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DISTANCE, RATING SYSTEMS AND ENTERPRISE FINANCE

**ETHNOGRAPHIC INSIGHTS FROM A COMPARISON
OF REGIONAL AND LARGE BANKS IN GERMANY**

Franz Flögel



Distance, Rating Systems and Enterprise Finance

In response to the credit crunch during the global financial crisis of 2007–2008, many have called for the re-establishment of regional banks in the UK and elsewhere. In this context, Germany's regional banking system, with its more than 1,400 small and regional savings banks and cooperative banks, is viewed as a role model in the financing of small and medium-sized enterprises (SMEs). However, in line with the 'death of distance' debate, the universal application of ICT-based scoring and rating systems potentially obviates the necessity for proximity to reduce information asymmetries between banks and SMEs, calling into question the key advantage of regional banks.

Utilising novel ethnographic findings from full-time participant observation and interviews, this book presents intimate insights into regional savings banks and compares their SME lending practices with large, nationwide-operating commercial banks in Germany. The ethnographic insights are contextualised by concise description of the three-pillar German banking system, covering bank regulation, structural and geographical developments, and enterprise finance. Furthermore, the book advances an original theoretical approach that combines classical banking theories with insights from social studies of finance on the (ontological) foundation of new realism. Ethnographic findings reveal varying distances of credit granting depending on the rating results, i.e. large banks allocate considerable credit-granting authority to local staff and therefore challenge the proximity advantages of regional banks. Nevertheless, by presenting case studies of lending to SMEs, the book demonstrates the ability of regional banks to capitalise on proximity when screening and monitoring financially distressed SMEs and explains why the suggestion that ICT can substitute for proximity in SME lending has to be rejected.

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Preface

As a result of the introduction of modern information and communication technologies and various regulatory requirements, banks' decision-making procedures have changed profoundly in the past two decades. By using computer-assisted standardised instruments, in particular credit scoring (in the private customer business) and credit rating (in case of corporate customers), at the extreme a fully automated credit decision is possible nowadays. This automation allows remote lending; thus, also in continental Europe, which traditionally has been dominated by trusting *Hausbank* relationships, various providers have for some time been granting loans in the private client business using only electronic and telephone contact. In business with small and medium-sized enterprises (SMEs), in contrast, spatial proximity to a personal contact at the bank remains important as matters stand.

From both a banking business, i.e. managerial, and a regional economic development point of view, the increasing standardisation of lending is highly controversial. On the one hand, standardisation leads to an objectification of lending decisions and enables efficiency increases, from which clients can, in principle, benefit. On the other hand, local competence is reduced in highly standardised decision-making processes, which eliminates local knowledge and so-called soft information from lending decisions. In addition, financial models, like rating algorithms, can be manipulated, as was the case for the FICO consumer score in the USA, and research has shown that models are able to develop performative effects, thus promoting uniform action and hence reinforcing a volatile economy.

Despite these well-known problems, the importance of model-based risk controlling has even tended to increase in the aftermath of the financial crisis. As this study by Franz Flögel shows, standardisation and model-based risk controlling not only affect large international banks but also the small and regional German savings and cooperative banks, which are considered to be the *Hausbanken* and patient lenders of SMEs. Considering the importance of these regional banks for access to finance, especially in peripheral and structurally weak regions, the question of whether standardisation undermines regional banks' ability to consider local knowledge and soft information is relevant not only for research but also for practice.

Franz Flögel tackles this question by comparing the lending practices of regional savings banks and large banks in Germany. His ethnographic study unfolds the everyday work of a regional savings bank to the reader and demonstrates the inadequacy of making credit decisions only on the basis of rating scores in the messy business of lending to small firms. The in-depth comparison with a large bank demonstrates that despite standardisation and the binding use of rating systems, regional banks still capitalise on proximity and consider soft information when lending to SMEs. This finding has been taken for granted in research but has actually not been tested before. It is desirable that this and other key results of the study will be taken up by a broad professional audience and stimulate more research on banking, space and (uneven) regional development.

