester Liberalism" in the new Germany. Subsequent to the foundation crash, a deep-seated reaction against liberal ideals, especially in the political economy, helped to set the Empire on the path towards its historical terminus of "organized capitalism."

The Foundation Years carry an analogous significance for German financial historiography. Contemporaneous with the excitement of the Foundation Boom a "second foundation wave" of joint-stock banks rolled across the shores of Germany's financial terrain. As feudal-agrarian laws were undone, the pent-up needs of businessmen to found corporate banks to propel industrialization were unleashed in a wave of optimism following war victory and reparations. The "second foundation wave" is crucial for the narrative of universal banking in Germany, because it is typically held that the new corporate banks founded were all "universal" in their provision of financial services. Following the crash, universal banks became more

concentrated in a wave of rationalising takeovers as well as communities of interest (cartels) (M. Pohl, 1982a), their mix of financial services became the standard vis-à-vis other financial institutions (Deeg, 2003; *idem*, 1999), and the division of labour between universal banks and the state central bank became institutionalized (Tilly, 1999). According to these narratives, the practice of universal banking *itself* did not go through any further pertinent changes following the *Gründerkrach*. Universal banking had crystallized in the corporate banking sector on the form described by Gerschenkron, and any further developments were essentially about the diffusion of an established practice to other sectors of the financial industry and credit system more generally.

This chapter takes issue both with the naturalistic, and psychological, economic narratives that have hitherto attempted to explain the speculative dynamic of the second foundation wave, as well as the notion that universal banking was finished evolving by the termination of economic optimism in 1874. It provides additional historical illustration to the point of earlier chapters that the establishment of joint-stock banking was not undertaken to efficiently solve market failures. Conversely, institutional development is better expressed through analyses problematizing the role of power in the political economy. In the first section of the chapter, the argument is made that the "second foundation wave" may have been fed by the psychopathology of mania on securities markets, but decisive for its institutional shape were important regulatory changes that, contrary to the received narrative, *compelled* financiers involved in promoting industry to incorporate or establish joint-stock banks rather than undertake these efforts as private bankers. This argument upends the traditional thinking which posits that the role of legislation simply *freed* bankers, rather than forcing them, to engage in the most economically viable form of business.

Developing on the institutional account of speculation on industry, the second section of the chapter argues that a system of corporate universal banking was not a foregone conclusion at the outbreak of the Foundation Crisis. This section outlines the constellation of financial institutions generated during the mania and bequeathed to the "Great Depression" period that followed the spectacular end to the foundation boom. The analysis posits that if history is an open-ended, non-deterministic process, then there is no way to read the later development of universal banking from this early stage of financial evolution: that is to say, not only had universal banking in its concrete form not yet arrived by the end of the second foundation wave, but there was indication to

contemporaries that the future developmental trajectory of German corporate financial institutions might be towards specialization, rather than further universalization.

SPECULATION AND THE FOUNDATION BOOM

Beginning towards the end of the 1860s, and continuing for two years following the establishment of the German *Kaiserreich*, the "foundation years" (*Gründerjahre*) are a socioeconomic milestone in all facets of German history (cf. Eley, 1992; Rosenberg, 1976; Wehler, 1985 [1973]). In the wake of the successful completion of war against France, and with company laws newly loosened to enable free incorporation, over 900 joint-stock companies were founded in the years from 1871-1873, twice as many as in the previous decade (Reckendrees, 2013: 58). This short episode marks in many ways the pinnacle of liberal economic ideology in pre-WWI Germany, which had been tightening the grip of its invisible hand over the imagination of state and (civil) society since the revolutions of 1848. The conjuncture of the "foundation years" also marks an important transformational episode in the trajectory of German socioeconomic development. The beginning and end of the foundation period bookend two very different trajectories of social development:¹¹³ one where liberal politico-economic thinking was expanding its social acceptance, especially as reflected in key politico-economic institutions and forms of social power, and the other characterized by the backlash against this ideology (Jaeger, 1988; Rosenberg, 1976: 62-77). The *Gründerjahre* therefore reflect a pivotally important episode of German history tout court.

This significance is echoed in the history of the German universal banking system. Not only were incorporation laws liberalized, marking the seeming end of the conflict between state and financier inaugurated in the 1830s and 40s, but a second foundation wave of joint-stock banks was unleashed to roll over the German political economy. There are various quantitative assessments of the number of joint-stock banks founded, 114 but they all largely concur that in the four years 1870, 1871, 1872, and 1873, at least 100 new joint-stock banks were founded. Chief among this foundation

¹¹³ This is also in part because of the concomitant founding of the *Kaiserreich* during this period, the end of a Germany that might include Austria, a vast constitutionalization of federal powers, and all of the expected consequences of formalizing nationhood across a political space while synchronously institutionalizing an industrial order materially through new company foundations and legally through the removal of the requirement for concessions.

¹¹⁴ See Manfred Pohl (1982a: 107) for an overview within the historical literature.

wave were the three corporate banks that would come to epitomize German universal banking during the 20th century: the *Commerz- und Disconto Bank* (1870), the *Deutsche Bank* (1870), and the *Dresdner Bank* (1872). Following the Second World War these three corporate banks were far and away the largest banks in Germany measured by their balance sheets and market capitalization (Edwards and Fisher, 1994: 100, 101), and remained the three leading for-profit banks until the merger of the Dresdner Bank with Commerzbank in 2009 reduced this triumvirate to two (Detzer, 2014).

Much historiography of German finance typically holds that the corporate banks of Germany had crystallized on universal banking by the end of the "second foundation wave" of joint-stock banks. This assumption is grounded in the observation that the commercial joint-stock banks that had been founded by the end of the second foundation wave specifically listed statutes in their corporate charters allowing them to engage in "banking business of any kind" (e.g. Burhop, 2014: 157; M. Pohl, 1986a: 51; Penzkofer, 1974: 52; cf. Bosenick, 1912: 60-74, for a list of the actual statutes). This assumption overlooks the emphasis put on different mixes of financial activities practiced by the various banks founded during this period. That is to say, the form of banks' "universality," or the concrete manner in which their array of financial practices were enacted. 115 Banks like the Berliner Handelsgesellschaft were entitled under their statutes to engage in any line of banking business, and did indeed have a (proportionally) small number of current accounts on their balance sheets (Dahlem, 2009; cf. chapter 3 here). However, the *Handelsgesellschaft* was primarily an issuing and flotations bank (Burhop, 2004: 126-7; Riesser, 1910: 517-8). Even though its statutes empowered it to engage in both the long and short-term sides of credit provision, its bread and butter was the speculative business of floating securities on the stock markets (Dahlem, 2009: 166, 196). In comparison, the Disconto-Gesellschaft was more balanced in the assets that it held on its books, with a more uniform division of returns from commercial and investment business (Däbritz, 1931, 246-249); however, of the ventures in which it participated, the *Disconto* only exceptionally engaged in the

Harald Wixforth has mentioned a similar point in relation to ongoing archival research for entrepreneurial history. Wixforth opines that the development of specific banks in the *Kaiserreich* has often been undertaken by projecting the assumed macro trends of banking and the financial sector as a whole on specific individual banks, leading to the impression that all banks pursued the same interests and business policies (Wixforth, 1997: 313-4). Wixforth himself however, has not used this insight to challenge our understanding of the development of universal banking, but rather simply to provide a more detailed specific history of the Dresdner Bank.

foundation business as a principal founder. ¹¹⁶ As a further example, the *Schaaffhausen'sche Bankverein* was equally as balanced in its holdings of commercial versus investment credits as the *Disconto Gesellschaft*; however, it concentrated a greater proportion of its efforts directly on the foundation of new enterprises (Burhop, 2004: 128-9; Riesser, 1910: 508-10). The demonstrable record of variety in which commercial and investment banking were combined—not to mention *involvement in the investment banking activities of founding new corporations*—highlights how the assumption that the straightforward *potential* to engage all branches of financial services is not the same as an institutionalized practice of universal banking *à la* Gerschenkron.

The second foundation wave of corporate banks occurred approximately concurrent with the foundation boom (*Gründerboom*) of the years 1871-1873. This massive and generalized upswing in economic activity is almost unanimously regarded in the historical literature to have been initiated by four key factors: (1) the introduction of the New Company Law on 11th June 1870, (2) the foundation of the German Empire in January 1871, (3) the speedy payment of French reparations following the Franco-Prussian war and (4) the annexation of Alsace Loraine (and its heavy deposits of iron ore) (M. Pohl, 1986a: 291; Craig, 1978: 78; Kitchen, 1978: 132; Henderson, 1975: 162). 117 According to this narrative, the economic expansion began following the liberalization of the concession system for joint-stock company foundation initiated by

The Disconto-Gesellschaft was the principal force behind the foundation of the Dortmunder Union, a mining concern in the Rhineland (Kleeberg, 1989: 220ff.). This was the only exception to its activities as a founder; however, the Disconto was associated with numerous foundations where it took a percentage of shares in initial flotations, even if it was not a principal founder per se. This is an important distinction to keep in mind, because accepting proportionally small numbers of shares to sell on to the market, or keep in its portfolio of securities, was a different activity than undertaking to found a new company from the outset. In that sense, figures like Friedrich Grillo, and Wilhelm von Born were more instrumental in establishing the initial firms of the Dortmunder Hütte and Neuschottland along founders' principles (and were incidentally highly concerned with the substantive goal of establishing an industrial society through the means of mining corporations (Kleeberg, 1989: 233-40).

¹¹⁷ Manfred Pohl's earliest delineation of the causes for the *Gründerboom* also included the final liberalization of guild laws that enabled the free choice of profession and the free movement for all persons of the *Kaiserreich*. This had the effect of initiating a massive immigration from country to city with subsequent push for increased housing and the development of the mortgage banks (M. Pohl, 1978: 23). In a study focused specifically on the sources of the Foundation Boom, one might also engage with Charles Kindleberger's depiction that includes international economic linkages in the form of miracle crop production in Austria (1990: 312). As our concern here is to place the development of the institution of universal banking against the sociopolitical background of the Foundation Boom, its delineation will be restricted to examining the qualitative social forces underpinning the second foundation of joint-stock banks.

the promulgation of the New Company Law in 1870. Under the New Company Law the old application process that had involved government oversight and final say in (a seldom granted) permission for corporate status was substituted for a simple registration of which anyone could undertake without exception or oversight. This legal move opened the floodgates to new corporate foundations as well as conversions of old private firms into corporate ones. Fuel was thrown on the manic speculative flames by the "feelings of optimism engendered by the foundation of the Empire and the victory over France" (Wehler, 1995: 98, *author's translation*), which were then in due course materially bolstered by the payment of French reparations that flooded the young Empire with liquidity. Finally, the addition of iron ore deposits in Alsace Lorraine helped to spur forward production of Ruhr steel factories and added the material basis upon which the aforementioned excessive optimism was premised.

Scholarship on universal banking historiography implies that the socioeconomic dynamics putatively responsible for the *general* upswing in economic activity occurring during the foundation boom were also responsible for impelling the second foundation wave of corporate banks (e.g. Burhop, 2011: 69, 188; *idem*, 2004: 11; Fohlin, 2007: 21, 23, 224; Penzkofer, 1974: 58; M. Pohl, 1986a; *idem*, 1982c: 225-6; *idem*, 1978: 22-24; Tilly, 1999: 135, 1986: 123-4; Wixforth, 1997: 318). That is to say, the second foundation wave of corporate banks is agreed to have been ultimately driven by liberalisation and the positive psychological outlook engendered by war victory. Putting the familiar details of the second foundation wave into sociopolitical context, and examining the institutional terrain, helps to underscore a much different significance of this episode for the development of universal banking.

Détente in the struggle over industrialization

Following the commercial and financial crisis of 1857, a period of relative socioeconomic stagnation set in amongst the German states until Prussia's victory over Austria in 1866 (Wehler, 1995: 95-6). The political economy of these nine years was stamped by the overcapacity generated during the 1850s boom as well as the geopolitical conflicts of the time (Wehler, 1995; Blackbourn, 2003). The Italian-Austrian war of 1859 and the American Civil war from 1861-1865, both helped to dampen prospects as well as economic growth within those respective countries as well as reduce international commerce with them (Henderson, 1975). Of more direct consequence for the German political economies were the German-Danish war of 1864

and the Prusso-Austrian war of 1866. Both these conflicts ultimately exercised a destabilizing force on the climate for investment as well as growth; however, their effects were not unilateral across Prussia or the other German states. The prospect, and then actuality, of war undermined markets for consumer goods, but helped to spur demand for the railroads and their related industries (Wehler, 1995: 97ff.; Böhme, 1966b). Consequently, this "leading sector" and its forward and backwardly linked industries—mining, smelting, etc.—continued to expand during the whole period 1859-1866 in the face of a more general stagnation in the political economy. In 1866, there was a small-scale financial panic on the exchanges of Prussia and Austria owing to the Austro-Prussian war of that year (Berghoff, 2002). The termination of conflict in 1866 opened a new phase of economic growth driven by the growth of the "leading sector complex of industries" that continued until the outbreak of conflict with France in 1870 (Tilly, 1990: 78-83).

One of the central factors driving politico-economic dynamics during these conjunctures was a shift in the interest-constellation of social forces propelling the struggle over industrialization. As we have seen in earlier chapters, during the pre-March era an oppositional attitude to industrialization emanating from conservative forces in Prussian state and aristocracy, and often also widely exhibited across the other German states in familiar constellations, provided resistance against the plans of businessmen to introduce (from abroad) or produce (as substitution) the social forms of an industrial order (cf. Brose, 2010). The socio-material interests and self-conceptions of state, bureaucracy, aristocracy and owners of land principally located their power in ideas of, and traditions pertaining to, feudal-agrarian society. The "monarchicalbureaucratic-condominium" (Wehler, 1987: 297) of the pre-March years derived its material and ideological sources of power from traditional agricultural society. The struggle to promote reforms and social transformation from groups favouring industrialization led during the 1850s to many compromises on the part of the German states' administrations against the image of agrarian society: for example, in Prussia, the concession system for the incorporation in the mining industry was liberalized by Minister von der Heydt as a compromise to maintaining a restrictive policy over jointstock bank concessions (Friedrich, 1980). 118 The increased activity in coal mining enabled the production of coal to more than double between 1850 and 1860, and then

¹¹⁸ See also Chapter 3 here.

double again by 1870 (Torp, 2011: 343; Brophy, 2011: 186). Generally, the German states made enough concessions for reform during the conservative reaction following the Revolution of 1848 to help facilitate the conditions for the expansion of industrial activity. In the immediate reaction (early 1850s), however, they also initiated legislation to shore-up many aspects of the pre-industrial order. For example, to protect guilds against "the factory system." During the 1850s Prussia, Hanover, Saxony, Baden, Württemberg, Hesse-Darmstadt, Nassau and Bavaria all "introduced corporate reforms which seemed to promise a return to guild control of production," control prices, and shore up the agrarian feudal order against advancing industry (Brose, 2013: 289). Owing in part to changes in government leadership and officials who were less reactionary, and in part to end the pleas from handicraft associations, almost all of the aforementioned states, retreated on these legislative initiatives by 1862, and 30 German states had introduced complete freedom of enterprise by 1869 (Hamerow, 1958: 239-248). The transformation in attitudes towards freedom of enterprise was also importantly influenced by the international commercial context (Torp, 2011; idem, 2010). The Cobden-Chevalier treaty of 1860 was the beginning of free trade between France and England, and the subsequent Franco-Prussian trade treaty of 1862—which effectively opened the entirety of the Zollverein to tariff-free trade with France extended the former agreement and essentially opened the German states to the world market (Brophy, 2011: 190). Related to international trade, the changing disposition of German states was also driven by the slow transformation of agrarian interests. While it has been commonplace to contrast the rapid change of industry, as against the stasis of agricultural life, agriculture itself was also in a process of transformation during this time period: it became more dependent on industrial technology, 119 the introduction of new crops, ¹²⁰ and specialization of their operations on marketable products for profit. ¹²¹ In short, the material basis of agriculture became ever more industrialized during the 1850s and 1860s, even though the many contemporaries lamented the moral, ideological and political consequences of the money nexus (Sheehan, 1989: 747-762). The increasing use of industrial products in agriculture helped to develop a constituency of

¹¹⁹ The use of new farm equipment like threshers, and the use of fertilizers, like guano imported from Chile.

¹²⁰ Root crops in particular, potatoes, sugar beet, etc.

¹²¹ This was supported and in part driven by the other two changes: the introduction of root crops for example often required that fields not lie fallow, which in turn meant less space for animal grazing. The reduced space for animals was bolstered by the diminished need for their manure secured by the import of guano (see Schißler, 1978; Sheehan, 1989).

free traders (as farmers could benefit from the import of cheaper foreign industrial and consumer products, while also gaining a vent for their products, e.g. grain—many producers of industrial goods, by contrast remained in favour of tariffs especially for products like steel).

The 1860s can be seen in retrospect as a distinct, if somewhat temporary, détente between agrarian and industrial social forces over the continuing struggle over the shape of German society. Ultimately, this decade saw reserved consent for the social change implied by advancing industrial capitalism across the German lands. Anti-industrial social forces began to accept a greater place for industry in German society, although not without reserving the desire to have agriculture remain the chief power of German society (Barkin, 1970). The 1860s represent a confluence of historical change that inaugurates what some scholars have deemed the "liberal era" (Ullmann, 1995; Jaeger, 1988). By the end of the 1860s, there had been a watershed in the conflict over social change in Germany insofar as "the German states had mostly recognized that industrialism was too important for their finances and the military establishment" to further restrict its expansion (Brose, 2013: 289; similar statements in Berghoff, 2002: 85; Kitchen, 1978: 135). The changing socio-material basis of German life laid the foundation for persuasion by means of "Manchester liberal" arguments about market freedom.

New institutions for the liberal era

Not only were old anti-industrial regulations overturned, but the changing attitude of the German states towards industrialization was encoded in the establishment of new laws and institutions. A new more liberal commercial code was passed in 1861 (das Allgemeines Deutsches Handelsgesetzbuch (ADHGB)) for the German Confederation. This general softening of law towards commerce provided the basis for many German states to remove the concession requirement for joint-stock companies. 124 In 1869 a Superior Commercial and Trade Court (Obersten Handelsgerichtshof) was

¹²² One could add also that ongoing considerations over war and the constitutional conflict helped to distract from some of the more slow moving changes of the political economy.

Foreshadowing the orgiastic change of commercial and financial regulation that would come later, Prussia rescinded its ordinance of 1843 which had prohibited the use of futures contracts on its securities markets (Berghoff, 2002: 84).

¹²⁴ The ADHGB enabled individual states to choose whether they would maintain or overturn the concessionary requirement. This was the case for example in Saxony, that already removed the concession requirement on the 15th June 1861 (Burhop, 2006b: 95, note 7).

concomitantly established to hear cases under the ADHGB (Berghoff, 2002: 85). In 1867, a Trade Parliament for the discussion of commercial matters was formed for members of the Zollverein (Gömmel, 1992: 151). Finally, the system requiring governmental concession for the foundation of joint-stock companies was removed throughout the North German Confederation (i.e. in Prussia as well) with the promulgation of the New Company Act of 1870 (an amendment to the ADHGB).

This has typically been cast in a fashion that underscores the element of "removal," allowing the *natural* tendencies of the market and the commercial spirit to break free, in particular from the time consuming and uncertain process of seeking governmental concessions from the Prussian bureaucracy. There was a generalized recognition by financiers, industrialists and merchants that the removal of the concession system would lead to improved possibilities for business. The growth of the Prussian bureaucracy had not matched the growth in proportion to the number of claims that were increasingly being submitted. So, even though there remained a certain skepticism, on the part of the Prussian state about "stockjobbery," and commensurate fears about speculative trends that might be introduced, the Prussian state and bureaucracy was keen to eliminate the concession requirement if only to alleviate some of the growing demands on its resources (Baltzer, 2013). Nevertheless, the state remained beholden to the agrarian social forces of the East, represented by conservative party members in the North German Parliament, that ultimately conceded the bill in exchange for a reduction in steel tariffs agreed by industrial groups (Böhme, 1966b: 285-6); however, this concession was carried out in such a way that "stockjobbery" and speculation were still meant to be avoided (Hamerow, 1972: 342-3). The elimination of concession therefore still carried conditions, which were highly significant for constructing dynamics of the "second foundation wave" of joint-stock banks.

The New Company Act of 1870 was indeed important because of its removal of the concession system. The continuing struggle of agrarian-conservative forces against an industrial system and its corresponding "stockjobbery" helped introduce two frequently overlooked details of financial regulation in the New Company Act of 1870 that were highly significant for the foundation wave of joint-stock banks from 1871-1873. Firstly, conservatives conceded the removal of constrictions on the type of shares

¹²⁵ Regardless of whether this institution served essentially as a rhetorical mouthpiece for the dissemination of the political ideal of liberalization, or whether it represents a more enduring material concession to liberal ideas about politico-economic organization is besides the point. Its establishment is emblematic of the growth of liberal power during this decade.

that could be issued in the course of a foundation, so that secondly, the addition of *stricter conditions for subscription and paying up* of shares prior to legally recognized incorporation might be enshrined in the law.

The granting of government concessions for joint-stock companies had extended beyond the simple permission to incorporate, and *into* the legal minutiae of corporate foundations, stipulating not only whether a company might be founded, but also numerous other conditions for the admittance of the company to the commercial register (Bösselmann, 1939; Wolff, 1915). For our purposes here, one of the most important was the type of shares that could be employed in a primary issue for a new foundation. In Germany, two types of shares were common. Registered, or "name," shares (Namensaktien) were issued directly to the specific individual who subscribed them. These shares listed the owner of the share directly on the document itself, the name of the owner was recorded in a government registry, and the transfer of the share needed to be formally arranged, approved and certified by the government before it could change legal possession (Gömmel, 1992: 150). Conversely, bearer shares (*Inhaberaktien*) were owned straightforwardly by the person who (physically) held them (in their hands). They did not require any formal governmental approval to transfer ownership. Financiers and investors typically preferred the latter type of shares, because they were more readily fungible and therefore easier to trade and liquidate. "Name" shares required much longer periods of time in order to officially secure the transfer of a share following a sale, and remained subject to the whims of the bureaucracy, causing delays that prohibited the liquidity necessary for a secondary market in such shares, and injecting greater uncertainty into business operations (Berghoff, 2002: 74).