Eichstätt, January 2018 Hans-Martin Zademach

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The ethnographic study in hand takes the reader into the ‘society’ of banks and SMEs. The conducted participant observation enabled intimate insights into the everyday work of bank employees and their clients. I am very grateful to all participants, observed or interviewed, who permitted the insights into their professional life. I hope that the more than 60 individuals involved, who cannot be named for obvious reasons, find their everyday business ‘society’ accurately depicted. If you will allow me the personal comment, I did not find a ‘society’ of ‘greedy’ bankers, neither in the savings bank nor in the big bank studied in-depth, but rather a ‘society’ of pragmatic cooperation, tough competitions, restricting hierarchies, feeling of responsibility and caring supervisor. A ‘society’ quite familiar to me after more than six years in the sciences. My special thanks go to the more than 60 individuals of the banks and organisations studied as well as to the ‘door openers’ Franz-Josef Arndt and Thorsten Wehber from the respective banking associations who provided me with the information necessary to produce this work.

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Gelsenkirchen, February 2018 Franz Flögel

Abbreviations

BaFin	<i>Bundesanstalt für Finanzdienstleistungsaufsicht</i> (English: Federal Financial Supervisory Authority)
Bn	Billion
BWA	<i>Betriebswirtschaftliche Auswertung</i> (English: business assessment)
DCF	Discounted cash-flow
DSGV	<i>Deutscher Sparkassen- und Giroverband</i> (English: German Savings Banks Association)
ECB	European Central Bank
HIC	High-income countries
ICT	Information and communication technologies
IRA	<i>Interner Ratingansatz</i> (English: internal rating-based approach)
KSA	<i>Kreditrisikostandardansatz</i> (English: credit risk standardised approach)
KWG	<i>Gesetz über das Kreditwesen</i> (English: German Banking Act)
LMIC	Low- and middle-income countries
LGD	Loss given default
MaRisk	<i>Mindestanforderungen an das Risikomanagement</i> (English: minimum requirements for risk management)
OSPlus	OneSystemPlus (ICT system of the Savings Banks Financial Group)
PD	Probability of default
SMEs	Small and medium-sized enterprises
SolvV	<i>Solvabilitätsverordnung</i> (English: Solvency Regulation)
SSoF	Social studies of finance
VoC	Varieties of capitalism

1 Introduction

Germany evoked several surprises during the global financial crisis of 2008. The high level of engagement of Germany's banking sector in US securities and the consequently substantial losses contradict the common view of a domestic-oriented, bank-based German financial system. Between 2007 and 2010, German banks wrote off 2% of their assets. Only the USA, the country where the financial crisis originated, topped this (Hardie et al. 2013: 12). Even more surprisingly, it was not only the big globally operating banks like Deutsche Bank and Commerzbank that needed to write off many US securities, but also government-owned banks like IKB and a range of *Landesbanken* (Hardie and Howarth 2013a, 2013b). This observation sharply contradicts the widespread view that Germany's bank-based financial system, with its domestic-oriented government-owned banks, remains rather disentangled from global finance (Beyer 2009; Hardie and Howarth 2013b).

Yet despite these heavy losses, the financial crisis hardly affected the financial sector in total or lending to firms in particular (Gärtner 2009a, 2009c; Gärtner and Flögel 2013; Hardie and Howarth 2013b). No bank run occurred and lending to domestic firms decreased only moderately (Gärtner and Flögel 2015). Furthermore, the crisis only temporarily affected the German economy, which quickly returned to growth, while the unemployment rate remained low (Bruff and Horn 2012). In fact, public debates see the German model as a 'winner' of the crisis and prime example of a competitive economy (Kirchner et al. 2012; The Economist 14.04.2012). This represents a remarkable turnaround of public and academic perceptions, as Germany was seen as the *Kranker Mann Europas*, or sick man of Europe, a decade ago (e.g. Die Welt 06.01.2003; Kitschelt and Streeck 2004; Bruff and Horn 2012; Audretsch and Lehmann 2016).

A range of factors explain the positive performance of the German economy during the crisis: the strong manufacturing sector in relation to the financial sector; the high competitiveness of Germany's small and medium-sized enterprises (SMEs), especially the so-called hidden champions; the beneficial euro exchange rates; and the coordinated labour market organisation which enabled the implementation of short-time work under the short-time allowance scheme (Beck and Scherrer 2013). Furthermore, Gärtner (2009a) and others argue that the

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decentralised banking system ideally supported Germany's firms during the crisis and also accounts for the success of the German model (e.g. Hardie and Howarth 2013b).

Germany's banking system shows several special features in comparison to the banking systems of other OECD countries. The public- and cooperative-owned banks preserve a significant market share in Germany and compete as universal banks with their private-owned peers (Hackethal et al. 2006; Klagge 2009). From a geographical point of view, the more than 1,400 regional (mainly cooperative and savings) banks hallmark the decentralised German banking system. These banks are regional because as independent banks they operate in regionally designated market areas. Thus, the so-called *Regionalprinzip*, or regional principle, obliges savings banks to run branches only in the area of their dedicated municipalities (cities, towns or counties) and to lend to the institutions, companies and private individuals of their municipalities first. Cooperative banks apply this regional segregation in a similar way (Bülbul et al. 2013). Gärtner (2009a, 2011) and others argue that especially the regional savings and cooperative banks continued handing out credits during the financial crisis (Hardie and Howarth 2013b; Gärtner and Flögel 2015). Because of this lending, German firms experienced few financial constraints and overcame global economic weakening rather well, rendering the firms particularly competitive once the economy recovered (Abberger et al. 2009).

Figure 1.1 supports this argument. From the peak in 2008 to the lowest value in 2010, all banks reduced overall lending to German non-financial firms and the self-employed by €47 billion (bn). The so-called German big banks and especially the *Landesbanken* greatly reduced credits granted. In the same period, the more than 1,400 regional savings and cooperative banks actually increased credit volume by €5.7 bn and €8 bn, respectively, and thus attenuated the overall credit cutdown. In fact, in 2015 all savings banks together handed out the most credits to firms, followed by the cooperative banks. These banking groups have increased credits almost steadily since 2007, whereas big banks and, since the financial crisis also *Landesbanken*, have cut down lending. Therefore, the regional savings and cooperative banks contribute to the favourable credit supply in Germany, especially during the financial crisis.

This line of argumentation assumes (implicitly) that the regional savings and cooperative banks operate differently from the centralised big banks and *Landesbanken*. Disentangled from global finance, regional banks preserve close relationships to their SME customers and were willing and able to support their SMEs during the crisis. The book in hand scrutinises this widespread assumption. Against the background of homogenising bank regulation and the standardisation of processes, especially the use of rating systems by all modern banks, the study investigates if lending to SMEs by regional savings and cooperative banks still differs from such lending by large banks. Put differently: What differences exist in the credit-granting processes to SMEs between regional and large banks?

To this end, the credit-granting processes of regional and large banks are compared in this book. In detail the book describes and contrasts the organisation of