Also important was the form of foundation itself. By the early 1870s there were two legally recognized forms of foundations: "successive" (*Suksessivgründung*) and "simultaneous" (*Simultangründung*) (Bösselman, 1939: 97). Successive foundations involved advertising and accumulating subscriptions for new share issues, wherein the actual company itself would be founded in a legal sense *before* the potential placement of the first allotment of capital. That is to say prospective companies could become incorporated without having the entirety of their share capital subscribed (no less paid up). This was the process used for example by Cologne bankers in founding many railway companies.¹²⁶ Simultaneous foundations were those where the *entirety* of the

¹²⁶ Described in chapter 2 here.

initial public offering (IPO) would be subscribed *en masse* by one underwriter (but in practice usually a syndicate of underwriting agents, led by one firm directing individual allotments and quotas of shares), who then accepted the legal obligation to make eventual payment on all the shares owned. Typically in this latter case a bank would underwrite the share issue, and sell parcels of its shares on to its other clients or directly to market traders (Burhop, 2006b: 95).

Both forms of foundation provided opportunities for speculation through agiotage. That is to say, between the initial price for shares agreed by the foundation bank, and that at which it could sell shares on to the securities market. In the case of successive foundation banks would first agree the par value of the share package with the firm to be founded, while also agreeing to subscribe a certain number of shares for their own portfolio. Importantly, subscribed shares did not require immediate payment, but represented rather an obligation to pay the value of the share. Subsequently, the foundation bank would aim to collect subscriptions for the remaining shares, with an aim to generate a good deal of interest in the shares. When demand for share subscriptions was larger than available supply, the shares would begin to be quoted at a premium as compared to the par value on securities exchanges. The more interest, or hype generated in a subscription, the more it was possible to positively increase the share value on securities markets where the shares could be sold on. The aim of (usually private) bankers was to hype shares enough that they could realize a profit between the par value they paid on share subscriptions, and that for which they could sell the shares onto the securities exchanges. This was similar for simultaneous foundations, except that here financiers subscribed the entire value of the share package all at once, necessitating that hype and price making for the share occur only via interest on secondary markets.

The New Company Law of 1870 introduced a new political-legal pressure in relation to both of these facets of company promotion and foundation that was crucial for propelling the "second foundation wave" of joint-stock banks from 1871-1873. Firstly, the New Company Law removed the necessity to use "name" shares (Gömmel, 1992: 150). In Prussia the joint-stock law of 1843, its amendment in 1845, as well as the decrees of 1853 and 1856 had also demanded that the issuance of bearer shares require the full paying up of subscribed capital up-front—conditions that were similarly dropped with the New Law of 1870 (Weigt, 2005: 28). This had the unsurprising consequence that bearer shares became much more widely used, to the point that they

were the *de facto* form of equity. Bearer shares could be much more easily bought and sold, and encouraged the beginnings of secondary markets in securities (Buchheim, 2002). In conjunction with the further relaxation of restrictions on the futures market at the Berlin exchange, as well the ease of access to trading on the "coulisse," this provision wildly increased the number of entrants to the secondary markets for securities: "everyman" could, and many did, enter the Bourse in order to personally undertake their own securities trades (Baltzer, 2007: 15; Meier, 1992: 8).

Secondly, the New Company Law stipulated that the full amount of a new firm's IPO must be completely subscribed, with at least 10 percent of the nominal value of that capital already paid-in, 20 percent for insurance companies, before the firm could be legally recognized as incorporated (Baltzer, 2007: 32-33; Weigt, 2005: 25, note 118; Reich, 1980: 258). Additionally, a prospectus, specifying a time period within which the subscriptions would take place, was required; and the opening general meeting of shareholders had to attract attendance of a minimum percentage (Fohlin, 2007: 230). The consequence of these legal rules was to dramatically alter the legal basis for, and simultaneously reduce the number of, successive foundations (Bösselmann, 1939: 97-8), as founders could not take the risk that any element of their IPO might remain unsubscribed and jeopardize the legal recognition of their firm (Whale, 1930: 41). In June of 1870 when the New Law was promulgated, this heavily favoured the existing joint-stock banks as agents that could pledge the entire value of a subscription up front (Fohlin, 2007: 230).

Compelling freedom

The first joint-stock banks had landed on the joint-stock legal form unintentionally as the result of political struggles in the 1850s (rather than because of

¹²⁷ All that was required was the demonstration of an "interest in trade" and a Bourse card for entrance (Baltzer, 2007: 14).

¹²⁸ The subscribers were also legally liable for 40 percent of the nominal value of capital they subscribed. Caroline Fohlin erroneously states that the 1870 amendment to the ADGHB had the same conditions for foundation as the much stricter 1884 amendment: namely, that at least 25 percent of the nominal capital needed to paid in. Fohlin cites only the text of the 1884 law, and I have yet to find a further source that confirms her assertion.

Although there did remain some joint-stock firms that were founded "successively." Wolff tabulates 1,262 joint-stock companies founded simultaneously, and 116 founded successively between 1885-1892 (Wolff, 1915: 73ff.).

¹³⁰ Prior to such legal recognition firms would essentially be unable to do business. Other aspects relating to the publication of a prospectus, as well as certain formalities relating to quorum at General Meetings could also put a hold on the firm coming online.

the structural functional compulsions of industrialization). ¹³¹ The transformational possibilities of the joint-stock form for finance were not immediately apparent to those initially founded. It was only later that it became evident that this legal form afforded an *opportunity* to leverage limited liability and larger agglomerations of financial capital to pursue the most exceptionally competitive of cases in the foundation or government loan business (Bosenick, 1912: 17-22). For the majority of the issuing business in railroad securities, the joint-stock form of banking had not yet become a *necessity*. The promulgation of the New Company Law in 1870 shifted the balance of financial power in favour of joint-stock banks to continue the foundation business because of the terms that it heaped on the traditional "successive" form of foundation that had been so successfully pursued by the private bankers.

When the New Company Law was introduced in 1870 the existing corporate banks engaging in the foundation business were given an advantage over the private bankers also pursuing industrial foundations. The larger capital reserves of the corporate joint-stock banks allowed them to engage in simultaneous foundations relatively free of existential (financial) hazard. They could pay the legally required 10 percent nominal capital for new issues, absorb the potential of 40 percent nominal capital loss in the event of a failed issue with the certainty that they would not be immediately bankrupted or made illiquid in the event that they could not find new buyers for the shares they had underwritten. In the event of such an occurrence, they could themselves produce new issues of shares in order to increase their available capital. Moreover, the joint-stock banks were themselves usually the product of networks of private bankers—which provided an immediate list of contacts to form underwriting consortia, or to serve as a client base for the onward selling of new issues.

Conversely, the majority of individual private banks were put at a disadvantage in relation to the foundation business. They were not necessarily as well connected, they did not have the same magnitude of capital, and were personally liable for losses in ventures that failed. The growth of the secondary markets also made it less necessary to mobilize interest in IPOs via prolonged subscription periods. In order to compete with the existing corporate banks, private bankers (that had not already founded joint-stock banks themselves, and had previously practiced successive foundations), were now *compelled* to found joint-stock banks of their own in order to partake in the fruits of

¹³¹ See Chapter 5 here.

foundation deals. Otherwise, they would be relegated to taking marginal shares in underwriting consortia where they could no longer themselves help to steer the course of the foundation and issuing business.¹³²

It is important to underscore that it was only the new legal provisions of the 1870 law that made the advantage of the joint-stock form for banks pursuing the foundation business decisive. Again, whereas the greater certainty afforded by a larger capital base provided an opportunity for corporate banks during the 1850s and 60s, it was not yet at that time an *imperative* for private bankers to initiate corporate banks. The successive method of foundations used by private bankers had been very lucrative and successful for them up until the New Company Law. Indeed, private bankers—and not corporate banks—were responsible for financing the bulk of the railway boom in Germany, and they did so using principally successive foundations and name shares (Fohlin, 2007: 229, note 10; Then, 1997: 131-140). 133 That is to say, there was no necessity for bearer shares, simultaneous foundation, or corporate banks in order to progress along the path of industrialization. The New Company Law of 1870 made it unfeasible in many situations to continue with the tried method of successive foundations, which could require a long waiting period to accumulate subscriptions and injected too much uncertainty about whether the efforts of foundation would be fruitful, go to waste, or cause existential financial ruin.

None of this is to say that the private bankers were undone with the stroke of the legislative pen. Private bankers had other business segments that they pursued outside of the foundation business. Indeed, as earlier chapters have discussed, the private bankers—as a group across Germany—pursued a diversity of financial practices, so much so that across the German states the category "private banker" can only be unified as a category through its legal standing as a set of banking organizations with unlimited liability (Reitmayer, 2003: 11). The private bankers as a group were involved in every aspect of finance, but individual private banking houses specialized overwhelmingly in trade finance or the issuance of government securities (North, 1997). Only the private bankers of Cologne during the 1830s and 1840s (Chapter 2 here), and then in small

¹³² Unless they were willing to take on the always uncertain venture of a flotation on their own shoulders, which indeed some very wealthy and well connected private bankers did do. See below.

¹³³ Moreover, England financed its entire stock of railway in this manner, and continued to use successive subscription as the principal manner in which stocks were issued even into the later 19th century (Whale, 1930: 39; Burhop, 2006b; Then, 1997).

numbers in Hamburg (Burhop, 2014: 157-8; M. Pohl, 1986b) and Berlin (Berghoff, 2002; Spangenthal, 1903: 80-1) beginning in the mid to late 1850s, integrated industrial foundations as part of their principal array of financial services. The majority of private bankers across the German states continued to neglect the foundation business altogether. Most private bankers continued to play similar roles in the German financial system following the New Company Law of 1870 as before. That said, as the balance sheets of joint-stock banks grew, and these new corporate entities began to take over the traditional business segments of the private bankers, the role of the latter became increasingly smaller as they were slowly pushed from acting as principal financial intermediaries into the niche market of personal financial management for small groups of highly wealthy clients in the 1930s (Ziegler, 2009; Wixforth and Ziegler, 1994). 134

The important point to underscore at this juncture is that during the foundation years 1870-1873, the role of private bankers *that were* engaged in the foundation business was channelled into the group effort of founding joint-stock banks that could pursue foundations under the legal regime of the New Company Law of 1870. Private bankers playing a principal role in the foundation business became key actors in the transformation of their own private banking institutes into joint-stock banks, the creation and foundation of other joint-stock banks, or in the secondary role of syndicate membership of a larger bank founding a joint-stock bank (M. Pohl, 1982a: 158).

Some very wealthy and well-connected private bankers could still manipulate the successive foundation method for founding new corporations. The Berlin private banker Bleichröder, renowned for his connections to Bismarck and the Rothschilds (see Stern, 1977), together with the Hamburger private banking house L. Behrens and Sons, were the principal sources in managing the foundation of the Royal United Laura Mill for Mining and Smelting works—the *Laurahütte (Vereinigte Königs- und Laurahütte AG für Bergbau und Hüttenbetrieb)* (Wixforth, 2002: 20). The success of this venture was built on the basis of their connections to other banking institutions, and their ability thereby to mobilise a good deal of interest in the shares in advance of the opening of subscription (Burhop, 2006). That is to say Bleichröder and Behrens were capable of

This process is best characterized as one of a struggle for institutional power, wherein private bankers had originally intended that the joint-stock banks they created should serve their interests, but were slowly excised from important decision making and control in the new corporate big banks by the a cadre of professional managers (Reitmayer, 2003: 12-3; cf. M. Pohl, 1982a: 158-9, who states exactly this, but fails to incorporate any theoretical role for power in his analysis of banking concentration).

accepting the (minimal in this case) uncertainty of a failed flotation, and speculated that their ability to promote the venture would help to generate proportionally large profits on the operation. Indeed, not only was the issue vastly oversubscribed, but the success of the *Laurahütte* once it came into operation helped to generate huge profits for the firm resulting in large dividend payouts in its first two years of operation. The massive dividend payouts helped to push the value of the *Laurahütte*'s shares 162 percent above par as they became an object of speculation on German bourses (Wixforth, 2002: 20).

This example demonstrates that the successive foundation method *could* still be used, but where it was employed (successfully), was a measure of the social power of the banks that mobilised it. In the case of the *Laurahütte*, the oversubscription of the shares allowed Bleichröder as the leading banker to dictate how many shares would be apportioned to subscribers: those subscribing as many as 10 shares were allotted 1 share, those who subscribed between 11 and 40 shares were allotted 2, and those who subscribed over 40 shares were allocated 5 percent the nominal value of the total issue (Gömmel, 1992: 154). Bleichröder was able to promote a new company foundation in such a way as to generate hype that had *already* raised the worth of the shares before the subscription period was even finished. The personal discretion reflected in the arbitrary rules that he was able to outline for the issue of share quotas equally indicate the dimension of power held in the hands of his firm. Other private bankers, who did not stand at the apex of a long-developed network of personal connections to other banking firms, held less capital, or who were untried/insecure in their promotional abilities were no longer in a position to undertake such operations owing to the existential uncertainty they now posed. The ability of Bleichröder as a private banker to deploy the successive method of foundation provides the exception that demonstrates the rule.

*

The New Company Law of 1870 is typically presented as a liberalisation of the economy from the draconian restrictions of an antiquated feudal regime. In this portrayal the unleashing of previously caged economic forces caused them to spill forward in a natural and uninterrupted manner, without restriction. The discussion above highlights that it is instead important to emphasize the *constructive* force of the new institutions and regulations introduced in generating the speculative forces driving the second foundation wave rather than simply the *emancipatory release* of the

restrictions that were removed. 135 The regulatory codex of the New Company Law applied unilaterally and equally for the entire North German Confederation, 136 indeed simplifying the procedure for, and "freeing," social forces to found industrial joint-stock companies with greater ease. Nevertheless, it decisively imposed a new constellation of regulations for the financing of industrial enterprises, shifting the way in which financial praxis was institutionalized and financial power was exercised in relation to the specific legal forms of company promotion. Previously, successive foundation had been the chief form of foundation for private banks because of the manner in which it allowed them to finance securities' issues without tying up too many resources, and it had provided a way for leading private banks to help drive the prices of as yet unissued shares higher before their introduction to active trading. By contrast, simultaneous foundation had presented uncertainty because it required the possibility of the underwriter being forced to hold on to shares that could not readily be further passed to a securities exchange for trading.

Following 1870, this calculus of power was reversed. Successive foundation became unfeasible for the majority of private banks owing to the timeliness required to expeditiously subscribe all the shares of a new issue, and producing the uncertainty of an existential threat should the entire issue not be subscribed. It remained an opportunity for the most powerful, assured, and well-connected financial institutions to manipulate the subscription process for their advantage, but simultaneous foundations became the *de facto* and near *compulsory* form of foundation as the difficulties in establishing joint-stock banks were reduced to a simple registration. In this way, while the foundation years were indelibly marked by the *liberalisation* of restrictions on foundations of industrial corporations, the New Law of 1870 helped to positively construct a new regulatory context that constitutively shaped the social relations underpinning the "second foundation wave" of joint-stock banks that rolled over the German political economy during the *Gründerzeit*. Unlike the mainstream economic history literature, it should be clear that this outcome is best described as the result of relations of power, rather than those efficiency.

¹³⁵ For the theoretical basis that helped to motivate the analysis behind this insight see Knafo (2012; 2009).

it was implemented less than a year before the proclamation of the new Empire, but was carried over unproblematically to apply similarly to the Reich in 1871.

PRACTICES AND ORGANIZATION IN GERMAN FINANCE, 1869-73

The New Company Law of 1870 generated a positive force shaping the nature of corporate bank foundations. It was crucial for the stimulation of the "second foundation wave" of joint-stock banks between 1870-1873 as it forced those private banks that had been engaged in the foundation business to incorporate in order to continue in their established fields. This compulsion needs to be contextualized in two further important ways. Firstly, it must be set against the continuing diversity of alternative forms of bank and financial institutions during this period (that is to say against other financial institutions that were not incorporated). Secondly, it must also be juxtaposed to the various business programmes, i.e. types, of joint-stock bank that were founded during the "second foundation wave." Not all banks were involved in speculative practices on securities markets, but as we will come to see, the foundation business constitutes the driving force beyond the other stylized forms of corporate bank foundations.

It is important to highlight the continuing diversity of financial institutions in the political economy of the *Kaiserreich* because it underscores that the history of universal banking was still *in progress*, and in no way yet a *fait accompli* as the assumption of a common adoption of "universality" in bank statutes implies. History is an open process, and German finance was not yet locked-in on a path towards a universal banking system. Indeed, despite the central importance of the speculative foundation business as the central social purpose of German finance during these years, the different shape of "mixed-banking" undertaken by other corporate banks highlights the still present possibility that the German banking system may have developed towards specialization rather than become ever further universalized at this still early point in time.

The pillars of German finance

By the end of the 1860s the corporate legal form was beginning to gain in appeal amongst German financial circles. Nevertheless, joint-stock banks made up only a small portion of financial assets in the German financial system at the beginning of the frenzied period of the second foundation wave. The other important "pillars" of the German financial system were private bankers, note-issuing banks, savings banks, and credit co-operatives. The former three were all for-profit "private" institutions, while

¹³⁷ We could also add the categories of mortgage banks and "other." The latter would include the state-run Overseas Commercial Bank, as well as the *Landschaften*, a group of banks focused on providing credit to agricultural groups that also had a public charter, and invested in

the latter two were public institutions, operated by municipalities and their members respectively. The savings banks had been established early in the late 18th and early 19th centuries in order to help the "under classes" of German society, and slowly transformed into institutions meant to instill the savings motive in the growing number of wage labourers (Jachmich, 1997: 133; H. Pohl, 1987: 15-6). The credit co-operatives were also a response to the industrial transformation of German society: they were founded by liberal social reformers intent on promoting "self-help" amongst small businessmen through the co-operative principle (i.e. they gathered their operating capital from members and loaned to members only). 138 The credit co-operatives had a greater rural presence than the savings banks, although they existed in cities as well, and their clientele was principally small farmers or businessmen (Guinnane, 2001). The assets of these different groups of financial institutions were all denominated (at least following the foundation of the Empire in 1875) in similar currency; however, these monies all circulated in large part within relatively distinct and compartmentalized circuits of financial relations. 139 The savings deposited at the Sparkassen and Genossenschaftsbanken were reinvested for the most part in municipal or sometimes state level loans, but did not overlap with the assets and liabilities of the for-profit banks. In other words, at the foundation of the German empire in 1871, the different pillars of the German financial system could only claim commonality as institutions of the financial sector insofar as they were all organizations that handled "money."

Pfandbriefe, essentially mortgages for Junkers. I do not detail their quantitative growth here, other than to say that these two groups alone made a not inconsequential proportion of financial assets, because their relevance would diminish over time. As their political role becomes important for the qualitative change of universal banking practices they will be mentioned in turn, but otherwise they represent a class of financial organization that would not be incorporated into "universal" banking practices (as the savings banks and co-operative banks later would).

¹³⁸ This was in part the principle mobilized by David Hansemann in his initial founding of the Disconto-Gesellschaft in 1851 (See Chapter 3).

There were points of contact between these circuits in the early 1870s, insofar as the wages paid to workers in large industrial enterprises may have arisen in the first instance from loans made by a joint-stock bank that had founded that enterprise in the first instance. Nevertheless, the assets of the German financial system were relatively segmented by clientele: the private bankers and joint-stock banks served large enterprises, wealthy agrarians and the federal and state governments; the savings banks catered to the lower and working classes, while the credit co-operatives assisted the Mittelstand or medium sized firms and agricultural enterprises (cf. Deeg, 2003; Tilly, 1986). This would begin to change in the decades before WWI, and it was in part this process of an increasing competition for similar clientele that would help to foment changes in the structure of universal banking. See the discussion below.

In 1860 private bankers held the lion's share of financial system assets, followed by note-issuing banks, mortgage banks, savings banks and co-operative banks (Burhop, 2011: 168). 140 These figures would change dramatically by 1880: private banks' share of financial assets decreased by half, the savings banks doubled and the co-operatives increased by 22 fold, while the corporate banks' share of financial assets barely changed (Burhop, 2011: 168). The decline in significance of private bankers' share of total financial assets was continued in 1900, wherein that of the joint-stock banks nearly doubled while the savings banks and credit co-operatives more or less maintained roughly the same share of assets. On the eve of the first World War the joint-stock credit banks had increased their share of total financial assets to roughly 25 percent of the total. The other credit institutions, namely the savings banks and credit cooperatives, maintained their shares of financial assets proportionally in relation to the whole; however, by 1913 the total amount of financial assets had itself increased from roughly 125 percent of gross domestic product (GDP) to 169 percent. That is to say, even though the proportions of financial assets held by the savings banks and credit cooperatives remained the same, their overall nominal value had increased dramatically. 141 At the centre of this expansion were the joint-stock credit banks, the most powerful of which had developed into the Berliner Großbanken by the eve of the First World War: they were among the largest corporations in Germany as measured by their financial assets; Germany's three largest incorporated enterprises were Big Berlin Banks; finally, 17 of the top 25 largest enterprises in Germany were joint-stock banks (Tilly, 1986: 113-4). Crucially, of the 22.04 billion Marks in financial assets held by the joint-stock credit banks, fully half of that was concentrated in the five largest Berlin Big Banks (Tilly, 1986: 114). Nevertheless, even after the enormous concentration of financial wealth and power in the hands of several Big Berlin Banks just before WWI, the total volume of assets controlled by this category of financial institution indicated no

¹⁴⁰ It is a curious fact of statistics for this period that there are no figures for the year 1870, although I have consulted as wide a variety of the available sources as possible. Convention has it to list the share of financial system assets every twenty years from 1860, with a final balance in 1913 (see Pierenkemper and Tilly, 2004: 115; Deutsche Bundesbank, 1975: 53-67; Guinnane, 2002: 83; Fohlin, 2007: 328).