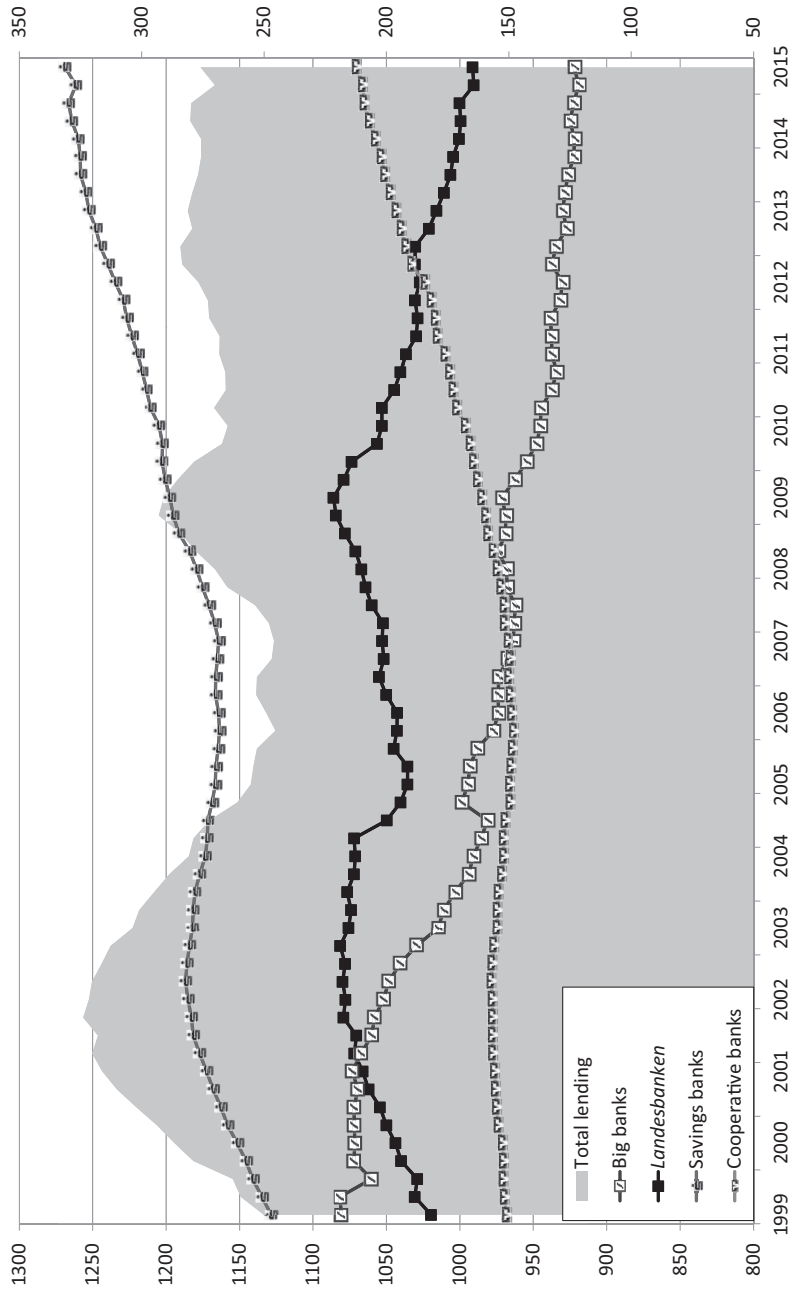


Figure 1.1 Credits to non-financial firms and the self-employed by banking groups in bn euros

Source: author's figure based on Deutsche Bundesbank 2015

4 Introduction

credit decision making to SMEs of one savings bank and one German big bank by utilising ethnographic findings from participant observation during a two-month, full-time internship in the regional savings bank and expert interviews with employees from the big bank. In the big bank, a branch in the same region as the savings bank that competes for the same SME clients was analysed. Furthermore, the study relates these findings to eight additional banking cases (examined in less detail) and analyses documents and secondary statistics to estimate the generalisability of the empirical results. The analysis focuses on the differences in the geographical organisation of credit decision making.

The following section of this introduction places this work in the research field of the geography of finance and introduces the classification of decentralised versus centralised banking, which represents the conceptual starting point of this study (Section 1.1). Section 1.2 sketches the influence of credit decisions for economic development, indicates the impact of distance on lending and problematises a simplistic understanding of distance in modern banking. Section 1.3 clarifies the research contributions of the book and outlines its proceedings.

1.1 The geography of finance and SME lending

More than two decades ago Richard O'Brien (1992) declared "the end of geography". Because of the development of information and communication technologies (ICT) and deregulation, "geographical location no longer matters in finance, or matters much less than hitherto" (O'Brien 1992: 1). Local banking and financial markets were important in the past because co-location was vital for the communication and transmission of information. However, with the advancement of ICT and the lessening of regulatory boundaries the importance of co-location decreased and global finance arose.

The internationalisation of finance is now a fact. Nevertheless, partly provoked by O'Brien's (1992) claim (Martin 1994; Pike and Pollard 2010), a geographical line of research has emerged that studies the role of geographical proximity in finance (Schamp 1993; Leyshon and Thrift 1997; Klagge 1995; Martin 1999). On the one hand, proximity to certain customers in fact lost its importance because of advances in distance communication technologies, like telephone and online banking (Marshall and Richardson 1996; Leyshon and Thrift 1999; Martin 1999; Leyshon and Pollard 2000). Yet, on the other hand, proximity to other financial actors such as competitors, service providers, public bodies and other business partners remained important or even gained relevance (Thrift 1994; Lo 2003; Clark 2005; Hall and Appleyard 2009; Wójcik 2009; Schamp 2009). The financial sector thus tends to concentrate in global financial centres and offtake from certain peripheral regions and districts (e.g. Leyshon and Thrift 1995; Marshall and Richardson 1996; Pollard 1999; Martin 1999).

Scholars assess this logic of spatial concentration in finance – at the risk of oversimplification – in two opposing ways. On the one hand, they explore and explain the development of global and national financial centres (Taylor et al. 2003; Lo 2003; Grote 2004; König et al. 2007; Hall and Appleyard 2009; Schamp

2009; Dörry 2015). Thus, knowledge spillovers and other agglomeration economies explain the innovativeness and competitiveness of financial centres. In line with territorial innovation models (Maskell and Malmberg 1999; Rehfeld 1999; Bathelt et al. 2004), financial centres possess specific atmospheres that boost the innovativeness of the clustering financial sector (comparable to clusters of high-tech firms). An innovative and large financial sector, in turn, fosters economic growth (King and Levine 1993; Levine 2005), wherefore the spatial concentration of finance positively impacts economic growth.

On the other hand, scholars evaluate the development of global finance centres critically. The world city/global city research direction expresses this criticism (Friedmann and Wolff 1982; Friedmann 1986; Sassen 2001; Therborn 2011). According to this line of research, a handful of interconnected global cities with massive financial sectors execute immense power and control over the world economy. In peripheral regions the spatial concentration of finance leads to losses of autonomy and poor capital provision, which reinforces polarised economic development (Chick and Dow 1988; Klagge and Martin 2005; Gärtner 2009b, 2013). Furthermore, the research line of financialisation observes “the growing influence of capital markets, their intermediaries, and processes” (Pike and Pollard 2010: 29) and critically assesses their global spread (Leyshon and Thrift 2007; French et al. 2011). The short-term profit orientation of a financialised financial sector hampers economic development in the long run (Froud et al. 2000; Aglietta and Breton 2001; Epstein 2005; Theurillat et al. 2010). Thus, the spatial concentration of finance negatively impacts economic growth.

Both views expect a further spatial concentration of the finance sector. Yet, this development is not mandatory. Thus, Wójcik and MacDonald-Korth (2015) and Gärtner and Flögel (2017) actually show that the spatial concentration of banking and finance (in terms of financial employees) did not increase in Germany between 2002 and 2012. In this light it is posited that the same argumentation which explains why the financial sector tends to concentrate (information advantages in financial centres) also explains why finance stays decentralised (Gärtner 2011). If spatial proximity between financial intermediaries and clients remains important in terms of gaining information, then instead of concentration, a distribution across space which follows the spatial distribution of its customers is to be expected. And in fact Sternberg and Litzenberger (2004) and Titze et al. (2011) show that retail finance remains decentralised in Germany, whereas auxiliary services to finance tend to concentrate in space.

The research direction of small firm financing supports notions of the usefulness of decentralised banking. Small and regional banks have advantages in processing proprietary information in comparison to centralised large banks. Therefore, they are better off when financing informationally opaque SMEs (Stein 2002; Berger et al. 2005; Udell 2008, 2009; Alessandrini 2009a; Wray 2010; Behr et al. 2013). Thus, a decentralised financial system with many regional banks tends to yield advantages in SME financing, especially in peripheral regions, and balances regional economic disparities (Chick and Dow 1988; Gärtner 2009b).