The value of assets commanded by the savings banks as a sector of the financial industry increased from 9.45 billion Marks in 1900 to 22.56 billion Marks in 1913. The credit cooperatives assets increased from 1.68 billion to 6.17 billion marks. The joint-stock banks increased their assets from 6.96 billion to 22.04 billion Marks. That is to say the increase in the nominal value of assets was 239 percent, 367 percent and 317 percent respectively for the savings banks, credit co-operatives and joint-stock banks (Pierenkemper and Tilly, 2004: 115, table 37; author's own calculations).

monopoly over the financial system as a whole wherein equal proportions of financial assets were controlled by the savings banks and credit cooperatives, which were not yet practising any form of universal or "mixed" banking. So, even though over the entire period of the *Kaiserreich* there was a growth of financial clout amongst the largest joint-stock credit banks, the financial system was still characterized by a diversity of institutional forms, and a variety of financial practice.

The diversity of corporate banks

It is also important to consider the diversity of financial practice within the category of joint-stock banks, especially at the beginning of the Kaiserreich. In doing so, it is necessary to distinguish between the existing joint-stock banks (those discussed in Chapter 3) and those established during the "second foundation wave," all of which can be disaggregated into several forms based on the focus of their financial activities. Almost without exception, all joint-stock banks were allowed by their statues to engage in every kind of financial activity (cf. Bosenick, 1912); however, the weight that different institutions placed on different segments of the credit business varied, even if their balance sheets all had some combination of commercial and investment items. To reiterate an oft-made point in this thesis, the business programme of these "mixedbanks" did not yet correspond to the theoretical representation of universal banking. Propelling the entire corporate banking sector in its financial activities, either directly or indirectly, was the social purpose of industrialization, itself fuelled by the speculative tint of the foundation business. Amongst the joint-stock banks we can roughly distinguish three different general tendencies as per the emphasis of banks' weighting on the foundation business.

Firstly, there were the foundation banks that were established by private bankers, and other joint-stock banks, who were engaged in the business of starting new industrial corporations (Gehr, 1959: 18-19). These banks were founded largely in the image of those joint-stock banks formed during the 1850s that had been established in order to forward the industrial order and take advantage of the gains from IPOs and "founders' rights" (Blume, 1914: 73-86). In their combination of financial activities the "foundation banks" were not dissimilar to the *Berliner Handels-Gesellschaft*, insofar as their emphasis was on the organization of the financial side of founding new corporate enterprises, principally in the underwriting of new issues, although in some cases they

leaned towards the early model of the BHI in their balance of financial services, ¹⁴² as they sometimes also acted as cashiers for the industrial firms that they represented. The "foundation banks" were the key figures of the "second foundation wave" of joint-stock banks, and were heavily concentrated in Berlin and the booming securities exchange there (Schulze-Gaevernitz, 1922: 34), ¹⁴³ although some were also established closer to financial centres like Frankfurt, e.g. the *Frankfurter Bankverein* (Burhop, 2004: 97-8), or closer to the industrial areas that they aimed to serve, e.g. the *Rheinische Effektenbank* (M. Pohl, 1982a: 129, note 73). This was the category of joint-stock bank that had been pulled into existence via the New Company Law of 1870.

The "provincial" joint-stock banks comprised the second most important propensity of the "second foundation wave." Joint-stock banks were founded in many regional centres in order to take advantage of the opportunity to provide shorter-term commercial credit to industrial firms. Despite being focused more heavily on the commercial side of financial activities, the driving force of the "foundation business" was also evident in the establishment of these "provincial" joint-stock banks. This can principally be demonstrated through the reciprocal relationship between those banks founded near financial centres like Berlin and Frankfurt, and this second most important group of joint-stock banks founded in "the provinces." Foundation banks were established in financial centres to facilitate the introduction of securities from new foundations to the securities exchanges in those centres. In turn, these "foundation banks" established provincial joint-stock banks with emphasis on the "regular" banking business closer to the industrial clientele that had been created to cover their needs in the regular banking business. This was particularly the case in areas like Dresden and Leipzig in Saxony which was the second most developed industrial region following the Rheinland-Ruhr. Dresden, for example, had the second highest number of new jointstock bank foundations following Berlin (M. Pohl, 1982a: 130). The Dresdner Bank, which was transformed from the former private bank of Michael Kaskel in 1872 principally to serve the industrial financing needs of Saxony, is perhaps one of the best

¹⁴² The reader is reminded that the Darmstädter Bank engaged heavily in the foundation business prior to 1857 (see Chapter 3 here), but then withdrew from foundations in the aftermath of that crisis, thus distinguishing an "early" from a "later" variation in its marriage of commercial and investment banking.

¹⁴³ Of the 107 new joint-stock banks founded during the foundation years, 40 new foundation banks were established in Berlin alone (M. Pohl, 1982a: 122).

known examples of such a provincial joint-stock bank (Reitmayer, 2006; Wixforth, 1997; Kaskel, 1983). 144

During the Foundation Boom, the emphasis of the provincial joint-stock banks on the regular banking business could very well have developed into a division of labour between foundation banks in financial centres specialized in investment banking and provincial banks in the periphery focused on commercial banking (cf. Whale, 1930). In France a comparable starting constellation led to a specialized system of banks by the end of the 19th century. Such a path could conceivably have occurred in the financial evolution of the Kaiserreich, and is evidenced by the way that German "provincial joint-stock banks" undertook the establishment of "foundation banks" in financial centres like Berlin and Frankfurt in order to facilitate the securities issuing necessary to found further industrial concerns (M. Pohl, 1978). The engagement of the provincial corporate banks in initiating further foundation banks is a testament to their desire to maintain their focus on the business of short-term credit, as much as it is evidence of their being propelled by the speculative imperative of the foundation business. 145 A similar division of labour between centre and periphery banks developed in France over the 1860s and 1870s, wherein the French provincial banks were "mixed," engaging in some securities business but principally specializing in commercial credit that is to say, these banks did not entirely correspond to the specialized practice of "commercial banks" à l'anglaise (Lescure, 2003). Following a financial crisis in the 1880s the provincial banks, especially the Crédit Lyonnais, began to entirely refrain from any further securities focused business whatsoever. The result was a system of national banking organization in France comparably specialized in its operation to that of the English commercial and investment banks (ibid: 117-8). The "provincial" jointstock banks in the German Kaiserreich similarly dug their heels into the "regular banking business" following the financial calamity of the Gründerkrach. 146 These same

¹⁴⁴ Although it should be noted that because it was founded so close to the outbreak of the Foundation Crisis, it was unable to begin engaging in the foundation business itself.

¹⁴⁵ This is evident in a comparison of the social purpose driving the operation of English commercial banks, and the German provincial joint-stock banks that had a high proportion of commercial credit on their books (i.e. might have developed into commercial banks). English commercial banks that aimed to expand their business by taking on existing clients, or awaiting new firms that were aiming to found themselves (cf. Collins, 1991). That is to say they awaited a demand for their services. The German provincial joint-stock banks aimed to create the conditions for their commercial credit services by founding the firms that would demand it (cf. Tilly, 1966).

As did the more speculatively oriented foundation banks in the financial centres.

provincial corporate banks, however, began to expand and engage more heavily in the securities business again already in the 1880s. By the 1890s their attempts to engage in the speculative side of the securities issuing business lead them into cartel arrangements with the Big Berlin Banks before they would go on to merge with them following the First World War (Reitmayer, 2001b; M. Pohl, 1982a). That is to say, the German, provincial, "mixed" corporate banks became *more universal over time*, while the French, provincial, "mixed" corporate banks became *more specialized*. This is a further indicator that the "second wave" of joint-stock bank foundations cannot be understood as the culmination of universal banking within the corporate banking sector of German finance during the Foundation Years.

Finally, there were numerous "special purpose" joint-stock banks established during the "second foundation wave," whose incorporation was very particularly focused on specific politico-economic goals. Included in this category were the ample foundations of further note-issuing banks that were established by entrepreneurs who were concerned with the (now less pressing) problem of liquidity, and a great number of banks specializing purposively in the financing of new urban building. 147 Most important, however, for the later development of universal banking were the handful of banks founded principally for nationalistic reasons and aiming to advance German trade finance. England dominated the market for international trade finance in the 1860s, and German businessmen were eager to free themselves from the "humiliating" necessity of drawing bills of exchange on London (or Paris, Nantes, and Bordeaux for that matter) (Seidenzahl, 1970: 5). Special corporate banks were established to take advantage of the joint-stock form in order to finance German exports directly, without the assistance of enemy foreign powers, or to found subsidiaries in key trade entrepôts over which German control could be maintained (Kobrak, 2007). ¹⁴⁸ The first foundation in this vein was the Internationale Bank in Hamburg January 1870, followed by the Deutsche Bank

¹⁴⁷ Mortgage financing had always been separated from "regular banking business" and was often discursively denounced as too risky for "normal banks" to undertake. A more complete history of this particular financial institution would also examine the manner in which the chief form of financing for the agrarian power centres of Eastern Prussia were reliant on a type of mortgage financing called *Pfandbriefe*, and the way in which legal restrictions on this type of financial instrument helped to secure cheap credit for agrarian landholders (see Seabrooke, 2007; Tcherkinsky, 1922). In the midst of the rapid urbanization of the early 1870s the sprouting of building societies that neglected the forms of finance favoured by the universal banks was an exceptional phenomenon, but not one that had significant consequences for the institutional form of universal banking.

¹⁴⁸ The use of joint-stock capital to found further banks abroad in order to promote trade finance links even these special purpose banks to the foundation business.

in March 1870 and then the *Commerz- und Disconto Bank* in April 1870.¹⁴⁹ The *Internationale Bank* went into liquidation in 1879, but the latter two institutions would become not only members of the *Berliner Großbanken* during the *Kaiserreich*, but nearly synonymous with the idea of the German universal bank in the post-WWII period.¹⁵⁰ That two banks founded to engage in short-term trade finance, would become the epitome of universal banking specialized in particular on providing *all* of the financial needs for *industrial* clients (i.e. not merchant clients), surely can not be read from the institutional foundations established already by 1873.

Some aspects of the foundation narratives of these specialist banks, further underscore the point of earlier chapters, that the social logic leading to the widespread establishment of joint-stock banks cannot be reduced to an economic logic of efficiency, or teleological-functional logic of industrialization. Moreover, despite going on to be two of the most renowned universal banks engaged in industrial financing, it would be wrong to imply that the intention of the founders of the Deutsche and Commerzbank was to establish an institutional solution to market failure by means of the joint-stock legal form. Despite being permitted "to engage in any and all banking business" the Internationale Bank and the Deutsche Bank were not originally conceived as ("mixed," or) universal banks (Burhop, 2004: 91, 93-4; M. Pohl, 1982: 109-112). As with other corporate banks, the permissive character of their official statutes did not reflect their early business practices (Gall, 1995: 29). Ergo, they were perhaps universal banks in promise, but not universal banks in practice in their opening phases of business activity before the outbreak of the *Gründerkrach*. Neither really engaged in any issuing business of any significance, and remained, as per their intent to sponsor trade, focused on the short-term side of commercial lending. While they did exceptionally engage in several foundations, these were the establishment of overseas partner institutions (e.g. in London) to ply their intended purpose of sponsoring German overseas commerce. ¹⁵¹

¹⁴⁹ From hereon in I will refer to the *Commerz- und Disconto Bank* simply as the *Commerzbank*. This was a title that it did not attain until the 20th century, but which simplifies the task of writing without causing undo historical anachronism.

¹⁵⁰ In addition to the Dresdner Bank, the Commerzbank and the Deutsche Bank would become the top three for profit banking institutions by financial assets in Germany during the 20th century (Edwards and Fisher, 1994: 100).

¹⁵¹ It could be argued that founding a bank specifically to assist in trade financing was indeed a reaction to market failure. If businessmen could not attain credit at all on favourable terms because of the geopolitical distribution of commercial financing houses, then this would constitute a market failure, and the establishment of a bank to alleviate this problem would qualify as an institutional solution to that failure. However, in the case at hand, trade financing

The *Commerzbank* is something of an exception in this sense as it is generally reputed to have been founded with the intent of being a universal bank, servicing not only the needs of Hamburg merchants for trade credit but also intending to engage in the issuing and foundation business as well (Burhop, 2014: 157-8; Kurzrock, 1970: 44-5). Two points need to be made in this connection. Firstly, in the first three years of its operation, the balance of its financial activities lay in the "regular banking business," and its investment in the establishment of a branch bank in London to promote better conditions of trade credit for Hamburg merchants: only 6 percent of its balance sheet was dedicated to the issuing and foundation business during these years (Burhop, 2004: 133), whereas the *Disconto-Gesellschaft* had roughly 33 percent (Burhop, 2004: 112) and the *Handelsgesellschaft* 70 percent. 152 Its balance of commercial and investment

was available from English and French sources: the issue was rather the nationality of the credit itself.

Therefore, if we were to examine the strictly economic motives, this would need to be considered a case of market competition. Nevertheless, the nationalistic and geostrategic motives were primordial in the reasons for founding the *Deutsche* and *Internationale Bank*, as just mentioned. Consequently, NIE theorizing which presupposes that strictly economic motives of transaction-cost reduction are the essential factors in the establishment of economic institutions cannot explain the foundation of the *Deutsche* or the *International Bank* where non-economic reasons played an important primary role in constituting the drive to establish the bank.

The percentage for the *Handelsgesellschaft* has been determined using the author's own calculations with figures from Bosenick (1912: 262-3) for the years 1871-1874. Burhop includes an average percentage of foundation and issuing business for the *Handelsgesellschaft* as well, but for the years 1869-1879, creating an unrepresentative picture of the *Handelsgesellschafts*'s *intended* mix of commercial and investment banking. Owing to the massive losses incurred from speculation during the *Gründerkrise*, the *Handelsgesellschaft* withdrew from the issuing and foundation business dramatically from 1875-9. Consequently, providing an average for the earlier years as I do here highlights the character of the bank as a "first class issuing and foundation bank" (Riesser, 1912) better than the average until 1879 which leads Burhop to classify the *Handelsgesellschaft* as a bank primarily engaged in commercial business, while noting paradoxically its heavy role in issuing (Burhop, 2004: 126-8).

As a more general point, using balance sheet records of issuing business in many cases is not a surefire indicator of the proportions between commercial and investment banking because often successful foundations and IPOs would be further sold on to other clients without making it onto the books at the end of the year. Moreover, banks like the Frankfurter Bankverein held roughly half of its balance sheet in current accounts, but the credits and debits on these accounts were used principally for the bank's clients to purchase or sell securities from the bank itself: i.e. even with a high proportion of current accounts (typically commercial business), the balance sheet deceivingly suggests a bank with a heavy emphasis in regular banking, but the social purpose of these current accounts indicates a speculative-foundation bank (investment business) (cf. Burhop, 2004: 118-9). Balance sheet figures can be compared with revenues and profits from different business segments, and while this gives a good indication in certain cases, e.g. the Disconto-Gesellschaft (cf. Bosenick, 1912: 210ff.), it fails to highlight those speculative-foundation banks that were unsuccessful in their attempts. In general, organizing the banking practice of the different banks into particular categories is best

activities gave it the character of something between a "trade" and "provincial bank." Moreover, where it did engage in foundation activities, it followed the principles of securities issuing established by the dominant joint-stock banks of the time. That is to say, at most the intent of the founders might have been to copy the image of the "mixedbank" engaged in the foundation business that was popularized by the BHI, and copied in Hamburg by the *Norddeutsche Bank* (see chapter 3 here). More likely, however, is that the founders were intent on distinguishing their new bank from the other two international trade banks (the Internationale and Deutsche Banks) that were both founded shortly before the Commerzbank in 1870, both of which were more highly specialized in financing trade. Therefore, despite the declaration in the statutes to engage in all aspects of banking business, categorizing the Commerzbank as a jointstock bank intended to become universal is highly problematic: it misses the actuality of the bank's financial practice; it risks anachronism in the periodization of universal banking amongst the corporate banking sector; finally, it overlooks the dynamics of competition prevalent between the founders of the specialist trade banks, all contending for share subscriptions to fill out their equity capital and complete their foundations within months of each other. 153

CONCLUSION

The existing scholarship on universal banking development has problematically characterized the "second foundation wave" in two principal ways: firstly, it has averred that the massive establishment of new joint-stock banks that occurred simultaneously with the speculative groundswell from 1871-73 owes in no small part to the "freeing" of financiers from the constrictions of the pre-industrial regulatory system. Secondly, it has assumed that because, most, if not all, the corporate banks founded could engage in a universal mix of financial services, all the corporate banks that were founded were exemplary of an entrenched praxis of universal banking à la Gerschenkron. This chapter has problematized both of these key assumptions vis-à-vis the historical narrative of universal banking.

Examination of the social forces and context behind the second foundation wave of joint-stock banks illustrate that the choice of corporate form for engaging in the

achieved not only by the quantitative elements of their balance sheets and profits, but also by placing these in relation to the social context of their founding, and the development of their financial services.

153 Compare the analysis of Barth (1995: 18, note 19).

foundation business is best described in terms of power. Choices for private bankers to incorporate were highly influenced by the existing institutions for founding corporate enterprises and their concomitant methods of speculation on the latter. While the New Company Law of 1870 did "unshackle" the process of founding new joint-stock companies from explicit government oversight, this "freeing" had the paradoxical effect of compelling that which had hitherto been an opportunity. Banks that had been engaged in the foundation business were not now released to incorporate should they want to freely develop their economic potential, but were rather compelled to do so in the event that they wished to continue in their established business segment. This reversal in the status of incorporation—from opportunity to imperative—tied together private bankers' relation with an uncertain future (speculation), calculations of profit and loss (efficiency), the legal system (state) and the persuasive promotional ability of bankers' rooted in their social networks of clients (social power). The tried and tested method of successive foundations that had allowed middling private bankers to tame uncertain futures, and leverage their relatively small capital reserves through their persuasive ability to promote and generate interest in new issues so successfully in the railroad industry was undone by the New Company Law of 1870 and its de facto requirement to use simultaneous foundations. The logic of this reversal might be deemed "economic." After all, it could be said that the majority of private bankers engaged in the foundation business could not "afford" to subscribe entire IPOs at once and therefore made decisions to establish incorporated foundation banks so that they might diversify liability and increase their capital. This ignores the pre-1870 social context wherein private bankers successfully founded numerous railway companies without the need of the joint-stock form. In both cases steering price dynamics through the hyping of IPOs was a strategy to generate successful speculation. That is to say despite profit and loss being a chief motivating concern, financiers were assured that rather than the "underlying value" being decisive, their promotional abilities as exercised through social networks, rhetorical-persuasive power, and marketing to hype new issues were the definitive measure through which they could exercise their financial power. This contrasts starkly with models of investor behaviour that posit information and its analysis in relation to "underlying values" of securities. In the latter case, the reality of securities' prices is static, and traders "discover" pre-existing efficient prices. The practice of the foundation business was premised on the uncertain nature of future prices, and bankers' ability to influence these.

This chapter also highlighted how the variety of financial institutions bestowed on German society following the foundation crash demonstrates that the organizational evolution of universal banking was not at an end in 1874. While banks that were incorporated to engage in the foundation business were at the centre of the "second foundation wave," they did not represent a singular form of financial practice in the early *Kaiserreich*. Instead they represented the social purpose that motivated the establishment of a network of foundation and regular business banks. These two principal forms of corporate bank were emblematic of a growing division of labour between money-centre and province, where banks near securities exchanges engaged in irregular speculative deals, and provincial banks were founded in order to take-over the necessary close contacts for regular credit business. Under different circumstances (for example had the American railroad industry not imploded in 1873), even if the speculative wave could not have lasted forever, it is conceivable that over a longer period of time this division of labour might have become entrenched in the existing corporate banks.

The foundation of the special purpose banks—the continuing foundation of note-issuing banks, the establishment of building banks, and most importantly the creation of specialized trade banks—indicates that there was no "iron law" behind the genesis of economic institutions. Indeed, trade banks were founded in part for "(geo)political" or nationalist purposes.

Even though the speculative compulsion established by the New Company Law drove the foundation of money centre banks, and indirectly thereby many provincial joint-stock banks, there was no monolithic set of motivations behind the "second wave" of bank incorporations during the Foundation years. Both the provincial banks and the special purpose banks illustrate this. Crucially however, where existing narratives have highlighted the necessity in the foundation of all corporate banks, but underscored the arbitrariness and contingency of speculation, this chapter has reversed the emphasis. It was the *speculative* impulse at the centre of German finance that generated a compulsion to found joint-stock banks owing paradoxically to liberalization, and the corporate banks that were founded for *regular* banking business that were the product of the contingent exercise of (political) agency. When the "euphoria" of the Foundation Boom was greeted by the sober reckoning of the Foundation Crash, the corporate banks of the German financial system were all nominally "mixed-banks" in promise, but were

not yet commensurate with concrete universal banking. This would require the introduction of deposit-taking.

CHAPTER 5

Betting on Social Change, Speculating on Deposits, 1874-1914

Interest associations, financial regulation, and organized capitalism

"Success typifies the banker; failure reveals the speculator." 154

"In the early years of the Deutsche Bank it might have seemed as though the banks were going to divide into two classes, like the French banques de dépôts and banques d'affaires; but this did not happen. The Deutsche Bank adopted the industrial policy of the other banks, and the other banks the special features of the Deutsche Bank." 155

"Industrialization had changed almost everything and eliminated nearly nothing." ¹⁵⁶

INTRODUCTION

The Foundation Crash bequeathed a configuration of financial institutions to Imperial Germany that, despite having been burned by their speculative orientation, remained unafraid of the heat of speculative endeavours. By contrast, financial historiography has typically recounted the sudden, lasting change in attitudes of the surviving banks, as well as regulators of financial markets, following the crisis (e.g. Wixforth and Wellhöner, 2003; Gehr, 1959: 28-30). This literature avers that there was a commensurate change in financial strategy enacted by the banks that were now loath to continue speculating on foundations. Alternatively, some scholars have suggested that the only banks that survived the crisis, were those that did not engage in speculation. That is to say, there is a prevalent understanding in the historical literature that only those financial institutes that did not fail in the Foundation Crisis were banks, while those that did collapse must have done so because they were speculators. This assumption works in tandem with the prevalent suppositions about universal banking: many scholars maintain that all the corporate banks had cemented into the practice of universal banking by the end of the second foundation wave, the banks that survived were universal banks, and therefore not engaged in speculation (e.g. Hardach, 1995: 914-5). The result is an implication that concrete universal banking's lineage of uninterrupted institutional reproduction can be traced to the *Gründerkrach*.