Klagge (1995) proposed a classification of decentralised and centralised banking and also applied this to other financial intermediaries (Klagge and Martin 2005; see also Verdier 2002). With the global financial crisis of 2008 this topic gained new attention (Gärtner 2009a, 2011; Gärtner and Flögel 2013, 2014; Wójcik and MacDonald-Korth 2015; Klagge et al. 2017), because the decentralised German banking system with its more than 1,400 regional savings and cooperative banks attenuated a credit crunch. Two reasons potentially explain why regional banks were able to extend lending to firms during the financial crisis (Gärtner and Flögel 2015). Firstly, regional banks refinance their lending from regional savings, which make them independent of global finance; in this way regional banks did not face a funding gap during the crisis. Secondly, regional banks grant credit to regional customers at short distance, which gives them informational advantages. Therefore, the credit risk assessment of these banks was superior and they faced fewer write-offs during the crisis.

Although this argumentation in favour of decentralised banking appears conclusive, open questions remain if one considers the actual business practices of modern banks. Standardisation of banks' credit-granting processes and bank regulations tend to centralise credit decisions, despite the regional independency of banks (Leyshon and Thrift 1999; Degryse et al. 2009; Gärtner and Flögel 2013; Dixon 2014). Therefore, the predicted end of geography in finance (O'Brien 1992) remains a current issue (Petersen and Rajan 2002; Pieper 2005). Addressing the issue, Degryse et al. (2009: 182) ask provocatively, "Is distance [in banking] dead? Or will it die another day?"

In Germany all regional savings banks use the same rating systems, centrally developed by an affiliated company of the German Savings Banks Association (DSGV), to assign rating scores to their business clients (Sparkassen Rating and Risikosysteme GmbH 2010). As the rating score is key information for credit decisions, expressing the probability of default, it is questionable if savings banks gain informational advantages from short metric distance to firms (Gärtner and Flögel 2013, 2014). In other words, does the widespread assumption that regional banks decide at a shorter distance to their SME clients than large banks and thus gain information advantages in SME lending hold true? The study in hand tackles this question empirically by comparing the credit decision-making processes of regional and large banks in Germany.

Analysing SME lending processes and the practices of banks is not only the next step with regard to a classification of decentralised versus centralised banking, but also helps to fill a more general research gap. More than 10 years ago Pollard (2003: 430) argued "that firm finance is something of a 'black box' in economic geography, a largely taken-for-granted aspect of production". She called for "detailed analysis [of firm finance], not simply to 'add' to our knowledge [. . .], but in order to further develop and refine our understanding of uneven development" (Pollard 2003: 430). To date, scholars have analysed the link between SMEs and financial intermediaries from a geographical perspective, mainly in the field of venture capital (Martin et al. 2005; Zademach 2009; Wallich 2009; Klagge and Peter 2009; Scheuplein 2013), but also for bank-based

SME lending (Handke 2011; Panzer-Krause 2011). Yet, to the author's knowledge, there has been no in-depth study of banks' decision making practices in SME lending from a geographical perspective. Therefore, more than 10 years after Pollard's (2003) call, the need for more research on banking and firm financing continues (e.g. Appleyard 2013; Baumeister and Zadernach 2013; Gärtner and Flögel 2013; Hall 2013).

1.2 Credit decisions and rating systems

Banks and other financial intermediaries such as venture capital firms and investment funds influence economic development based on their decisions as to which firms and projects receive external capital (e.g. loans, equity capital). Depending on the success of these (credit) investment decisions, economic development and decline is co-determined by finance; e.g. banks finance innovative and successful firms or inflate asset bubbles. To conduct credit decisions, banks and other financial intermediaries collect private and public information about potential borrowers. Furthermore, they monitor borrowers and execute corporate governance. By doing so, banks and other financial intermediaries facilitate capital allocation and overcome information asymmetries between borrowers and lenders (Levine 1997; Engerer and Schrooten 2004; Klagge 2009; Beck et al. 2009; Turner 2010).