This was far from the case. This chapter highlights how during the *Kaiserreich* the corporate banks' combination of commercial and investment finance remained in

¹⁵⁴ Pohle (1995: 30)

¹⁵⁵ Whale (1930: 25), my emphasis.

¹⁵⁶ Fairbairn (2008: 80).

flux until the final years before the First World War. Further, it argues that the developmental path of corporate banks towards becoming universal providers of patient capital was set in train by engaging in speculative financial activities. Indeed, it is during the *Kaiserreich* that the technique of participating in new industrial foundations would be transformed from a speculative endeavour onto a more cautious and risk-averse footing commensurate with the concrete form of universal banking. That is to say, it is only during the *Kaiserreich* that the financial practices of universal banking as described by the information asymmetry account definitively emerge.

It is only possible to appreciate this significant transformation if we recognize that the institution of universal banking was still in development during the *Kaiserreich*. The necessary conditions for its crystallization and reproduction on the concrete form were present—the amalgamation of commercial and investment banking, the joint-stock legal form, and deposit-taking—albeit not in all the corporate banks. Conversely, Tilly's information asymmetry account suggests that universal banking was already a coherently established and cemented financial practice amongst the corporate banking sector by the outbreak of the Gründerkrach (1873). Tilly avers the only important changes in universal banking during the Kaiserreich occurred in monetary policy and the regulatory environment. The Prussian Bank was transformed into the Reichsbank in 1875, and given expansive powers of discounting to support the payments system. This institutionalised a lender of last resort for universal banks (according to Tilly, the Prussian bank had already provided this function since 1846, which we have seen is difficult to justify from the historical evidence). Consequently, when financial crises erupted, or runs on the banks occurred, the universal banks could discount illiquid securities they held and avoid becoming payment insolvent. Additionally, new financial regulation, ostensibly targeted at the speculative practices of the banks, unwittingly helped to consolidate universal banking as the accepted institutional form amongst the Great Berlin Banks (Tilly, 1999; idem, 1998; idem, 1994; idem 1992; idem 1989; idem 1986).

For Tilly, these central developments of the period are driven by the change in politico-economic ideology brought about by the Foundation Crisis. Following the discrediting of liberalism, there was a distinct push by government to turn away from its *laissez faire* approach to government regulation, especially as concerned financial markets (Tilly, 1999: 137-8; *idem*, 1994: 304; *idem*, 1992: 135-6; *idem*, 1989: 195; *idem*, 1986: 124-5). This led in 1881 to the stamp tax law, in 1884 to the tightening of

the New Company Law, then in 1896 to the Bourse regulation, and Deposit Laws. These regulations imposed long waiting periods before the equity of founded firms could be introduced to a securities exchange and even higher minimums on the issuing of new equity for foundations (minimum share prices of 1000 Mark per share) (Fohlin, 2007; Horn, 1980), the increased (transaction) costs of which made participation on German exchanges prohibitive for independent stockjobbers and smaller banks.

It is hard to dispute that the new financial regulations passed during the Kaiserreich were incredibly important for universal banking. Nevertheless, their significance is not entirely appreciated by asymmetric information theory because of its assumption that universal banking was already institutionalized amongst corporate banks by the end of Foundation Crisis. These financial regulatory changes were crucial for the further development of universal banking because they provided a legal compulsion for banks to alter the basis of their securities issuing. The transformation of equities issuing ended its speculative basis, and endowed it with a "patient" character. Moreover, often left unsaid by the information theoretic scholarship is that the New Deposit Law of 1896 crucially paved the way for the expansion of the Great Berlin Banks into the Provinces because of the restrictions it placed on voting shares held with the money centre banks. This hinterland expansion was undertaken initially to maintain advantages associated with investment banking. By absorbing shares in Provincial banks, the Berlin Banks were thereby legally enabled to vote on behalf of equity shares deposited with them for safekeeping. The additional working capital to be accrued from the extent of the deposit business in the provinces was seized upon by the Deutsche Bank. Moreover, the Polanyian fashion in which regulatory changes are depicted by Tilly as the result of a society wide shift against liberalism fails to account for the dynamics of struggle between promoters of an agrarian state and those continuing to agitate for the further expansion and consolidation of an industrial state (cf. Fairbairn, 2008: 69; Barkin, 1970).

The chapter is divided into three sections. The next section outlines the Foundation Crisis, and its aftermath. Against this background it argues that the *speculative orientation* of German financiers concerned to advance German industrialization environmentally shaped the adoption of deposit banking by the *Deutsche Bank*. The third section outlines the shift away from liberalism, but highlights how, despite Imperial Germany often being held as the cradle of "coordinated capitalism," bank practices were slowly transformed not by coordinated non-market

activities, but rather through intense market competition. This section sketches the growth of pressure groups, who favoured German society's continuing development either in the direction of an agrarian or industrial society. Against the background of these ever more vehement struggles over the developmental direction of German society, anti-capitalist agrarian groups campaigned successfully for stricter financial regulation. The final section delineates the competitive pressures that crystallized out of this regulatory lobbying. This section charts the "politicization" of the large corporate banks, and their organization into the Central Association of German Banks and Banking Sector (Centralverband des deutschen Bank- und Bankiergewerbes, CVBB). In spite of this coordination mechanism to lobby for the interest of the large corporate banks, competition between the banks over deposits only further intensified to the point where the state was forced to settle an agreement between them. The end of this battle in 1909, highlights the culmination of concrete universal banking and the path towards institutional reproduction of universal banking for the 20th century. The chapter underscores how it was principally innovations undertaken in order to maintain competitiveness in an environment of speculative financial activity that led to the distinctively non-speculative institutional character of German universal banking. In other words, the unintended outcome of attempting to reproduce the financial environment led to its radical transformation.

FOUNDATION CRISIS AND THE END OF THE LIBERAL ERA, 1874-1879

The momentous "Foundation Crash" (*Gründerkrach*) followed the Foundation Boom in May of 1873. Similar to the next great financial calamity that would inaugurate a "Great Depression" in 1930, the collapse of 1873 began in Vienna, where alone from the 9th until the 15th of May the value of the Viennese Bourse dropped by 12 percent (Meier, 1992: 10). Wehler (1995: 100) reports that from May until July the value of key high-quality stocks dropped from 280 to 10 florins (and even at this low price often still without the prospect of being sold). Contagion had spread to Germany such that by the end of July 1873, some firms with shares listed on the Berlin Bourse were forced to stop payments; however, in Berlin as in Vienna, a period of relative price stabilization set in on the Bourse until September (Gömmel, 1992: 155). This was the figurative calm before the storm. When Jay Cook & Co., a New York bank that had been a key node in the nexus of relations for issuing American railway company shares on foreign exchanges, collapsed, the subsequent crisis on the New York stock exchange

further reverberated on the Berlin market (Wehler, 1995: 100). Beginning in early October 1873, there was a series of spectacular bankruptcies in Berlin which initiated a period of gradual, but continually worsening depreciation of securities' values across the German exchanges (Meier, 1992: 10). From the highpoint of listed values for 444 German firms in 1872, until the end of 1873, their quoted prices dropped by almost 50% (Wetzel, 1996: 32; cf. Gömmel, 1992: 155-6). By 1877, the value of all shares on the Berlin exchange had dropped on average by 60%, and many had been made completely worthless: 61 banks, 4 railway companies, and 115 industrial corporations were forced into liquidation or bankruptcy (Meier, 1992: 10). By 1880, 100 of the 186 newly founded joint-stock banks had disappeared (M. Pohl, 1982c: 227).

The *Gründerkrach* was followed by a period of decreased optimism about markets, slower wage growth, lay-offs, the end of dividend payments (until the 1880s), and decreasing prices—in short slowed economic activity—lasting until roughly 1895. Contemporaries knew this as "the Great Depression" (Wehler, 1995: 579), although in order to distinguish it from the even larger crisis of the 1930s, this period is now referred to as "the Great Deflation" by historians as decreasing prices were its hallmark. Indeed, even though there were an enormous number of business failures during the crisis of 1873-4, and market relationships did not expand at the same pace in the aftermath of the *Gründerkrach*, Net Domestic Product (NDP) actually *grew* at an average pace of 1.22 percent year on year during this "Great Depression" (Torp, 2011: 339). ¹⁵⁷

The crash of the early 1870s is another landmark of German history, and again, no less for German financial historiography. A large proportion of the new corporate firms that had been established during the foundation years went bankrupt in the drastic and sudden deterioration of prices for securities on exchanges in Berlin, Frankfurt and Vienna (Baltzer, 2007). Many of these firms were fly-by-night operations founded by

¹⁵⁷ A "depression" as opposed to a "recession" is not a term with a fixed meaning either for government statistical agencies, professional economists, or journalists. Often a "recession" is characterized by two quarters of negative growth; however, the specific definition of such terms has fluctuated over the course of the 20th and early 21st century as statistical agencies and politicians attempt to manipulate definitions for political gain. In our case here, the most important point is that "the Great Depression" of the late 1800s is better characterized as a period of deflation because "the economy" nevertheless continued to expand and at no point reached a point of negative growth (Holtfrerich, 1981: 20, note 27). Nevertheless, it should be pointed out that this *overall* expansion is a statistical depiction that masks the "structural crisis of agriculture" (Wehler, 1995: 56-58), a sector which actually suffered stagnation and nominal decline during the period (Fairbairn, 2008: 81, note 5).

intentionally duplicitous groups, that had no prospects of running viable businesses (Blume, 1914; cf. Rosenberg, 1976); however, there were also a great many other firms that had been established for legitimate industrial purposes that were simply made insolvent by the abrupt and unexpected drop in equity prices, and their consequent inability to make payments because of a lack of short-term credit. This was for example the case for some joint-stock banks that had been set-up to engage in the foundation and issuing business, but were forced into liquidation when the value of their securities portfolios dropped (M. Pohl, 1982a). This is also suspected to be the case where the *Deutsche Bank* took over the *Berliner Bankverein* as well as the *Deutsche Unionbank* and of the Dresdner Bank's take-over of four other banking institutions—the *Sächsische Bankverein* (1873), the *Dresdner Handelsbank* (1874), the *Sächsische Creditbank* (1877), and the *Thüringischen Bank* (1878)—during and in the wake of the Foundation Crisis (M. Pohl, 1982a; Wixforth, 1997: 324-5, see also note 43 there).

Organized capitalism and the reaction against liberalism

The public outcry against the fickleness of the securities exchanges, markets and capitalism more generally, following the *Gründerkrach* has led historians and political economists to rightly characterize the subsequent period as one of intense ideological change in the German political economy (cf. Lehmbruch, 2001). Problematically, this is often portrayed in terms of a sudden social backlash against liberal economic ideas, very much akin to a Polanyian pendulum swinging against the rule of the market. In this vein, the Foundation Crisis is by and large often held accountable as a key temporal marker for the shift from a political economy of "Manchester Liberalism" to the typically German variant of "organized capitalism," "corporatism," or "coordinated market economy" (Torp, 2011; cf. Abelshauser, 2005). Typically, this reasoning is grounded in the 1879 shift away from free trade brought about by the "coalition of iron and rye" and the growing number of trusts and cartels that were formed in the political economy in order to avoid the deleterious effects of market competition in international

¹⁵⁸ The distinction between "cash-flow insolvent" and "balance-sheet insolvent" is useful here: cash-flow insolvent companies are those whose assets would allow them to pay all of their creditors, but are prohibited from doing so because their assets are not liquid enough; balance-sheet insolvent firms are those who do not own enough assets overall in order to discharge their liabilities. There were some banks that had been founded as more than simply institutions of swindle, that is to say would have potentially been viable businesses, but were made *on balance* cash-flow insolvent from the market crash. This recalls the predicament of the Schaaffhausen Private bank described in Chapter 3 of this thesis.

and domestic markets (Torp, 2011: 349; Hentschel, 1978: 9-22). There was a remarkable process of corporate consolidation enacted by the firms that survived the *Gründerkrach*, many of whom—especially amongst the joint-stock banks—liquidated each other enacting a heretofore unseen level of concentration within the corporate economy (Tilly, 1990; M. Pohl, 1982a).

Historians have begun to challenge many of the assumptions of the "organized capitalism" paradigm for the *Kaiserreich*. The coalition of "iron and rye" has for example been demonstrated to have been led as much by grassroots agrarian interests, as by the large Junker dominated estates of the East (Fairbairn, 1991). Rather than a sharp backlash resulting in the sudden reversal of politico-economic order, the period following the *Gründerkrise* is better characterized by the slow gestation of new socioeconomic forms. These new forms had only really crystalized across the political economy in a manner reflective of "organized capitalism" shortly before the outbreak of global war that would undermine them (Torp, 2010). This is especially so in the case of banking and finance (Reitmayer, 2001b).

In the field of finance, the existing joint-stock banks are often presumed to be universal banks by this point, but are also assumed to have organized the rationalization of industrial firms into cartels by exercising their power through interlocking directorates and ability to grant credit (e.g. Abelshauser, 2005; Henderson, 1975; the *locus classicus* Hilferding, 1910). A great deal of research has disputed the assumption of an often omnipotent power of the banks to manipulate industrial enterprises into unwanted cartel arrangements (e.g. Wellhöner, 1989). More importantly here, is the often implied but unexamined characterization of the joint-stock banks both as universal banks already following the *Gründerkrach*, and as so concentrated that their competition with one another no longer resembled the ideal of a "liberal" segment of the German political economy. Indeed, it is readily apparent that only following the turn of the twentieth century did the for-profit financial sector begin to enact cartel-like arrangements in order to reduce elements of competition (cf. Hardach, 1995: 915-6).

Betting on Deposits: the Deutsche Bank aims to universalize

The constellation of financial institutions that had coalesced in the gravity of the speculative imperatives of the Foundation Boom were, following the Foundation Crisis, bequeathed to a much transformed Imperial German political economy. The Foundation Crash (*Gründerkrach*) undermined an enormous number of newly established

corporations—industrial, commercial, financial and otherwise—a good deal of which had been fraudulent, but a number of others which were simply made insolvent by the sudden withdrawal of credit and liquidity as bankruptcies interrupted the chain of payments that made the ongoing inflationary dynamics of the boom possible. In the corporate banking sector those banks that had been focused on the foundation business were extremely hard hit by the crisis. Almost none of the new speculative banks that had been founded during the boom still existed in the 1880s (M. Pohl, 1981; *idem*, 1978). Established corporate banks, like the *Handelsgesellschaft*, that had heavily emphasized the foundation business survived the turmoil, but suffered heavy losses from their failed speculations (Blume, 1914) ¹⁵⁹ and refocused their business programmes on the regular banking business (Wixforth, 2002: 22-3 Gehr, 1959: 28-30). ¹⁶⁰ The *Berliner Handelsgesellschaft* had retreated so far into current account business between 1874-1879 that when its balance sheets are considered over the decade of the 1870s, it appears on average a bank concerned only with current accounts and the "regular banking business" (Burhop, 2004: 126) (!).

The implementation of deposit-taking by the *Deutsche Bank* appears as a prescient business policy decision against this background. As the other banks were retreating from speculative investment banking and securities issuing, the Deutsche Bank was expanding its ability to collect external capital through deposits for the more reliable "regular banking business." This ex post facto correlation belies the peculiarity of the Deutsche Bank's decision to adopt deposit banking when it did. Indeed, the Deutsche Bank implemented the collection of deposits already in 1870 shortly after its foundation: a full three years before the financial landscape would crash and burn in the Gründerkrach, and at the height of speculative mania in the foundation business. Moreover, following the Foundation Crisis, the principal shareholders of the *Deutsche* Bank aimed to reduce its capital, in line with the grim economic outlook occasioned in the wake of the crash. The business policies of the *Deutsche Bank*, especially its decision to pursue deposit banking, reflect the speculative character of the extant German banking culture even if they did not mirror its technical practice in the issuing of securities for foundations. Betting on social change, the Deutsche Bank speculated on deposits.

Compare Dahlem (2009), and also Lüke (1956) for the case of the *Handelsgesellschaft*.

¹⁶⁰ For the specific details of how this relates to the *Handelsgesellschaft*, see Burhop (2004: 126).

Deposit banking is typically considered to be the antithesis of speculative financial activity. 161 It requires sustained calculation, disciplined and continuous scrutiny of time limits, and a geographic network of branches. It is the quintessential activity in the "regular business of banking" because it consists in matching savings (credit) with investment (debt) and making a profit from the interest rate differentials accrued from the regular turn-over and repayment of these credits and debts (Sgambatti, forthcoming; Verdier, 2002). In the German context, the culture of the large corporate banks against which the *Deutsche Bank* competed (the *Disconto-Gesellschaft*, the Handelsgesellschaft, the BHI, the Schaaffhausen'sche Bankverein, etc.) principally focused their profitability on the analysis of sporadic opportunities for foundations and large securities issues that required the transitory and discontinuous assessment of profitable arbitrage, as well as localized issuing arrangements. The foundation business was oriented around singular and specific opportunities for intermittent, but highly lucrative one-off deals (Burhop, 2006b; idem, 2004). Crucial to this speculative orientation was the social purpose of forwarding industrialization, which justified the uncertainty of such deals, and propelled business strategies into a highly uncertain future (see Chapter 4 here). Rather than the meticulous optimizing agents depicted by theories like the capital asset pricing model (CAPM), German financiers did not undertake sophisticated calculations based on mathematical models of risk. Instead they lived by the more general maxim of "weighing and wagering" (wägen und wagen), which suggested a primitive form of optimization, but crucially not one that was solely concerned by the monetary pay-offs to optimisation problems (Reitmayer, 2001a; cf. Pohle, 1995; Seidenzahl, 1960). This principle guided the Deutsche Bank's unconventional strategy, making it a speculative tactic, but also entirely in keeping with the financial culture of German finance (Reitmayer, 1999a).

The *Deutsche Bank* adopted deposit banking as a speculative strategy in this sense—it was a gamble for the *Deutsche Bank* to implement deposits in a banking culture premised on the opposite principles of profitability. Everything about being successful as a financial centre corporate bank suggested involvement in investment banking and foundations. Furthermore, it was a *wager* on the part of the *Deutsche*'s

¹⁶¹ Indeed, the model of deposit banks is often considered the essential kernel of "the regular business of banking" (Sgambati, *forthcoming*). This was also the case for German banks in the 19th century, even though deposit banking as combined with the joint-stock legal form was often considered to be as fraught with socially deleterious consequences as unbridled securities market speculation (Schumacher, 1908).

managers that the structure of German society would change to provide the terrain to make this financial practice lucrative. That is to say, given what was known at the time, it is difficult to conceive of this action in any way other than as a gamble on an uncertain future. The implementation of deposit banking did not make economic sense: it made political sense, given what was assumed about the transformational direction assumed of German society, and the determination of the Deutsche Bank's managers to create a demand for these services.

The Deutsche Bank had first begun collecting deposits in July 1870, shortly before the outbreak of the Franco-Prussian war. The drive to introduce deposit-taking originated from the management board of the bank (*Verwaltungsrat*), ¹⁶² in particular at the insistence of Georg Siemens, one of the banks' directors. By the end of December 1870, roughly 22,000 Taler remained in deposits (a very small sum in comparison to the operating capital of the bank). Despite the relatively poor initial showing, after the conclusion of the Franco-Prussian war, a special deposit office was established in Berlin's Burgstraße, separate from the headquarters of the bank in 1871 (Helfferich, 1923: 302-3). Relatively poor results flowed from this tiny deposit office as well, but the bank continued to justify the potential of the deposit office in spite of the evidence suggesting that it would not be as profitable as the established business branches of German finance.

The recalcitrance of the *Deutsche Bank* in relation to its small deposit business stemmed in part from its manager Georg Siemens. Siemens had spent 1867 in London, working to establish the Indo-European telegraph company on behalf of his uncle Werner Siemens (of Siemens & Halske renown). Georg Siemens' experience in London exposed him to the successful operation of deposit banking there. From this experience he reputedly gained the insight that banking consists in "making money from other peoples' money" (Helfferich, 1923: 302). Siemens understood the English financial system to be more developed than the German: he seemed to reason that if German finance was developing in a similar path, it would eventually manifest the characteristics of English finance (Helfferich, 1923). Consequently, betting on deposits early would eventually result in profitable outcomes following development (Motschmann, 1915: 71; Helferrich, 1923: 303).

¹⁶² The term standardised following the amendment of the New Company Law in 1884 was *Vorstand*, as compared with *Aufsichtsrat*. The former is a special management board, involved in day-to-day decisions, whereas the latter is an oversight committee meant to voice and guard the concerns of the firms' owners.

In 1870, the institutional structure of German banking and finance resembled very little that which prevailed in England. Indeed, there was a ready clientele of customers willing to leave their money with commercial deposit banks in England. Not only was there an institutionalised habit of leaving money with banks, a role occupied in Germany by the savings banks (*Sparkassen*) and not the corporate banks, but customers of English banks could also effect payment by cheque. Paying by cheque allowed banks to settle payments ultimately via clearing operations, without requiring as much hard cash on hand, and thereby not affecting their reserves. In Germany there was no habit of leaving money at banks on deposit. Moreover, there was no chequing system for making payments. Reflecting the speculative character of the large corporate banks at the time, the director of the *Reichsbank* Robert Koch, wrote in 1878 that most of the German corporate banks were not stable enough for such a payments system (Motschmann, 1915: 68, 93). For the deposit business to be similarly viable in Germany, these institutions would need to be approximated.

Siemens did not envision that the *Deutsche Bank* would be a passive observer waiting to see whether such institutional change would spontaneously arise on its own. Instead, he saw the role of the *Deutsche Bank* as engendering the social change necessary for the proper clientele to arise. In this vein he set about on a campaign of propaganda (Motschmann, 1915: 74-78) and blanket advertisement (Helfferich, 1923: 303) to educate people about the advantages of deposit accounts. ¹⁶³ Nevertheless, it took more than 20 years for the deposit business to develop any significance for the Deutsche Bank.

The implementation of the deposit business was used as a pretext for the expansion of the bank's activities. This was expressed in a form of circular logic by the directors of the *Deutsche Bank* in their efforts to become a universal bank. Shortly following the establishment of the bank in 1870, the managing directors of the new institute came to realise that the ability of the *Deutsche Bank* to financially sponsor trade was insufficient. In 1875, this situation came to a head, when it became clear that the bank could not operate on exchange transactions alone. The managers argued to the shareholders, that in order to expand the exchange business (i.e. continue pursuing the original remit of the bank's planned operation), they would need to extend the deposit

¹⁶³ The idea that this was an "educational" process is important. It demonstrates that this activity was about *creating demand for a service*, and not about convincing customers as to a better service between existing alternatives.

business; however, in order to pay the interest required by the deposit business they would also be required to extend their operations into the issuing of securities (Gall, 1995: 30).

This argumentation emerged in relation to an internal conflict within the bank following the *Gründerkrise*, between the interests of the bank's professional managers and the interests of the supervisory board (also the shareholders' representatives). In the aftermath of the crisis, the shareholders of the Bank wanted to reduce its capital in proportion to the financial devastation and what they believed were the ensuing possibilities for business (Helfferich, 1923: 279-287). Many of the shareholders of the bank were also simultaneously private bankers, or shareholders of other corporate banks. That is to say, they wished to reduce the scope of the *Deutsche Bank* so as not to come into competition with it, especially in view of the grim prospects augured by the financial crash (Seidenzahl, 1970). The managing directors of the bank argued conversely that reducing the capital of the bank was a drastic mistake (Gall, 1995: 30). They suggested rather taking over two other banking institutions and thereby increasing their access to capital, as well as adding a ready clientele to their existing customers. These banks were the Berliner Bankverein and the Deutsche Union-Bank. The shareholders of all three banks aimed to resist this manoeuvre, and called several special general meetings to order (M. Pohl, 1982a: 134-6). While the private banker shareholders of the Deutsche Bank had worried about potential competition from their own creation, the possibility of amalgamating all three banks risked the creation of an institution that would threaten the shareholders from each bank. After a prolonged letter writing campaign, the social persuasion of different important groups of shareholders, in part by conceding that any involvement in the securities issuing business would be "cautious," and the principal aim of the bank would continue to be the overseas business (Gall, 1995: 30; M. Pohl, 1982a: 135) the deal was concluded and the Deutsche Bank became, by measure of its balance sheets, one of the three largest corporate banks in Imperial Germany (Reitmayer, 2001a: 165). 164

Despite its comparable size to the other *Berliner Großbanken*, the *Deutsche Bank* would not become involved in floating companies in the same manner as the other corporate banks had done prior to the Foundation Crash. Firstly, as mentioned above, part of the terms for accruing the support at the general shareholders' meetings where

¹⁶⁴ In competition with the *Disconto-Gesellschaft* and the *Darmstädter Bank*.

the takeover was concurred, was that the *Deutsche Bank* would not become involved in "speculative" deals, except those where there was a "maximum of security" (Gall, 1995). Secondly, in 1874, an important change in the external financing of industry was introduced when the Prussian Overseas Trading Corporation (*Seehandlung*) underwrote through a syndicate, the placement of a 22.5 Million Mark loan provided in the form of a bond to Krupp. The issue of bonds, rather than equity, became more popular during the later 1870s, and 1880s. Entrepreneurs often preferred this form of financing because it allowed them to keep personal control of their firms, or at least within their own or families' hands (Kocka, 1975). Bonds were much more like a traditional loan, with their chief benefit that they could be traded on secondary markets. The *Deutsche Bank* participated in several further flotations of bonds before engaging in its first industrial foundation financing in 1890.

The *Deutsche Bank's* adoption of deposit banking was a speculative endeavour, premised on the ongoing transformation of German financial relations. Moreover, the implementation of deposit banking, as well as the business policies more generally in the 1870s were enacted against resistance. That it was a struggle to carry out these reforms, and that deposit banking needed to be promoted speaks to the role of power in the operation of institutional genesis.

CONTINUING STRUGGLE OVER INDUSTRIALIZATION, 1880-1896

In the last quarter of the nineteenth century the Berliner joint-stock banks would reverse the steps through which they issued securities. As was examined in the thesis up to this point, founding new companies involved either, promoting and accumulating subscriptions for shares, or underwriting an entire issue of stock *in advance* of a new firm's establishment. This was a speculative form of financing, because the prospects for the firm could not be based on past experience of profitable operation. Financiers engaged in such foundations despite the risk because of the prospects that new industrial firms presented for steering social change in the direction of industrialization. Conversely, between the 1880s and the turn of 20th century, the provision of debt and

The transformation of existing firms occurred differently, but was potentially no less risky as often the transformation process involved amalgamating previously separate businesses into entirely new ones that needed to establish new working patterns. The example of the *Discontogesellschaft's* experiment with the failed *Dortmunder Union* demonstrates this point (Kleeberg, 1989: 306-313).

Although, as previous chapters have shown, banks did indeed try to influence and take control of how firms would be received and operate once they came into existence.

equity capital for industrial firms was reversed: only firms with which banks had prior relationships (for commercial credits) were provided long-term capital through equity issues (Wixforth, 2002: 22-3).

Some scholars have argued that this change can be rooted in the experience of the Foundation Crash. Indeed, following the crash, banks' business stratagems changed. This was however, only a short-term change in business strategy for many banks. During the 1880s there would be a period of increased optimism that the bourses would return to their former vitality (Wehler, 1995: 570) and a revival of the foundation business amongst the big Berlin banks (Reitmayer, 2001a). Although corporate banks like the *Deutsche Bank*, as well as some others like the *Disconto-Gesellschaft*, only engaged in the new form of foundation business—providing short-term loans for an initial period to establish a relationship with their new clients. Nevertheless, returns to the corporate banks from the foundation arm of the investment banking business were astronomical in the 1880s. Indeed, Burhop has shown that profits were consistently higher for the foundation business during the 1880s than they had been during the four Foundation Years (Burhop, 2006b).

This shift in foundation financing began with a move of the location of investment to the "new" industries of the second industrial revolution. This move was in turn influenced by the ongoing social struggle over industrialization through the nationalization of the railways. Finally, the agitation of anti-industrial and anti-capitalist agrarian interest groups would help to ensure that foundation financing was consecrated in the new more conservative manner through promulgation of new financial regulation.

New sectors of the industrial economy

The "new" sectors of the "second industrial revolution" included the machine, chemical and electrical industries. These were, for the period, "knowledge intensive" industries, that presupposed scientific breakthroughs and technical knowledge. Entrepreneurs in these industries were often highly educated and technically skilled persons, unmotivated by the acquisitive drives of commercial gain. Their principal concerns were often scientific achievement, or the power that they could exercise over the natural and social world through their technical achievements (Kocka, 1975: 89-90).

¹⁶⁷ Discussed in more detail below.

The corporate banks had been driven during the foundation boom to speculate on the foundation of many new industrial firms. The bulk of those enterprises were in some way involved in railway industries. The Reich nationalized the German railways in 1878, and began using them as a policy tool to assist and support Eastern agricultural regions in Prussia (Wehler, 1995: 678). With railway investment no longer a possible destination for corporate banks' capital, funds were freed for other purposes. The large corporate banks sent a good deal of their funds for speculative investments to the United States where the booming railroad market provided another opportunity to engage in railroad foundations (Fear and Kobrak, 2010). More importantly however, was the freeing up that it provided for the corporate banks to invest in new industrial firms.

Agrarian agitation against industrial capitalism

The "Great Deflation" has been suggested as proof positive that German society had become an industrial state by the end of the *Gründerkrach* (Wehler, 1995: 586). This argument posits that it was the economic dynamics of deflation, labour cutting, and bankruptcies that exactly demonstrated through their widespread destabilizing effects the cementing of an industrial society in the *Kaiserreich*. Whether this was objectively the case or not, contemporaries certainly did not think of industrial society as a fait accompli. Indeed, different than the short period of détente catalogued in the last chapter, the Kaiserreich is generally depicted as a period where the fault line between agrarian and industrial values, norms and economic organization reappeared at the forefront of public discourse, and political activity. Intellectuals, state bureaucrats and above all different agrarian social forces mobilised ever more strongly in the aftermath of the Gründerkrach against "industrial society" and the forces of international capitalism (Fairbairn, 2008: 69; Krüger, 1983; Barkin, 1970). In other words, the conflict over the future direction of German social change continued to be cleaved along the lines of anti-industrial agrarian social groups against those forces attempting to promote the further industrialization of Germany.

The persistence of anti-modern attitudes within the state, and the formation of a wide ranging number of "pressure groups"—especially those representing agrarian interests is often considered to have been in the favour of, if not orchestrated by, the Prussian Junkers. Agrarian interest groups like the *Bund der Landwirte* (BdL), were nominally formed in order to promote the interests of agrarian concerns, and are often presented as having been dominated by the large *latifundia* of Eastern Prussian Junkers

(cf. Pühle, 1967). More recent research has highlighted how agrarian groups may have been less "elite-dominated," and equally as driven by lower socioeconomic strata within agricultural regions. Important for our purposes here, is the manner in which agrarian interests actively agitated against industrial capitalism and to put curbs on speculative finance (Seabrooke, 2007: 89).

The first fruits of anti-industrial groups agitation was the amendment of the New Company Law of 1870, in 1884. Following a series of commissions led by conservative politicians affiliated with agrarian interests groups in the immediate aftermath of the Gründerkrach, a series of amendments was tabled to the New Company Law of 1870 (discussed here in Chapter 4). These amendments included larger minimum share values for new issues (1000 Marks minimium), the formalization of the supervisory board roles as distinct from management, as well as greater fiduciary requirements for the supervisory board (i.e. penalties for not supervising as they should have) (Reich, 1980). These amendments of the 1884 Law gave further preference to the large corporate banks in Berlin over smaller independent brokers and private banks. Inadvertently, they also provided a basis for the corporate "mixed-banks" to become more cautious about their foundation activities, as the minimum share worth of 1000 Marks made reselling in secondary markets more difficult. The higher fiduciary requirements and greater liability for failed foundations also increased the stakes, but not so much that foundations became comprehensively undertaken only after short-term credit relations had been established.

Following a series of scandals and banking collapses in 1891 anti-industrial groups began to make public calls for enquiry into the financial system (Baltzer, 2013: 105). After it was revealed that there had been fraud committed on the part of banks holding deposits of securities for clients, counterfeit broker's notes created, and abuses of commodity futures, conservative and centre party politicians at the behest of agrarian interest groups like the BdL, organized a public enquiry in order to investigate the financial system and propose regulatory measures in 1892 (Reitmayer, 2001b: 143). With the *Gründerkrach* less than a generation earlier, and the failure of the 1884 amendments to the New Company Law to have provided any worthwhile protection, social outrage was marked in public discourse and venues. This resulted in the near unanimous passing of the Stock Exchange and Deposit Laws of 1896. The new stock exchange law forbade futures contracts

for mining and industrial securities, as well as grain and wheat, established "a gambling register" of traders, and prevented any company worth less than one million marks from listing, including the added pain of having to wait twelve months before listing for those with sufficient capital (Seabrooke, 2007: 89).

The Stock Exchange Law was nominally an attempt to reduce speculation, especially in important, socially necessary goods. Its promulgation was a definitive feather in the cap of agrarian social forces intent on stopping the forward march of industrialization throughout the German pastoral landscape. It has typically been remarked how the effect of this law was to perversely increase the power of the Great Berlin Banks at the expense of smaller private bankers, and the savings and cooperative banks (Tilly, 1999). In fact, however, it was partly successful in providing a further legal reason for the large corporate banks to shift to pre-financing. As the last stipulation above notes, firms needed to wait a full year before their shares could be traded on German exchanges. This had the effect of solidifying the practice of short-term pre-financing in advance of floating securities for firms.

The new Deposit Law has less often been remarked upon than the Stock Exchange Law. This law was enacted in order to prohibit the fraudulent voting of securities held in custody (on deposit). When securities were sold on to individual clients, those clients frequently did not collect the shares themselves, but devolved voting rights and so on to the banks who had bought the securities on their behalf. Following the revelations that Great Banks had been voting shares without their customers' permission, and often with disastrous results, the Bank Deposit Law specifically prohibited this practice. Consequently, the Great Banks were pushed into the provinces in order to search out new clients to whom they could sell shares, and then in turn exercise the voting rights of those shares on behalf of these customers (Fear and Kobrak, 2010: 729).

THE COMPETITION OVER DEPOSITS, 1896-1914

From 1896 until the outbreak of the First World War, the shift towards the use of deposits and pre-financing of the foundation business would be irrevocably enshrined in the business programmes of almost all the big Berlin banks. Banks had been drifting in the direction of becoming more conservative in their foundation activities, but the ever growing emphasis on the use of deposits would ultimately compel them to give up entirely on the speculative foundation methods of earlier.

The ever-increasing use of deposits was itself a product of the cutthroat competition that broke out in the provinces. The Stock Exchange and Bank Deposit Laws of 1896 set this development in train. One outcome of the division of labour between the financial centre banks focused on speculative foundations business, and provincial banks focused on the provision of short-term working credit, was the channelling of investment clientele over networks from the province to the centre. As discussed above, provincial banks' clientele would often serve as an ultimate market for the securities floated by corporate banks in financial centres. The advantages of this system for the corporate banks in financial centres were the proxy-voting rights conferred on them for securities they held on deposit. Being able to exercise the votes of their collected clientele allowed the corporate banks to vote a far larger number of shares than they actually owned. The Bank Deposit Law effectively prohibited this by disallowing the provincial banks to pass on their proxy-votes to financial centre banks. Eager to maintain this advantage, and fearful of losing their outlet for securities issuing in the provinces, the Great Berlin Banks began forming "communities of interest" with provincial banks in 1896 (M. Pohl, 1982a).

The expansion of the Great Berlin Banks into the provinces was originally driven by their desire to maintain advantages they possessed in investment banking. Once in the provinces, the competition between different affiliates became so intense that maintaining provincial affiliate banks cost more money than it made (Reitmayer, 2001b). The Deutsche Bank showed the way by establishing deposit offices at its provincial branches, to increase its network for accumulating deposits. The aim to imitate the deposit practice of the *Deutsche Bank* drove many banks to similarly expand into the provinces; however, for many of the banks deposit collecting was initially unprofitable. This was in part because of the aforementioned competition over other elements of their financial service provision. It was also because collecting deposits in the provinces brought the Great Banks into competition with savings and cooperative banks, turning competition into a cross sector affair. It was often the ability to place securities with customers gained through the local-provincial connections that kept the corporate banks committed to the deposit business in the hope that transitive gains from the investment side would balance out the regular losses from their provincial bases.

¹⁶⁸ This competition against the savings and cooperative banks is highlighted by Deeg (2003), who does not however acknowledge the ongoing evolution of concrete universal banking: see chapter 1.

Despite the economic costs involved, the move towards deposits would produce a ratcheting effect prohibiting them from turning their backs on the new source of external funds. Adopting the use of deposits, in conjunction with the move to the provinces, led to a massive shift in the liability structure of the Big Berlin Banks between 1905-1914. Deposits grew more quickly than equity capital, and the ability to find profitable short-term outlets for those deposits led banks to change their business strategies (Holtfrerich, 1981). Whereas previously the equity capital of banks had been used to finance the speculative business of foundations, now the liabilities of deposits became the source of banks' funding for their assets. This further reinforced the banks' decision to turn away from speculative underwriting of firm foundations, as the risk of failure increased astronomically. The change in capital source enacted a concomitant alteration in emphasis on short-term current account credits, bill discounting, and lombard loans (Wixforth, 2002). Pushing all the banks to seek reliable existing industrial clientele that could be the source of "guaranteed" agiotage profits from securities issues.

CONCLUSION

By 1909, the Great Berlin Banks had taken over, or formed communities of interest with nearly all of the remaining provincial banks. This effectively extended their influence over a national network of branches, ¹⁶⁹ through which they mobilized deposits for the funding of their loan activities. At this point, the corporate banking sector had finally institutionalized the concrete practices of universal banking as they were described by Gerschenkron, and explained by Tilly.

The arrival at this terminus from the *Gründerkrach* was influenced by the ongoing struggle over industrialization and the speculative implementation of deposit-taking by the *Deutsche Bank*. The reaction against liberalism and the nationalization of the railways helped to shift foundation investment into the new industries of the 1880s, as well as change the basis for this business practice through pre-financing. The new techniques for financing foundations were then edified by a changing regulatory environment, itself a product of the continuing attempt by anti-industrial forces to steer German social change away from industrial capitalism. Finally, once the institutional

¹⁶⁹ Even though in communities of interest, both original firms maintained legally separate identities, the "exchange" of equity involved was usually one-sided so that the Berlin banks de facto controlled the provincial banks.

environment of German finance had been so shaped, the exigencies of the deposit business, and in particular maintaining a national network of branches, institutionalized concrete universal banking across the corporate banking sector of Germany.

EPILOGUE

CONCLUSION

The social core of economic institutions

And the performative codification of Universal Banking

"If the Macmillan Committee could still recommend the German universal banking system as worthy of emulation at the beginning of July 1931, Dernburg, who was a professional banker of the highest caliber, could not give his seal of approval following the banking crisis. Dernburg was not alone. During a Banking Enquiry with experts and Reich representatives, the Reichsbank president Luther forwarded the idea that a division of labour should be enforced amongst the existing banks." ¹⁷⁰

"[F]or Marx, the ultimate secret of capitalist production is a political one. What distinguishes his analysis so radically from classical political economy is that it creates no sharp discontinuities between economic and political spheres; and he is able to trace the continuities because he treats the economy itself not as a network of disembodied forces but, like the political 'sphere', as a set of social relations." ¹⁷¹

This thesis has put forward a substantively new composite narrative of the development of German universal banking, centred on social struggle and delineated in an idiom of power. The pages of the text have emphasized the historical narrative, intertwining in many places theoretical reflections about the nature of financial development, the genesis of economic institutions, the social basis of economic activity, and the fundamental role of power in the operation of the economy. Key to the argument, has been the thesis that economic activity is at its core socially constructed. Socially constructed is taken to mean that "the economy itself is not a network of disembodied forces but, like the 'political sphere,' a set of social relations" (Wood, 1981: 68). That is to say, that abstract disembodied economic forces, determined in advance of historical analysis will always be unable to account for historical agency, because people make history, even if not under the conditions of their own choosing. Nevertheless, simply highlighting that the economy is composed of social relationships, that are themselves subject to differential social power, is of little benefit if our substantive narratives of economic dynamics remain unchanged. In other words, an abstract justification of the social basis of the economy is only worthwhile if it does

¹⁷⁰ Born (1976: 18), my translation.

¹⁷¹ Wood (1981: 68)

more than cloak familiar narratives in the garb of new language. In that vein, the weight of emphasis here has been on historical narrative rather than explicit theoretical reflection. This has been intentionally undertaken in order to provision a new narrative of the evolution of German universal banking, which is recounted in synopsis here, before the wider stakes and relevance of this study are outlined.

The development of universal banking as an institution was driven forward directly and indirectly by a conflict over the shape of German society that arose in the European international context of the early 19th century. The principal social struggle in the German lands was over the direction, extent and form of industrialization. This struggle over industrialization shaped not only the emergence of the necessary, but also the sufficient, conditions for universal banking to emerge over the course of the 19th century. The necessary conditions—the emergence of "abstract" universal or "mixed" banking—can be traced to the unintended outcome of financiers' activity to sponsor an industrial order through the expansion of a railway system across the German states of the 19th century. The battle amongst businessmen, and between businessmen and the state to bring about an industrial order provides the key piece of the puzzle to understanding investment decisions of Rhenish financiers. Private bankers in the Rhineland believed it was crucial to invest in railway companies because they believed that these companies would both solidify the advancing industrial order as well as solve many of their quotidian problems, namely liquidity concerns, in maintaining their then position in the quasi-feudal social order of the pre-March period. In this case, an economic activity was undertaken for a social purpose, the cost and benefit of which cannot be properly understood without including the social context.

"Mixed-banking" was relatively successful in its early form, but it was rather the concern about liquidity that actually generated the first demand for corporate banking institutions. The amalgamation of "mixed-banking" into corporate banks occurred contingently as the product of political struggles during the revolution, and amongst financiers over the character of the post-revolutionary credit order. The battle between bankers motivated, on the one hand to establish industrial financing on a firmer footing in joint-stock banks, as against private bankers concerned to shore up their privilege in the old order of corporate estates and government securities, demonstrates the continuation of the sociopolitical conflict over industrialization by other means. The resistance to joint-stock banks from private bankers of the old order, and conservative forces within the Prussian state, is indicative of the "industrial" social purpose of these

institutions. Even though institutions that would later become some of the most important corporate universal banks were founded during this "first foundation wave," and none of them had restrictions on the financial business they could undertake, they were not yet universal banks in the theoretical sense widely appreciated in GPE. Indeed, their social purpose was also driven principally by the conflict over industrialization, and characterized by the speculative techniques pioneered by the Rhenish private banks.

Liberalisation of the regulatory order would ironically help to *compel* private bankers to establish joint-stock banks leading to a second foundation wave of corporate banks between 1869-1873. Both the new regulatory statues as well as the foundation banks established were equally products of the struggle over industrialization. The specificities of the institutions involved in founding new enterprises further indicate why the efficiency narrative for founding joint-stock banks is insufficient, and why charting institutional development and dynamics requires a perspective of power.

The final crystallization of German corporate financial institutions on concrete universal banking arose as an outcome of speculative practices, and in conjunction with the struggle over industrialization. The implementation of deposit banking by the Deutsche Bank, was undertaken at a time when the German political economy was in no way ripe for deposits. Beginning deposit-taking when it did was an act of wagering on an uncertain future outcome: that German development would attain the level of that reached in England, and then justify the deposit business. While the *Deutsche Bank* was extending this business segment, there was a concomitant social backlash against speculative financial practices leading to the implementation of new financial regulation, most drastically in 1896. This new regulation imposed waiting periods that formalized the new manner of issuing securities following the prior establishment of short-term credit relationships with new firms. Moreover, the Deposit Law, helped to steer the development of banking practices into a head on collision amongst the big Berlin banks over the collection of deposits. In this way, financial regulation enacted by the state at the behest of agrarian anti-industrial interest groups helped to consecrate the trend toward the patient provision of capital. Between the widespread adoption of deposit banking by the Big Berlin Banks, and the consequent increase in competition over deposit customers in the provinces during the early 20th century, concrete universal banking was developed amongst the Big Berlin Banks. The imperatives of this business practice shifted universal banking off of a developmental trajectory reliant on speculative praxis. The big Berlin banks would maintain the provision of investment services to their customers, but not for the original speculative purposes that they had adopted investment banking. Consequently, securities issuance was redirected towards the patient configuration that would be institutionally reproduced throughout the 20th century.

By the outbreak of the First World War the financial practices of many of the Big Berlin Banks had evolved so as to fit the image of universality that would be prominent during the post World War II period. The savings banks and credit cooperatives had also moved steps closer to becoming universal in their array of financial services, and something resembling a national credit market was in emergence. Crucially, one key element of their changing practices towards the more conservative cultivation of the deposit business involved using deposits more and more frequently to supplement own capital. In the aftermath of the first world War the rapid inflation that set in completely eroded the capital base of all the banking pillars. The end of the inflation in 1923 helped to stablise the situation, but all of the banking pillars had been brought closer into competition with each other in the search for deposits as a manner to finance their own asset generating activities. These developments led in 1929 to the introduction of retail banking by the big banks, and securities flotation by the credit cooperatives and the savings banks (Deeg, 2003).

Although all pillars of the German banking system now possessed the full complement of contemporary financial activities, it was not yet a complete "system" in the full institutional sense. We can mark this development with the British Macmillan Committee of 1929 and the Reich banking enquiry of 1933. For, it was during these public enquiries into the failings of British and German finance, respectively that a "universal" system was as such consciously recognized by the actors that embodied it. Throughout the 19th century, the practices that had been adopted by the corporate banks, and then later slowly adopted by the other banking pillars had been developed without much conscious reflection on whether they were "universal." The specific reflection of this character made "universal banking" an object of social praxis itself. The Macmillan Committee was charged with researching the failure of British industry, and highlighted the German "universal banking system" as something to be mimicked in order to provide better financing for industry. Its recommendations came, however, just as the German financial panic of 1931 erupted. Consequently losing much of their force, and were not implemented. The Reich Banking enquiry of 1933 was charged with examining the failure of German finance during the 1931 crisis, and, as the quote at the beginning of this chapter explains, the universal banking system was highlighted as an institution deserving of reform. Opposition from the banks, and lack of support from the Reich government helped to stymie anything from occurring. Following the end of the Reich dictatorship, the banks were broken up by the American forces stationed in Germany, and came close to losing their universal banking characteristics, however, after a battle with the occupation authorities were finally allowed to reagglomerate in 1957 having kept the blueprint of the institution of universal banking alive as an object of struggle.

This substantively different narrative of universal banking evolution helps to underscore a raft of theoretical points for GPE more broadly beyond the local narrative of German financial development. Firstly, it highlights that the creation of economic institutions is not always the outcome of purely, or ultimately, economic logics focused on the rational pursuit of efficient cost-minimization/profit-maximization. The development of economic institutions is influenced by power, and the proper way to study power is through an examination of the dynamic sociopolitical relationships of historical actors. To understand the crystallization of economic institutions on a durable (or at least minimally persistent) form, their study requires a method that is capable of breaking down the presupposed borders between "the economic" and "the political." This is only partly in the trivial sense that everything "economic" is also more fundamentally "social" and of political significance. More specifically, it relates to the way in which, buried in the labelling of things as part of "the economic," they become associated with a causal necessity that activates an ahistorical rational behaviour. Despite guaranteeing universal applicability, such an ahistorical vision of rationality risks leaving our explanatory framework incapable of determinate, dynamic accounts of institutional development (Varoufakis, 1991: 185). Consequently, in order to properly delineate institutional evolution, it is necessary to bring in historical-empirical details from particular contexts: it is necessary to account for the *social purpose* that animates historical agency.

Dissolving the barriers between economics and politics does not mean ridding the conceptual vista of GPE entirely of all things "economic." It would be an analytical failure to entirely eliminate the distinction between activities, institutions, relations and objects, which are economic and political. This distinction will at certain levels continue to be useful for telling stories about the social world. Indeed, many of the chapters here

have themselves been implicitly reliant on mobilizing distinctions between these two "realms." Bankers had different concerns from Monarchs in the early 19th century. Where this thesis has attempted to go further however, and the added value of being able to tear down the barrier between "economic" and "political," has been to remove obstacles from our path to an *historical* understanding of key economic institutions. Such a methodological precept suggests a manner in which to go about studying historical material so that our theoretical suppositions—of homoeconomicus, markets, economic logic, or social ontology more generally—do not do the heavy lifting of historical analysis for us.

The reexamination of historical German financial practices conducted here, pinpoints the origins of universal banking in the quintessentially *economic* category of speculation. That the most sophisticated tools of mainstream economic analysis have missed this important economic facet of the development of universal banking is testament to the need for a conceptual shift in its methodological precepts. Indeed, by charting historical struggles around the shape of German society, this thesis demonstrates that examining the economy from the perspective of power offers a superior account of the genesis of important economic institutions. This result further highlights that studying the economy from a perspective of power does not reduce the entire social world to politics, or obliterate "the economy" as some form of post structural language game. Instead, it demonstrates a richer method for approaching the analysis of key elements of the global political economy.

Beyond the local insight provided into the specific history of Germany's universal banking system, this approach suggests wider implications for GPE. Important strands of contemporary political economy, such as VoC and CC, have in part built their theoretical understanding of path-dependence in 20th and 21st century CMEs on the mainstream historical narrative of universal banking. Demonstrating the operation of power and social purpose in the economy should offer the opportunity to reflect on these principal categories.

WORKS CITED

- Abelshauser, Werner (2005). The Dynamics of German Industry: Germany's path towards the new economy and the American challenge. Leamington Spa: Berghahn Books.
- Achterberg, Erich (1984 [1974]). "Georg von Siemens und die Banken," in The Deutsche Bank (ed), Beiträge zu Wirtschafts- und Währungsfragen und zur Bankgeschichte. Mainz: Hase & Koehler Verlag, pp. 325-337. Originally published 1974, Beiträge zu Wirtschafts- und Währungsfragen und zur Bankgeschichte, 12, May.
- Ahrens, Gerhard (1972). "Vorgeschichte und Gründung der ersten Aktienbanken in Hamburg," *Kapital und Kredit*, 5, 316-335.
- Ahrens, Ralf and Harald Wixforth (eds) (2010). Strukturwandel und Internationalisierung im Bankwesen seit den 1950er Jahren. Stuttgart: Franz Steiner.
- Akerloff, George (1970). "The Market for Lemons: Quality Uncertainty and the Market Mechanism," *The Quarterly Journal of Economics*, 84(3), August, pp. 488-500
- Allen, Franklin and Douglas Gale (2000). *Comparing Financial Systems*. Cambridge and London: MIT Press.
- Aybar, Sedat, and Costas Lapavitsas (2001). "Financial system design and the post-Washington consensus," in Ben Fine, Costas Lapavitsas, and Jonathan Pincus (eds), *Development policy in the twenty-first century: beyond the post-Washington consensus*. London: Routledge, pp. 28-51.
- Baliga, and Pollack (2004). "The Emergence and Persistence of the Anglo-Saxon and German Financial Systems," *Review of Financial Studies*, 17(1), pp. 129-163
- Baltzer, Markus (2013). "Spekulation als Anstoß für Kapitalmarktregulierung in Deutschland im ausgehenden 19. Jahrhundert," *Jahrbuch für Wirtschaftsgeschichte*, 2, pp. 95-110.
- Baltzer, Markus (2007). Der Berliner Kapitalmarkt nach der Reichsgründung 1871: Gründerzeit, international Finanzmarktintegration und der Einfluss der Makroökonomie. Berlin: Lit Verlag.
- Barkin, Kenneth (1970). *The Controversy over German Industrialisation*. Chicago: University of Chicago Press.
- Barth, Boris (1995). Die deutsche Hochfinanz und die Imperialismen: Banken und Außenpolitik vor 1914. Stuttgart: Franz Steiner Verlag.
- Benston, George J. (1994). "Universal Banking," *Journal of Economic Perspectives*, 8(3), pp. 121-143

- Bergengrün, Alexander (1908). *Staatsminister August Freiherr von der Heydt*. Leipzig: S. Hirzel Verlag.
- Bergengrün, Alexander (1901). *David Hansemann*. Berlin: J. Guttentag Verlagsbuchhandlung.
- Berghoff, Hartmut (2002). "Der Berliner Kapitalmarkt im Aufbruch (1830-1870)," in Hans Pohl (ed), *Geschichte des Finanzplatz Berlin*. Frankfurt a.M.: Fritz Knapp, pp. 53-102
- Blackbourn, David (2003). *History of Germany 1780-1918: The Long Nineteenth Century*. Maldon, Oxford & Carlton: Blackwell Publishing.
- Blackbourn, David and Geoff Eley (1984). *The Peculiarities of German History: Bourgeois Society and Politics in Nineteenth-Century Germany*. Oxford: Oxford University Press.
- Blume, Herbert (1914). *Gründungszeit und Gründungskrach mit Beziehung auf das deutsche Bankwesen*. Danzig: A.W. Kasemann, G.m.b.h.
- Boch, Rudolf (1991). Grenzenloses Wachstum? Das rheinische Wirtschaftsbürgtum und seine Industrialisierungsdebatte 1814-1857. Göttingen: Vandenhoeck & Ruprecht.
- Böhme, Helmut (1966a). "Gründung und Anfänge des Schaaffhausenschen Bankvereins, der Bank des Berliner Kassenvereins, der Direktion der Disconto-Gesellschaft und der Darmstädter Bank für Handel und Industrie: Ein Beitrag zur preußichen Bankpolitik von 1848-1853, Teil II," *Tradition: Zeitschrift für Firmengeschichte und Unternehmerbiographie*, 11(1), Februar, pp. 34-56
- Böhme, Helmut (1966b). Deutschlands Weg zur Grossmacht: Studium zum Verhältnis von Wirtschaft und Staat während der Reichsgründungszeit 1848-1881. 3rd Edition. Cologne: Kiepenheuer & Witsch.
- Böhme, Helmut (1965). "Gründung und Anfänge des Schaaffhausenschen Bankvereins, der Bank des Berliner Kassenvereins, der Direktion der Disconto-Gesellschaft und der Darmstädter Bank für Handel und Industrie: Ein Beitrag zur preußichen Bankpolitik von 1848-1853, Teil I," *Tradition: Zeitschrift für Firmengeschichte und Unternehmerbiographie*, 10(4), Februar, pp. 189-212
- Boldizzoni, Francesco (2011). *The Poverty of Clio: Resurrecting Economic History*. Princeton and Oxford: Princeton University Press.
- Born, Karl Erich (1983 [1977]). *International Banking in the 19th and 20th Centuries*. Leamington Spa: Berg Publishers.
- Born, Karl Erich (1976). "Die Hauptentwicklungslinien des mitteleuropäischen Universalbankensystems," in Institut für Bankhistorische Forschung (ed), *Universalbankensystem als historisches und politisches Problem.* Frankfurt am Main: Fritz Knapp Verlag, pp. 13-18.

- Bösselmann, Kurt (1939). Die Entwicklung des deutschen Aktienwesens im 19. Jahrhundert: Ein Beitrag zur Frage der Finanzierung gemeinwirtschaftlicher Unternehmungen. Berlin: Walter de Gruyter & Co.
- Bosenick, Alfred (1912). Neudeutsche gemischte Bankwirtschaft: ein Versuch zur Grundlegung des Bankwesens. Berlin: A. Sellier.
- Brophy, James M. (2011). "The End of the Old Economic Order: the Great Transition, 1750-1860," in Helmut Walser Smith (ed), *Oxford Handbook of Modern German History*. Oxford: Oxford University Press, pp. 169-194
- Brophy, James (1998). *Capitalism, Politics and Railroads in Prussia, 1830-1870*, Columbus: Ohio State University Press.
- Brose, Eric Dorn (2013). *German History 1789-1871: From the Holy Roman Empire to the Bsmarckian Reich*. New and Revised Edition (3rd). New York and Oxford: Berghahn Books.
- Brose, Eric Dorn (2010). "The Political Economy of Early Industrialization in German Europe, 1800-1840," in Jeff Horn, Leonard N. Rosenband and Merrit Roe Smith (eds), *Reconceptualizing the Industrial Revolution*. Cambridge and London: The MIT Press, pp. 107-124.
- Brose, Eric Dorn (1993). *The Politics of Technological Change in Prussia: Out of the Shadow of Antiquity, 1809-1848.* Princeton: Princeton University Press.
- Bruff, Ian and Eva Hartmann (2014). "Neo-pluralist political science, economic sociology and the conceptual foundations of the comparative capitalisms literatures," *Capital & Class*, 38(1), 71-85
- Brunner, Allan, Jörg Descressin, Daniel Hardy and Beata Kudela (2004). "Germany's Three-Pillar Banking System: Cross-Country Perspectives in Europe," *IMF Occasional Paper 233*. Washington, D.C.: International Monetary Fund Publishing.
- Bryan, Dick, and Michael Rafferty (2006). *Capitalism with Derivatives. A Political Economy of Financial Derivatives, Capital and Class.* Basingstoke: Palgrave Macmillan.
- Buchheim, Christoph (2002). "Deutsche Finanzmetropole vom internationalem Rang (1870-1914)," in Hans Pohl (ed). *Geschicht des Finanzplatzes Berlin*. Frankfurt a.M.: Fritz Knapp, pp. 103-156
- Burhop, Carsten (2014). "Die Gründung der Commerz- und Disconto-Bank 1870: Aktienbanken als Pfeiler des Universalbankensystems," in Dieter Lindenlaub, Carsten Burhop and Joachim Scholtyseck (eds), *Schlüsselereignisse der deutschen Bankengeschichte*. Stuttgart: Franz Steiner Verlag, pp. 155-165

- Burhop, Carsten (2011). *Wirtschaftsgeschichte des Kaiserreichs 1871-1918*. Göttingen: Vandenhoeck & Ruprecht.
- Burhop, Carsten (2006a). "Did banks cause the German industrialization?," *Explorations in Economic History*, 43, pp. 39-63
- Burhop, Carsten (2006b). "Die Technik des Gründungsgeschäfts in der Hochindustrialisierung," *Bankhistorisches Archiv*, 32(2), pp. 91-112.
- Burhop, Carsten (2004). *Die Kreditbanken in der Gründerzeit*. Franz Steiner Verlag: Wiesbaden.
- Burhop, Carsten and Sybille Lehmann (2014). "The Geography of Stock Exchanges in Imperial Germany," *FZID Discussion Paper 89-2014*, Universität Hohenheim, https://fzid.uni-hohenheim.de/71978.html
- Büschgen, Hans (1998). "Universalbankensystem versus Trennbankensystem," in Karl-Heinz Naßmacher, Heinrich von Stein und Hans-E. Büschgen u.a. (eds), *Banken in Deutschland: Wirtschaftspolitische Grundinformation*. Opladen: Leske + Budrich, pp. 50-65.
- Butzbach, Olivier and Kurt E. von Mettenheim (2015), "Alternative Banking and Theory," *Accounting, Economics and Law A Convivium*, 5(2), pp. 105-171
- Byres, Terence J. (1996). Capitalism from Above Capitalism from Below: An Essay in Comparative Political Economy. Basinstoke: Palgrave Macmillan
- Byrne, Joseph P. and E. Philip Davis (2003). *Financial Structure: An Investigation of Sectoral Balance Sheets in the G-7*. Cambridge: Cambridge University Press.
- Cable, John (1985). "Capital Market Information and Industrial Performance: the role of West-German Banks," *The Economic Journal*, 95, 118-132.
- Calomiris, Charles W. (1995). "The Costs of Rejecting Universal Banking: American Finance in the German Mirror, 1870-1914," in Naomi R. Lamoreaux and Daniel M.G. Raff (eds), *Coordination and Information: Historical Perspectives on the Organization of Enterprise*. Chicago: University of Chicago Press, pp. 257-322.
- Cameron, Rondo (1956). "Founding the Bank of Darmstadt," *Explorations in Entrepreneurial History*, 8(3), February, pp.113-130
- Canals, Jordi (1996). *Universal Banking: international comparisons and theoretical perspectives*. Oxford: Oxford University Press.
- Carney, Richard (2009). Contested Capitalism: the political origins of financial institutions. Oxon: Routledge.
- Clark, Christopher (2007). *Iron Kingdom: the Rise and Downfall of Prussia*. London: Penguin Press.

- Collins, Michael (1991). *Banks and Industrial Finance in Britain, 1800-1939*. Cambridge: Cambridge University Press.
- Collins, Michael and Mae Baker (2003). Commercial Banks and Industrial Finance in England and Wales, 1860-1913. Oxford: Oxford University Press.
- Craig, Gordon (1978). German History, 1866-1945. Oxford: Oxford University Press.
- Da Rin, Marco (1996). "Understanding the development of the German Kreditbanken, 1850-1914: an approach from the economics of information," *Financial History Review*, 3, pp. 29-47
- Däbritz, Walther (1931). Gründung und Anfänge der Disconto-Gesellschaft Berlin: Ein Beitrag zur Bank- und Wirtschaftsgeshichte Deutschlands in den Jahren 1850 bis 1875. Munich and Leipzig: Duncker & Humblot.
- Dahlem, Markus (2009). Die Professionalisierung des Bankbetriebs: Studien zur institutionellen Struktur deutscher Banken im Kaiserreich 1871-1914. Essen: Klartext Verlag.
- Deeg, Richard (2012). "Financialisation and models of capitalism: a comparison of the UK and Germany," in Christel Lane and Geoffrey T. Wood (eds), *Capitalist Diversity and Diversity within Capitalism*. London Routledge, pp. 121-149
- Deeg, Richard (2010). "Institutional Change in Financial Systems," in Glenn Morgan, John L. Campbell, Colin Crouch, Ove Kaj Pedersen and Richard Whitley (eds), Oxford Handbook of Comparative Institutional Analysis. Oxford: Oxford University Press, pp. 309-334
- Deeg, Richard (2003). "On the Development of universal banking in Germany," in Douglas Forsyth and Daniel Verdier (eds). *The Origins of National Financial Systems: Alexander Gerschenkron Reconsidered*. Routledge: London, pp.87-104
- Deeg, Richard (1999). Finance Capitalism Unveiled: Banks and the German Political Economy. Ann Arbor: University of Michigan Press.
- Deeg, Richard (1995). "What makes German Banks Different?" *Small Business Economics*, 10, pp. 93–101
- Detzer, Daniel (2014), "The German Financial System and the Financial Crisis," *Intereconomics: Review of European Economic Policy*, 49(2), March/April pp. 56-64
- Detzer, Daniel, Nina Dodig, Trevor Evans, Eckhard Hein and Hansjörg Herr (2013). "The German Financial System," *FESSUD Studies in Financial Systems*, No. 3, Leeds.
- Deutsche Bundesbank (1975). Deutsches Geld- und Bankwesen in Zahlen 1876-1975. Frankfurt a.M.: Fritz Knapp.

- Diamond, Douglas (1984). "Financial Intermediation and Delegated Monitoring," *The Review of Economic Studies*, 51(3), pp. 393-414
- Diefendorf, Jeffry (1980). Businessmen and Politics in the Rhineland, 1789-1834. Princeton: Princeton University Press.
- Edwards and Fisher (1994). *Banks, finance and investment in Germany*. Cambridge: Cambridge University Press.
- Eichholtz, Dietrich (1962). Junker und Bourgeoisie vor 1848 in der preussischen Eisenbahngeschichte. Berlin: Akademie Verlag.
- Eley, Geoff (1992). "Hans Rosenberg and the Great Depression of 1873-96: Politics and Economics in Recent German Historiography, 1960-1980," in Geoff Eley (ed), *From Unification to Nazism: Reinterpreting the German Past.* London: Routledge, pp. 23-41.
- Engberg, Holger (1981 [1963]). *Mixed-Banking and Economic Growth in Germany* 1850-1931. New York: Arno Press.
- European Central Bank (2002). *Report on Financial Structures*. Frankfurt am Main: ECB Printing.
- Fairbairn, Brett (2008). "Economic and Social Development," in James Retallack (ed) *Imperial Germany, 1871-1918*. Oxford: Oxford University Press, pp. 61-82.
- Fairbairn, Brett (1991). "Farmers, Capital and the State in Germany, 1860-1914," *Occasional Paper #91-02*, Centre for the Study of Co-operatives, University of Saskatchewan.
- Fear, Jeffrey and Christopher Kobrak (2010). "Banks on Board: German and American Corporate Governance, 1870-1914," *Business History Review*, 84, pp. 703-736.
- Feldenkirchen, Wilfried (1991). "Banking and Economic Growth: Banks and Industry in Germany in the Nineteenth Century and their Changing Relationship during Industrialisation," in W.R. Lee (ed). *German Industry and German Industrialisation*. London: Routledge.
- Fine, Ben and Milonakis, Dimitris (2009). From Economics Imperialism to Freakonomics: the Shifting Boundaries between Economics and Other Social Sciences Economics as Social Theory. London and New York: Routledge.
- Fohlin, Caroline (2012). *Mobilizing Money: How the World's Richest Nations Financed Industrial Growth*. New York: Cambridge University Press.
- Fohlin, Caroline (2007). Finance Capitalism and Germany's Rise to Industrial Power. Cambridge: Cambridge University Press.

- Fohlin, Caroline (2002a). "Corporate Capital Structure and the Influence of Universal Banks in Pre-World War I Germany," *Jahrbuch für Wirtschaftsgeschichte*, 2, pp. 113-134.
- Fohlin, Caroline (2002b). "Regulation, Taxation, and the Development of the German Universal Banking System," *Euopean Review of Economic History*, 6, pp. 221-254.
- Fohlin, Caroline (2000). "Economic, Political and Legal Factors in Financial System Development: International Patterns in Historical Perspective," *Social Science Working Paper 1089*, May, California Institute of Technology. Last accessed Online 11th November 2009 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=267674
- Fohlin, Caroline (1999). "Universal Banking in Pre-World I Germany: Model or Myth?" *Explorations in Economic History*, 36, pp. 305-343.
- Forsyth, Douglas (2003). "Introduction," in Douglas Forsyth and Verdier, Daniel (eds) The Origins of National Financial Systems: Alexander Gerschenkron Reconsidered. Routledge: London, pp. 1-22.
- Fremdling, Rainer (1977). "Railroads and German Economic Growth: A Leading Sector Analysis with Comparison to the United States and Great Britain," *Journal of Economic History*, 37(3), September, pp. 583-604.
- Friedrich, Wolfgang (1980). "Die Entwicklung des Rechts der bergrechtlichen Gerwerkschaft in Preußen von 1850 bis zum Ersten Weltkrieg," in Norbert Horn and Jürgen Kocka (eds). Recht un Entwicklung der Großunternehmen im 19. Und frühen 20. Jahrhundert / Law and the Formation of the Big Enterprises in the 19th and Early 20th Centuries. Göttingen: Vandenhoeck & Ruprecht, pp. 190-200.
- Gall, Lothar (1995). "The Deutsche Bank from its Founding to the Great War," in Lothar Gall, Gerald D. Feldman, Harold James, Carl-Ludwig Holtfrerich, Hans E. Büschgen (eds), *The Deutsche Bank*, 1870-1995. London: Weidenfeld & Nicolson, pp. 1-127.
- Gehr, Martin (1959). Das Verhältnis zwischen Banken und Industrie in Deutschland seit der Mitte des 19. Jahrhunderts bis zur Bankenkrise von 1931 unter besonderer Berücksichtigung des industriellen Großkredits. Unpublished Dissertation. Tübingen: Eberhard-Karls-Universität.
- Gerschenkron, Alexander (1962). *Economic Backwardness in Historical Perspective*. New York & London: Praeger.
- Grimmer-Solemm, Erik (2015). "Germany: From Sciences of State to Modern Economics," in Vincent Barnett (ed.), *The Routledge Handbook of the History of Global Economic Thought*. London and New York: Routledge, pp. 86-94.

- Gömmel, Rainer (1992). "Entstehung und Entwicklung der Effektenbörse im 19. Jahrhunder bis 1914," in Hans Pohl (ed). *Deutsche Börsengeschichte*. Frankfurt a.M.: Fritz Knapp Verlag, pp. 135-210.
- Goyer, Michel (2011). Contingent Capital: Short-term Investors and the Evolution of Corporate Governance in France and Germany. Oxford: Oxford University Press.
- Guinnane, Timothy (2002). "Delegated Monitors Large and Small: Germany's Banking System 1800-1914," *Journal of Economic Literature*, 40(1), March, pp. 73-124.
- Guinnane, Timothy (2001). "Co-operatives as Information Machines: German Rural Credit Cooperatives, 1883–1914," *The Journal of Economic History*, 61(2), pp. 366-389.
- Gumbel, Peter (2007). "Subprime on the Rhine," *Fortune Magazine*, 156(5), September, pp. 71-74.
- Hall, Peter and David Soskice (2001), "An Introduction to Varieties of Capitalism," in Peter Hall and David Soskice (eds), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press, pp. 1-70.
- Hamerow, Theodore S. (1972). *The Social Foundations of German Unification. Vol. 2:* Struggles and Accomplishments. New Haven: Princeton University Press.
- Hamerow, Theodore S. (1958), Restoration, Revolution, Reaction: Economics and Politics in Germany, 1815-1871. Princeton: Princeton University Press.
- Hansen, Joseph (1906). Gustav von Mevissen: ein Rheinisches Lebensbild, 1815-1899. Berlin: G. Reimer.
- Handtke, Stefan and Hubert Zimmermann (2012). "Institutional Change in German Financial Regulation" in Renate Mayntz (ed). *Crisis and Control: Institutional Change in Financial Market Regulation*. Frankfurt: Campus.
- Hardach, Gerd (1995). "Zwischen Markt und Macht: die deutschen Banken 1908-1934," in Wilfried Feldenkirchen, Frauke Schönert-Röhlk, and Günther Schulz (eds), Wirtschaft, Gesellschaft, Unternehmen: Festschrift für Hans Pohl zum 60. Geburtstag, Bd. 2. Stuttgart: Franz Steiner Verlag, pp. 914-938.
- Hardie, Iain, David Howarth, Sylvia Maxfield, and Amy Verdun (2013a). "Banks and the False Dichotomy in the Comparative Political Economy of Finance," *World Politics*, 65(4), October, pp. 691-728.
- Hardie, Iain, David Howarth, Sylvia Maxfield, and Amy Verdun (2013b). "Introduction: Towards a Political Economy of Banking," in Iain Hardie and David Howarth (eds), *Market-based Banking and the International Financial Crisis*. Oxford: Oxford University Press, pp. 1-21.

- Hardie, Iain and David Howarth (2013a). "Framing Market-Based Banking and the Financial Crisis," in Iain Hardie and David Howarth (eds), *Market-based Banking and the International Financial Crisis*. Oxford: Oxford University Press, pp. 22-55.
- Hardie, Iain and David Howarth (2013b). "A Peculiar Kind of Devastation: German Market-Based Banking," in Iain Hardie and David Howarth (eds), *Market-based Banking and the International Financial Crisis*. Oxford: Oxford University a Press, pp. 103-127.
- Hassel, Anke (2014). "The German Model in Transition," in Stephen Padgett, William Paterson and Reimut Zohlnhöfer (eds). *Developments in German Politics 4*. London: Palgrave, pp. 133-148.
- Helfferich, Karl (1923). Georg von Siemens: Ein Lebensbild aus Deutschlands großer Zeit. Berlin: Verlag von Julius Springer.
- Henderson, W.O. (1975). *The Rise of German Industrial Power, 1834-1914*. London: Temple Smith.
- Henning, Friedrich-Wilhelm (1980). "Die Entwicklung der Aktiv- und Passivgeschäfte der Banken im 19. Jahrhundert in Deutschland unter besonderer Berücksichtigung des Kontokorrent- und des Wechselkredits," in Helmut Coing and Walter Wilhelm (eds). Wissenschaft und Kodifikation des Privatrechts im 19. Jahrhundert. Frankfurt am Main: Vitorrio Klosermann. pp. 55-76.
- Hentschel, Volker (1978). Wirtschaft und Wirtschaftspolitik im wilhelminischen Deutschland: Organisierter Kapitalismus oder Interventionsstaat? Stuttgart: Klett-Cotta.
- Heyn, Udo (1981 [1969]). Private Banking and Industrialisation: The Case of Frankfurt am Main, 1825-1875. New York: Arno Press. [Reprint of the author's 1969 Doctoral Dissertation, University of Wisconsin).
- Hilferding, Rudolf (1910). Finance Capital. Trans. M. Watnick. London: S. Gordon.
- Hirschman, Albert O. (1970). Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations, and States. Cambridge, MA and London: Harvard University Press.
- Hobsbawm, Eric (2006 [1975]). The Age of Capital, 1848-1875. London: Abacus.
- Holtfrerich, Carl-Ludwig (2005). "Frankfurts Weg zu einem europäischen Finanzzentrum," in Christoph Maria Merki (ed.), *Europas Finanzzentren: Geschichte und Bedeutung im 20. Jahrhundert.* Frankfurt and New York: Campus Verlag, pp. 83-96.
- Holtfrerich, Carl-Ludwig (1999). Frankfurt as a Financial Centre: from medieval trade fair to European Banking centre. Munich: Verlag C.H. Beck. Trans. J.A. Underwood, Karl Heinz Siber, and Andrew Sims.

- Holtfrerich, Carl-Ludwig (1981). "Die Eigenkapitalausstattung deutscher Kreditinstitute 1871-1945," *Bankhistorisches Archiv*, 5, Beiheft, pp.15-29.
- Höpner, Martin (2007). "Coordination and Organization: The Two Dimensions of Nonliberal Capitalism," MPIfG Discussion Paper 07/12.
- Hoppe, Ruth and Jürgen Kuczynski (1964). "Eine Berufs- bzw. auch Klassen- und Schichtanalyse der Märzgefallenen 1848 in Berlin," *Jahrbuch für Wirtschaftsgeschichte*, Teil IV, pp. 200–272.
- "Aktienrechtliche (1980).Unternehmensorganisation Horn. Norbert der Hochindustrialisierung (1860-1920): Deutschland, England, Frankkreich und die USA im Vergleich," in Norbert Horn and Jürgen Kocka (eds), Recht und Entwicklung der Großunternehmen im 19. und frühen 20. Jahrhundert: a Wirtschafts-, sozial-, und rechtshistorische Untersuchungen zur *Industrialisierung in Deutschland, Frankreich, England,* und den USA. Göttingen: Vandenhoeck & Ruprecht, pp. 123-189
- Ilgman, Cordelius (2011). "The Advent of Corporate Limited Liability in Prussia 1843," *CAWM Discussion Paper No 46*, Centre of Applied Economic Research Münster. [Permission to cite received 02.09.2014]
- Jachmich, Gabriele (1997). "Grundzüge der Entwicklung der deutschen Sparkassen," in Franz Bosbach and Hans Pohl with the assistance of Gabriele Jachmich and Christoph Kampmann (eds), Das Kreditwesen in der Neuzeit/Banking System in Modern History: Ein deutsch-britischer Vergleich. Munich: K.G. Saur. pp.133-148
- Jackson, Gregory and Richard Deeg (2006). "How many varieties of Capitalism? Comparing the Comparative Institutional Analyses of Capitalist Diversity," *MPIfG Discussion Paper* 06/2.
- Jaeger, Hans (1988). Geschichte der Wirtschaftsordnung in Deutschland. Frankfurt am Main: Suhrkamp.
- Jeidels, Otto (1905). Das Verhältnis der deutschen Großbanken zur Industrie mit besonderer Berücksichtigung der Eisenindustrie. Duncker & Humblot.
- Jessop, Bob (2014). "Variegated Capitalism, das Modell Deutschland, and the Eurozone Crisis," *Journal of Contemporary European Studies*, 22(3), pp. 248-260.
- Johnson, Paul (2010). *Making the Market: the Victorian Origins of Corporate Capitalism*. Cambridge: Cambridge University Press.
- Kaskel, Joachim Felix (1983). "Vom Hoffaktor zur Dresdner Bank: Die Unternehmerfamilie Kaskel im 18. Und 19. Jahrhundert," *Zeitschrift für Unternehmensgeschichte / Journal of Business History*, 28(3), pp. 159-187.

- Kaufhold, Karl Heinrich (1992). "Der Übergang zu Fonds- und Wechselbörsen vom ausgehenden 17. Jahrhundert bis zum ausgehenden 18. Jahrhundert," in Hans Pohl (ed). *Deutsche Börsengeschichte*. Frankfurt a.M.: Fritz Knapp Verlag. pp. 79-134.
- Kellermann, Christian (2005). "Disentangling Deutschland AG," in Stefan Beck, Frank Klobes, and Christoph Scherer (eds). Surviving Globalization? Perspectives for the German Economic Model. Springer, pp. 111-132.
- Kindleberger, Charles (1993 [1984]). *A Financial History of Western Europe*. 2nd Ed. Oxford: Oxford University Press.
- Kindleberger, Charles (1990). *Historical Economics: Art or Science?*. Berkeley: Universit of California Press.
- Kitchen, Martin (1978). *The Political Economy of Germany 1815-1914*. London and Montreal: Croon Helm & McGill-Queen's University Press.
- Kleeberg, John M. (1989). *The Disconto-Gesellschaft and German Industrialization: A Critical Examination of the Career of a German Universal Bank, 1851-1914*. DPhil Dissertation: St. Catherine's College, Oxford.
- Knafo, Samuel (2013). *The Making of Modern Finance: Liberal Governance and the Gold Standard*. Milton Park: Routledge.
- Knafo, Samuel (2012), "Financial Crises and the Political Economy of Speculative Bubbles," *Critical Sociology*, i-First, 17th August.
- Knafo, Samuel (2008). "The State and the Rise of Speculative Finance," *Economy & Society*, 37(2), pp. 172-192.
- Knafo, Samuel (2002). "The fetishizing subject in Marx's Capital," *Capital & Class*, 74, pp. 145-175.
- Knips, Franz Lorenz (1912). Entwicklung und Tätigkeit der Bank für Handel und Industrie. Leipzig: August Hoffmann, Spezialdruckerei für Dissertationen.
- Kobrak, Christopher (2007). Banking on Global Markets: Deutsche Bank and the United States 1870 to the Present. Oxford: Oxford University Press.
- Kocka, Jürgen and Hannes Siegrist (1979). "Die hundert größten deutschen Industrieunternehmen im späten 19. und frühen 20. Jahrhundert: Expansion, Diversifikation, und Integration im internationalen Vergleich," in Norbert Horn and Jürgen Kocka (eds), Recht und Entwicklung der Großunternehmen im 19. und frühen 20. Jahrhundert: Wirtschafts-, sozial-, und rechtshistorische Untersuchungen zur Industrialisierung in Deutschland, Frankreich, England, und den USA. Göttingen: Vandenhoeck & Ruprecht, pp. 55-122.
- Kocka, Jürgen (1975). *Unternehmer in der deutschen Industrialisierung*. Göttingen: Vandenhoeck & Ruprecht.

- Konings, Martijn (2015). "State of Speculation: Contingency, Measure, and the Politics of Plastic Value," *The South Atlantic Quarterly*, 11(4), pp. 251-282.
- Konings, Martijn (2011). *The Development of American Finance*. Cambridge: Cambridge University Press.
- Konings, Martijn (2008). "European finance in the American mirror: financial change and the reconfiguration of competitiveness," *Contemporary Politics*, 14(3), pp. 253–275
- Konings, Martijn (2006). The Rise of American Finance: Agency, Institutions and Structural Power from Colonial Times to the Globalization Era. PhD Dissertation, York University, Toronto, Canada.
- Krippner, Greta (2011). Capitalizing on Crisis: The Political Origins of the Rise of Finance. Cambridge, MA and London: Harvard University Press.
- Krippner, Greta (2001). "The Elusive Market: Embeddedness and the paradigm of economic sociology," *Theory and Society*, 30, pp. 775-810.
- Krüger, Dieter (1983). *Nationalökonomen im wilhelminischen Deutschland*. Göttingen: Vandenhoeck & Ruprecht.
- Krüger, Alfred (1925). Das Kölner Bankiergewerbe vom Ende des 18. Jahrhunderts bis 1875. Essen: G.D. Baedeker Verlag.
- Kubitschek, Helmut (1962). "Die Börsenverordnung vom 24. Mai 1844 und die Situation im Finanz- und Kreditwesen Preußens in den vierziger Jahren des 19. Jahrhunderts (1840 bis 1847)," *Jahrbuch für Wirtschaftsgeschichte*, 2, pp. 57-78
- Kurzrock, Hans (1970). "Aus der Geschichte der Commerzbank," in Commerzbank Aktiengesellschaft (ed). *100 Jahre Commerzbank*, *1870-1970*, Frankfurt am Main: Fritz Knapp Verlag, pp. 39-126
- Lacher, Hannes (2006). Beyond Globalization: Capitalism, territoriality, and the international relations of modernity. London: Routledge.
- Landes, David (1956). "Vieille Banque et Banque Nouvelle: la révolution financière du dix-neuvième siècle," *Revue d'histoire moderne et contemporaine* 3(3), juillet-septembre, pp. 204-222
- Lazonick, William and Mary O'Sullivan (1997). "Finance and industrial development, Part II: Japan and Germany," *Financial History Review*, 4, pp. 117-138.
- Lehmbruch, Gerhard (2001). "The Institutional Embedding of Market Economies: the German 'Model' and its Impact on Japan," in Wolfgang Streeck and Kozo Yamamura (eds), *The Origins of Nonliberal Capitalism: Germany and Japan Compared*. Ithaca: Cornell University Press, pp. 39-93

- Leiskow, Hanns (1930). Spekulation und öffentliche Meinung in der ersten Hälfte des 19. Jahrhunderts. Jena: Gustav Fischer.
- Lescure, Michel (2003). "The origins of universal banks in France during the nineteenth century," in Douglas Forsyth and Daniel Verdier (eds). *The Origins of National Financial Systems: Alexander Gerschenkron Reconsidered*. Routledge: London.pp. 117-125.
- Lichter, Jörg (1999). Preußische Notenbankpolitik in der Formationsphase des Zentralbanksystems. Berlin: Duncker & Humblot.
- Lüke, Rolf E. (1956). Die Berliner Handelsgesellschaft in einem Jahrhundert deutscher Wirtschaft, 1856-1956. Berlin: Hartmann.
- Lütz, Susanne (2000). "From Managed to Market Capitalism? German Finance in Transition," MPIfG Discussion Paper 00/2, ISSN 0944–2073
- Maiwald, Marc Oliver (2005). "Aller Nationen...Vorbild oder Muster?" Die deutsche Wahrnehmung der sozialen und wirtschaftlichen Zustände Großbritanniens 1760 1850. Doctoral Dissertation, Ruhr Universität Bochum.
- Martin, Paul (1967). "Monetäre Probleme der Frühindustrialisierung am Beispiel der Rheinproviz (1816-1848)," in *Jahrbücher für Nationalökomie und Statistik*, November, 181(2), pp. 117-150.
- Meier, Johann Christian (1992). *Die Entstehung des Börsengesetzes vom 22. Juni 1896*. St. Katharinen: Scripta Mercaturae Verlag.
- Menz, Georg (2005). "Auf Wiedersehen, Rhineland Model: Embedding Neoliberalism in Germany," in Susanne Soederberg, Georg Menz, and Philip G Cerny (eds). Internalizing Globalization: The Rise of Neoliberalism and the Decline of National Varieties of Capitalism. Basingstoke and New York: Palgrave Macmillan, pp. 33-48.
- Metzler, Ludwig (1911). Studien zur Geschichte des deutschen Effektenbankwesens vom ausgehenden Mittelalter bis zur Jetztzeit: ein Beitrag zur Geschichte des deutschen Bankwesens. Leipzig: Carl Ernst Poeschel.
- Moors, Colin (1991). The Making of Bourgeois Europe: Absolutism, Revolution, and the Rise of Capitalism in England, France and Germany. London: Verso.
- Motschmann, Gustav (1915). Das Depositengeschäft der Berliner Großbanken. Munich and Leipzig: Duncker & Humblot.
- Neidlinger, Karl (1930). Studien zur Geschichte der deutschen Effektenspekulation von ihren Anfängen bis zum Beginn der Eisenbahnaktienspekulation (ein Beitrag zur Börsengeschichte). Jena: Verlag von Gustav Fischer.
- North, Michael (1997). "The Great German Banking Houses and International Merchants, Sixteenth to Nineteenth Century," in Alice Teichova, Ginette

- Kurgan-van Hentenryk, and Dieter Ziegler (eds). *Banking Trade and Industry: Europe, America and Asia from the Thirteenth to the Twentieth Century.* Cambridge: Cambridge University Press, pp. 35-49.
- Penzkofer, Peter (1974). "Wirtschaftliche und gesellschaftliche Einflüsse auf die Entstehung und Entwicklung der privaten Geschäftsbanken Ende des 19. und im 20. Jahrhundert," in Alfred Grosser, Eberhard Jäckel, Robert Zungk, Peter Christian Ludz, and Peter Penzkofer (eds). Wirtschaft Gesellschaft Geschichte. J.B. Metzlerische Verlagsbuchhandlung, pp. 43-201.
- Perlitz, Uwe (1976). Das Geld-, Bank- und Versicherungswesen in Köln 1700-1815. Berlin: Duncker & Humblot.
- Pierenkemper, Toni and Richard Tilly (2004). *The German Economy during the Nineteenth Century*. New York and Oxford: Berghahn Books.
- Pohl, Hans (1987). "Von der Spar-Casse zum Kreditinstitut," in Jürgen Mura (ed), Die Entwicklung der Sparkassen zu Universalkreditinstituten. Stuttgart: Deutsche Sparkassen Verlag, pp. 15-33.
- Pohl, Hans (1984). "Forms and Phases of Industry Finance," in German Society for Business History (eds). *German Yearbook on Business History*, Berlin: Springer-Verlag, pp. 75-84.
- Pohl, Hans (1982). "Das deutsche Bankwesen (1806-1848)," in Wissenschaftliche Beirat des Instituts für bankhistorische Forschung (ed). *Deutsche Bankengeschichte*. Band 2. Frankfurt a.M: Fritz Knapp Verlag, pp. 13-140.
- Pohl, Manfred (1989). "Die Blütezeit der Konsortien 1870 bis 1914," in Institut für Bankhistorische Forschung (ed). Die Zusammenarbeit der Geldinstitute in Konsortien: Zweites Wissenschaftliches Kolloquium des Instituts für bankhistorische Forschung e.V. am 14 mai 1987 in Wien. Frankfurt a.M.: Fritz Knapp Verlag, pp. 28-37.
- Pohl, Manfred (1986a). Entstehung und Entwicklung des Universalbankensystems: Krise und Konzentration als wichtige Faktoren. Frankfurt: Fritz Knapp.
- Pohl, Manfred (1986b). Hamburger Bankengeschichte. Mainz: von Hase und Koehler.
- Pohl, Manfred (1982a). *Konzentration im deutschen Bankwesen (1848-1980)*. Frankfurt a.M: Fritz Knapp Verlag.
- Pohl, Manfred (1982b). "Die Entwicklung des deutschen Bankwesens zwischen 1848-1871," in Wissenschaftliche Beirat des Instituts für bankhistorische Forschung (ed), *Deutsche Bankengeschichte*. Band 2. Frankfurt a.M: Fritz Knapp Verlag, pp. 143-220.
- Pohl, Manfred (1982c). "Festigung und Ausdehnung des deutschen Bankwesens zwischen 1870 und 1914," in Wissenschaftliche Beirat des Instituts für

- bankhistorische Forschung (ed), *Deutsche Bankengeschichte*. Band 2. Frankfurt a.M: Fritz Knapp Verlag, pp. 223-356.
- Pohl, Manfred (1981). "Gründung die Nationalbank für Deutschland," *Bankhistorisches Archiv: Zeitschrift zur Bankengeschichte*, 7(1), pp. 16-49.
- Pohl, Manfred (1978). "Gründungsboom und Krise," *Bankhistorisches Archiv*, 4, pp. 21-59.
- Pohle, Monika (1995). "Risk, information and noise: risk perception and risk management of French and German banks during the nineteenth century," *Financial History Review*, 2, pp. 25-39
- Pollard, Sydney and Ziegler, Dieter (1992). "Banking and Industrialisation: Rondo Cameron Twenty Years On," in Youssef Cassis (ed), *Finance and Financiers in European History 1870-1960*. New York: Cambridge University Press, pp. 17-38.
- von Poschinger, Heinrich (1879). Bankwesen und Bankpolitik in Preussen, Nach amtlichen Quellen bearbeitet: Die Jahre 1846 bis 1857. Band II. Berlin: Julius Springer.
- Pühle, Hans-Jürgen (1967). Agrarische Interessenpolitik und preußischer Konservatismus im wilhelminischen Reich (1893-1914): Ein Beitrag zur Analyse des Nationalismus in Deutschland am Beispiel des Bundes der Landwirte und der Deutsch-Konservativen. Hanover: Verlag für Literatur und Zeitgeschen.
- Rachel, Hugo and Paul Wallich (1967 [1939]), Berliner Grosskaufleute und Kapitalisten. Berlin: Walter de Gruyter & Co.
- Rajan, Raghuram and Luigi Zingales (2003). "Banks and Markets: The Changing Character of European Finance," *NBER Working Paper* 9595.
- Ramm, Ulrich (1997). "Die deutschen Aktienbanken seit der Mitte des 19. Jahrhunderts," in Franz Bosbach and Hans Pohl with the assistance of Gabriele Jachmich and Christoph Kampmann (eds), *Das Kreditwesen in der Neuzeit/Banking System in Modern History: Ein deutsch-britischer Vergleich*. Munich: K.G. Saur, pp. 69-84.
- Reckendrees, Alfred (2013). "Historische Wurzeln der Deutschland AG," in Ralf Ahrens, Borish Gehlen, and Alfred Reckendrees (eds), *Die "Deutschland AG:" Historische Annärungen an den Bundesdeutschen Kapitalismus*. Essen: Klartext, pp. 57-84.
- Reich, Norbert (1980). "Die Auswirkungen der deutschen Aktienrechtsreform von 1884 auf die Konzentration der deutschen Wirtschaft," in Horn and Kocka (eds), Recht und Entwicklung der Großunternehmen im 19. Und frühen 20. Jahrhundert / Law and the Formation of the Big Enterprises in the 19th and Early 20th Centuries. Göttingen: Vandenhoeck & Ruprecht pp. 123-181.

- Reitmayer, Morten (2006). "Eine Unternehmensgeschichte von innen—Felix Jüdell und die Geschichte der Dresdner Bank," in Eugen-Gutmann-Gesellschaft (ed), Felix Jüdell Erfahrung läßt sich nicht vererben: Dresdner Bank Ihre Entwicklung on 1872 bis 1914. Dresden: Eugen-Gutmann-Gesellschaft, pp. 9-38.
- Reitmayer, Morten (2003). "Der Strukturwandel im Bankwesen und seine Folgen für die Geschäftstätigkeit der Privatbankiers im Deutschen Reich bis 1914," in Wissenschaftliche Beirat des Instituts für Bankhistorische Forschung (ed). Der Privatbankier: Nischenstrategie in Geschichte und Gegenwart: Bankhistorisches Archiv. Beiheft 41, Stuttgart: Franz Steiner Verlag, pp. 11-26.
- Reitmayer, Morten (2001a). "Führungsstile und Unternehmensstrategien deutscher Großbanken vor 1914," Zeitschrift für Unternehmensgeschichte / Journal of Business History, 46(2), pp. 160-181.
- Reitmayer, Morten (2001b). "Zwischen Besitzindividualismus und organisierter Interessenpolitik: Die politischen Einstellungen der Bankiers im deutschen Kaiserreich," *Jahrbuch für Wirtschaftsgeschichte / Economic History Yearbook*, 42(2), pp. 133–160.
- Reitmayer, Morten (1999a). Bankiers im Kaiserreich. Sozialprofil und Habitus der deutschen Hochfinanz. Göttingen: Vandenhoeck & Ruprecht.
- Reitmayer, Morten (1999b). "Aus dem Zentrum in die Nische: Privatbanken und die Unterbringung deutscher Staatsanleihen 1867 bis 1914," *Bankhistorisches Archiv*, 25(2), pp. 71-100.
- Riesser, Jakob (1910 [1911]). *The German Great Banks and their Concentration*. Washington, D.C: United States Monetary Commission.
- Ritter, Gerhard A. (1985). Die deutschen Parteien 1830-1914: Parteien und Gesellschaft im konstitutionellen Regierungssystem. Göttingen: Vandenhoeck & Ruprecht.
- Rosenberg, Hans (1976). *Große Depression und Bismarckzeit: Wirtschaftsablauf, Gesellschaft und Politik in Mitteleuropa*. Berlin: Walter de Gruyter & Co.
- Rostow, Walt W. (1960). *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge: Cambridge University Press.
- Schißler, Hanna (1978). Preußische Agrargesellschaft im Wandel: wirtschaftliche, gesellschaftliche, und politische Transformationsprozesse von 1763 bis 1847. Göttingen: Vandenhoeck & Ruprecht.
- von Schulze-Gaevernitz, Gerhard (1922). *Die Deutsche Kreditbank*. Tübingen: J.C.B. Mohr (Paul Siebeck).

- Schumacher, Hermann (1908). "Geschichte der deutsheen Bankliteratur im 19. Jahrhunder," in Gustav Schmoller (ed), *Die Entwicklung der deutschen Volkswirtschaftslehre im Neunzehnten Jahrhundert*. Leipzig: Duncker & Humblot, part VII, pp. 1-39.
- Schwartz, Hermann (2009). *States Versus Markets: the emergence of a global economy*. 3rd Ed. Basingstoke: Macmillan.
- Screpanti, Ernesto and Stefano Zemagni (2005). *An Outline of the History of Economic Thought*. 2nd Ed. Oxford: Oxford University Press.
- Seabrooke, Leonard (2007). The Social Sources of Financial Power: Domestic Legitimacy and International Financial Orders. Cornell University Press: Ithaca & London.
- Seidenzahl, Fritz (1970). 100 Jahre Deutsche Bank. Frankfurt a.M.: Deutsche Bank Aktiengesellschaft.
- Seidenzahl, Fritz (1961). "Bismarck und die Gründung der Darmstädter Bank," *Tradition: Zeitschrift für Firmengeschichte und Unternehmerbiographie*, Dezember, 6(6), pp. 252-259.
- Seidenzahl, Fritz (1960). "Eine Denkschrift David Hansemanns vom Jahre 1856: Ein a Beitrag zur Geschichte der deutschen Aktienbanken," *Tradition: Zeitschrift für Firmengeschichte und Unternehmerbiographie*, 5(2), 83-92.
- Selwyn, Ben (2011). "Trotsky, Gerschenkron and the political economy of late capitalist development," *Economy and Society*, 40(3), 421-450.
- Sgambati, Stefano (forthcoming [2016]), "Rethinking Banking: debt discounting and the making of modern money as liquidity," *New Political Economy*, 21(3), pp. 274-290.
- Sheehan, James J. (1989). *German History 1770-1866*. Oxford: Oxford University Press.
- Shilliam, Robbie (2009). *German Thought and International Relations: The Rise and Fall of a Liberal Project.* Basingstoke: Palgrave Macmillan.
- Siebert, Horst (2005). Jenseits des Sozialen Marktes: Eine notwendige Neuorientierung der deutschen Politik. Munich: Deutsche Verlags-Anstalt.
- Slattery, Martin (2005). Key Ideas in Sociology. Cheltenham: Nelson Thormes, Ltd.
- Spangenthal, Simon (1903). *Die Geschichte der Berliner Börse*. Berlin: Spangenthal's Verlag.
- Sprenger, Bernd (1982). Geldmengenändergung im Zeitalter der Industrialisierung (1835 bis 1913). Cologne: Greven & Bechtold.

- Steimel, Robert (1963). J. D. Herstatt: Das alte und das neue Bankhaus. Cologne: Self-Published.
- Stern, Fritz (1977). Gold and Iron: Bismarck, Bleichröder, and the building of the German Empire. Harmondsworth: Penguin.
- Stiglitz, Joseph (1985). "Credit Markets and the Control of Capital," *Journal of Money, Credit and Banking*, 17(2), May, pp. 133-152.
- Stiglitz, Joseph and Andrew Weiss (1981). "Credit Rationing in Markets with Imperfect Information," *American Economic Review*, 71(3), June, pp. 393-410
- Story, Jonathan and Ingo Walter (1997). *Political economy of financial integration in Europe: The battle of the systems*. Manchester: Manchester University Press.
- Strange, Susan (1997). Casino Capitalism. Manchester: Manchester University Press.
- Streeck, Wolfgang (2001). "Introduction: Explorations into the Origins of Nonliberal Capitalism in Germany and Japan," in Wolfgang Streeck and Kozo Yamamura (eds), *The Origins of Nonliberal Capitalism: Germany and Japan Compared*. Ithaca: Cornell University Press, pp. 1-38.
- Streeck, Wolfgang (1997). "German Capitalism: Does it exist? Can it survive?" *New Political Economy*, 2(2), pp. 237-256.
- Streeck, Wolfgang and Martin Höpner (2003). "Einleitung: Alle Macht dem Markt?" in Wolfgang Streeck and Martin Höpner (eds), *Alle Macht dem Markt? Fallstudien zur Abwicklung der Deutschland AG*. Frankfurt am Main and New York: Campus Verlag, pp. 11-59.
- Stuebel, Heinrich (1935). Das Verhältnis zwischen Staat und Banken auf dem Gebiete des Preußischen Anleihewesens von 1871-1913. Berlin: Carl Hemanns Verlag.
- Stürmer, Michael, Teichmann, Gabriele and Wilhelm Treue (eds) (1994). *Striking the Balance: Sal. Oppenheim Jr. & Cie. A Family and a Bank.* London: Weidenfeld and Nicolson.
- Taylor, A.J.P. (1988[1945]). The Course of German History: A survey of the development of German history since 1815. London and New York: Routledge.
- Tcherkinsky, Morduch (1922). *The Landschaften and their Mortgage Credit Operations in Germany, 1770-1920.* Rome: Printing Office of the International Institute of Agriculture.
- Teichmann, Gabriele (1995). "Das Bankhaus Oppenheim und die industrielle Entwicklung im Aachener Revier von 1836 bis 1855," in Manfred Köhler and Keith Ulrich (eds). *Banken, Konjunktur und Politik: Beiträge zur Geschichte deutscher Banken im 19. und 20. Jahrhundert.* Essen: Klartext Verlag, pp. 9-23.

- Teschke, Benno (2003). The Myth of 1648: Class, Geopolitics and the Making of Modern International Relations. London: Verso.
- Then, Volker (1997). Eisenbahnen und Eisenbahn unternehmer in der industriellen Revolution ein preußisch / deutsch-englisch Vergleich: Göttingen: Vandenhoeck & Ruprecht.
- Tilly, Richard (2003). *Geld und Kredit in der Wirtschaftsgeschichte*. Stuttgart: Franz Steiner Verlag.
- Tilly, Richard (1999). "Public Policy, capital markets and the supply of industrial finance in nineteenth century Germany," in Richard Sylla, Richard Tilly and Gabriel Tortella (eds), *The State, the Financial System and Economic Modernization*. New York and Cambridge: Cambridge University Press. pp. 134-157.
- Tilly, Richard (1998). "Universal Banking in Historical Perspective," *Journal of Institutional and Theoretical Economics*, 154(1), pp. 5-32.
- Tilly, Richard (1995). "How to Write the History of a Bank Belgium, Holland, Germany, Luxemburg, Switzerland," in Martin G. Fase, Gerald D. Feldman and Manfred Pohl (eds), *How to Write the History of a Bank*. Aldershot: Scolar Press, pp. 68-85.
- Tilly, Richard (1994). "A Short History of the German Banking System," in Manfred Pohl and Sabine Freitag (eds), *Handbook on the History of European Banks*. Aldershot: Edward Elgar. pp. 299-312.
- Tilly, Richard (1992). "Zur Entwicklung der deutschen Großbanken als Universalbanken im 19. und 20. Jahrhundert. Wachstumsmotor oder Machtkartell?," in Sidney Pollard and Dieter Ziegler (eds), *Markt, Staat, Planung: Historische Erfahrungen mit Regulierungs und Deregulierungs versuchen der Wirtschaft.* Scripta Mercaturae Verlag: St. Katharinen, pp. 128-156.
- Tilly, Richard (1990). Vom Zollverein zum Industiestaat: Die wirtschaftlich-soziale Entwicklung Deutschlands 1834 bis 1914. Munich: Deutscher Taschen-Buch Verlag.
- Tilly, Richard (1989). "Banking Institutions in Historical and Comparative Perspective: Germany, Great Britain and the United States in the Nineteenth and Early Twentieth Century," *Journal of Institutional and Theoretical Economics*, 145(1), pp. 189-209.
- Tilly, Richard (1986). "German Banking 1850-1914: Development assistance for the strong," *Journal of European Economic History*, 15 (1), pp. 113-152.
- Tilly, Richard (1978). "Capital Formation in Germany in the nineteenth century," in Peter Mathias and M. M. Postan (eds). *The Industrial Economies: Capital, Labour, and Enterprise*. Cambridge: Cambridge University Press. pp. 382-441.

- Tilly, Richard (1967). "Germany 1815-1870," in Rondo Cameron (ed), *Banking in the Early Stages of Industrialisation*. Oxford: Oxford University Press.
- Tilly, Richard (1966). Financial Institutions and Industrialisation in the Rhineland 1815-1870. Milwaukee and London: University of Wisconsin Press.
- Torp, Cornelius (2011). "The Great Transformation: German Economy and Society 1850-1914," in Helmut Walser Smith (ed), *Oxford Handbook of Modern German History*. Oxford: Oxford University Press, pp. 336-358.
- Torp, Cornelius (2010). "The 'Coalition of "Rye and Iron" under the Pressure of Globalization: A Reinterpretation of Germany's Political Economy before 1914," *Central European History*, 43, pp. 401–427
- Treue, Wilhelm (1980). "Das Privatbankwesen im 19. Jahrhundert," in Helmut Coing and Walter Wilhelm (eds), *Wissenschaft und Kodifikation des Privatrechts im* 19. Jahrhundert. Frankfurt am Main: Vitorrio Klosermann. pp. 94-127
- Ullmann, Hans-Peter (2005). Der deutsche Steuerstaat. Geschichte der öffentlichen Finanzen vom 18. Jahrhundert bis heute, Munich: C.H. Beck.
- Ullmann, Hans-Peter (1995). *Das Deutsche Kaiserreich 1871-1918*. Frankfurt a.M.: Suhrkamp.
- Ullmann, Hans-Peter (1990). "Der Frankfurter Kapitalmarkt um 1800: Entstehung, Struktur und Wirken einer modernen Finanzierungsinstitution," *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte*, 77(1), pp. 75-92.
- Ullmann, Hans-Peter (1987), "The Emergence of Modern Public Debts in Bavaria and Baden Between 1780 and 1820," in Peter-Christian Witt (ed), Wealth and Taxation in Central Europe: The History and Sociology of Public Finance. Berg: Leamington Spa. pp. 63-79.
- Varoufakis, Yanis (1991). Rational Conflict. Oxford: Blackwell Publishers.
- Veblen, Thorsten (1915). *Imperial Germany and the Industrial Revolution*. New York: The Macmillan Company.
- Verdier, Daniel (2002). Moving Money. Cambridge: Cambridge University Press.
- Vierhaus, Rudolf (1988). *Germany in the Age of Absolutism*. Cambridge: Cambridge University Press.
- Vitols, Sigurt (2004). "Changes in Germany's Bank-Based Financial System: A Varieties of Capitalism Perspective," *Discussion Paper SP II 2004—03*, Wissenschaftszentrum Berlin.
- Vitols, Sigurt (2001). "The Origins of Bank-Based and Market Based Financial systems: Germany, Japan and the United States," in Wolfgang Streeck and Kozo

- Yamamura, eds., *The Origins of Nonliberal Capitalism: Germany and Japan*. Ithaca: Cornell University Press, pp. 171-199.
- Weber, Adolf (1915). Depositenbanken und Spekulationsbanken: Ein Vergleich deutschen und englischen Bankwesens. Munich and Leipzig: Duncker & Humblot.
- Wehler, Hans-Ulrich (1995). Deutsche-Gesellschaftsgeschichte: Von der «Deutschen Dopelrevolution» bis zum Beginn des Ersten Weltkrieges 1849-1914. Band III. Munich: C.H. Beck.
- Wehler, Hans-Ulrich (1987). Deutsche-Gesellschaftsgeschichte: Von der Reformära bis zur industriellen und politischen «Deutschen Dopelrevolution» 1815-1845/49. Band II. Munich: C.H. Beck.
- Wehler, Hans-Ulrich (1985[1973]). *The German Empire: 1871-1918*. Oxford and New York: Berg Publishers. Translated by Kim Traynor.
- Weigt, Anja (2005). Der deutsche Kapitalmarkt vor dem Ersten Weltkrieg: Gründerboom, Gründerkrise und effizienz des deutschen Aktienmarktes bis 1914. Frankfurt am Main: Fritz Knapp Verlag.
- Wellhöner, Volker (1989). *Großbanken und Großindustrie im Kaiserreich*. Göttingen: Vandenhoeck & Ruprecht.
- Wellhöner, Volker and Harald Wixforth (2003). "Finance and Industry," in Sheilagh Ogilvie and Richard Overy (eds), *Germany A New Social and Economic History Volume III: Since 1800*. New York and London: Arnold Press.
- Wetzel, Christoph (1996). Die Auswirkungen des Riechsbörsengesetzes von 1896 auf die Effektenbörsen im Deutschen Reich, insbesondere auf die Berliner Fondsbörse. Münster: Lit Verlag.
- Whale, P. Barret (1930). *Joint-Stock Banking in Germany: A Study of the German Creditbanks before and after the war*. London: Macmillan & Company.
- Windolf, Paul (ed) (2005). Finanzmarkt Kapitalismus: Analysen zum Wandel vom Produktionsregimen. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Wixforth, Harald (2002). "Industriekredit und Kapitalmarktfinanzierung zwischen Reichsgründung und Weltwirtschaftskrise," in Wissenschaftliche Beirat des Instituts für bankhistorische Forschung e.V. (ed), Bankkredit oder Kapitalmarkt: Alternativen der Industriefinanzierung in Deutschland. Bankhistorisches Archiv, Beiheft 40. Stuttgart: Franz Steiner Verlag, pp. 15-38.
- Wixforth, Harald (1997). "Bank für Sachsen oder Bank für das Reich? Zur Geschichte der Dresdner Bank von 1872-1914," in Simone Lässig and Karl Heinrich Pohl (eds), Sachsen im Kaiserreich: Politik, Wirtschaft und Gesellschaft im Umbruch. Weimar, Cologne and Vienna: Böhlau Verlag, pp. 309-342.

- Wixforth, Harald and Dieter Ziegler (1994). "The niche in the universal banking system: the role and significance of private bankers within German industry 1900-1933," *Financial History Review*, 1, pp. 99-119.
- Wolff, Siegfried (1915). Das Gründungsgeschäft im deutschen Bankgewerbe: Mit einer vielfarbigen Kurventafel: Gründung von Aktiengesellschaften 1883- 1912. Stuttgart und Berlin: Cotta Nachf.
- Wood, Ellen Meiksins (2002). *The Origins of Capitalism: a longer view*. London: Verso.
- Wood, Ellen Meiksins (1981). "The Separation of the Economic and the Political in Capitalism," *New Left Review*, I/127, May-June, pp. 66-95.
- Zschaler, Frank (2002). "Erzwungene Reorientierung im Zeichen der deutschen Teilung," in Hans Pohl (ed), *Geschichte des Finanzplatz Berlin*. Frankfurt a.M.: Fritz Knapp, pp. 215-252.
- Ziegler, Dieter (2014). "Die Entstehung der Reichsbank 1875: Die erste deutsche Einheitswähurung und der Goldstandard," in Dieter Lindenlaub, Carsten Burhop and Joachim Scholtyseck (eds), *Schlüsselereignisse der deutschen Bankengeschichte*. Stuttgart: Franz Steiner Verlag, pp. 166-177.
- Ziegler, Dieter (2009). "German Private Banks and German Industry, 1830-1938," in Youssef Cassis, Philip Cottrell, Monika Pohle Fraser and Iain L. Fraser (eds). *The World of Private Banking*. Farnham: Ashgate.
- Ziegler, Dieter (2005a). "Das deutsche Modell bankorientierter Finanzsysteme (1848-1957)," in Paul Windolf (ed.). Kölner Zeitschrift für Soziologie und Sozialpsychologie, Sonderheft 45: Finanzmarkt-Kapitalismus. Analysen: Wiesbaden. pp. 276-293.
- Ziegler, Dieter (2005b). "Das Zeitalter der Industrialisierung (1815-1914)," in Michael North (ed). *Deutsche Wirtschaftsgechichte: ein Jahrtausend im Überblick*. Munich: C.H. Beck, pp. 197-286.
- Ziegler, Dieter (1998). "Universal Banking in Continental Europe: 1830-1938," in Clara Eugenia Núñez (ed), *Finance and the Making of the Modern Capitalist World* 1750-1931. Sevilla: Universidad de Sevilla.
- Ziegler, Dieter (1997). "The influence of banking on the rise and expansion of industrial capitalism in Germany," in Alice Teichova et al. (eds), *Banking, trade and industry: Europe, America and Asia from the thirteenth to the twentieth century*. CUP. pp. 131-156
- Ziegler, Dieter (1996). Eisenbahnen und Staat im Zeitalter der Industrialisierung. Stuttgart: Franz Steiner Verlag.

- Zimmermann, Hubert (2012). "No Country for the Market: the Regulation of Finance in Germany after the Crisis," *German Politics*, 21(4), December, pp.484–501.
- Žmolek, Michael Andrew (2013). Rethinking the Industrial Revolution: Five Centuries of Transition from Agrarian to Industrial Capitalism. Leiden: Brill.
- Zysman, John (1983). Governments, Markets and Growth: financial systems and the politics of industrial change. Ithaca: Cornell University Press.