Research of distance and small firm financing argues that the lending decisions of banks are geographical rather than neutral. Distance influences lending, as more distant banks receive less knowledge about borrowers than banks that conduct lending decisions at a short distance to borrowers (Stein 2002; Alessandrini et al. 2009a; Behr et al. 2013). However, short geographical distance is neither necessary nor sufficient to facilitate knowledge exchange (Boschma 2005; Torre and Rallet 2005; Torre 2008; Bathelt and Henn 2014). This argument has special importance in lending to SMEs, because in contrast to high finance (Vopel 1999; Lo 2003; Hall and Appleyard 2009) banks have standardised most processes in the SME retail business (Pieper 2005; Riese 2006). Furthermore, several employees are involved in the credit decisions of banks to SMEs as bank regulation instructs (BaFin 2012a). Thus, to understand the role of distance in modern banks' credit decisions, the interplay of a range of actors and the standardisation of processes must be taken into consideration.

Rating systems in particular standardise the credit decision processes of banks. Banks use internal rating systems to assess the creditworthiness of SMEs, i.e. to calculate their default probability. The use of rating systems tends to shift the credit decisions from banks' local staff (that execute the interviews with the customers) to the algorithms of the rating systems (Leyshon and Thrift 1999; Martin 1999; Leyshon and Pollard 2000). As the rating scores represent key information in the credit decision processes of banks, an analysis of banks' lending decisions must take rating systems into account. Interestingly, Berger et al. (2011) show for the USA that not only large banks but also regional banks rely on rating scores for credit decisions. This observation contradicts the assumption that regional banks decide SME credits at a shorter distance to their customers and therefore achieve

informational advantages. It is known that regional savings and cooperative banks use rating systems in SME lending in Germany, too (Behr et al. 2013). However, the extent to which rating systems influence lending remains unclear. The study in hand aims to answer this question empirically by explicitly considering the influence of rating systems in the credit-granting processes of banks. Pursuing this aim requires conceptual work, as economic theories on distance and small firm finance tend to neglect rating systems and only consider the human actors – e.g. customer advisors, customer relationship managers, supervisors, bank CEOs – of the credit-granting processes. Therefore, one aim of this work is to elaborate a conceptualisation of decision making in bank-based (SME) lending which explicitly considers rating systems as non-human actors that influence credit decisions. Three strands of theory inform the conceptualisation:

- Firstly, the social studies of finance (SSoF) and especially the theory on the performativity of economic theories and models help to trace the influence of rating systems on credit decisions (Callon 1998; MacKenzie 2006).
- Secondly, on the metatheoretical level, actor-network theory (ANT) captures the power of non-human actors to influence and constrain human actions (Callon 1999; Latour 2005).
- Thirdly, this study builds on the new realist ontology (Gabriel 2013, 2015) to incorporate these strands of rather anti-realist theory with theories on distance and small firm finance that rely on a realist perspective.

With these three strands of theory this study conceptualises rating systems as (asymmetric) non-human actors that conduct credit decisions in cooperation with humans.

1.3 Research contributions and proceedings

Building on the classification of decentralised versus centralised banking and the research on distance and small firm finance, this book compares the SME credit-granting processes of regional and large banks in Germany. Germany's banking system tends to be a striking example of how decentralised banking smoothens SME financing and thus fosters the competitiveness of SMEs. It is seen as an alternative model to centralised banking systems, like the UK, with few international banks which are accused of offering insufficient support for domestic SMEs (The Economist 14.04.2012; Greenham and Prieg 2015). The book in hand aims to contribute to this discussion of alternative banking models with the comparison of regional and large banks. The comparison identifies differences in the organisation of credit-granting processes and discusses which effects these differences have on access to finance for SMEs. In this context, the question of whether regional banks decide credit at shorter distances than large banks and thus gain information advantages is addressed using the comparison of selected banks.

With this approach, the debate on distance and small firm finance is advanced. To the widespread assumption, regional banks gain informational advantages in

lending at short distances to informationally opaque SMEs (Berger et al. 2005; Alessandrini 2009a; Behr et al. 2013). However, against the background of bank regulation, standardisation of processes and especially the use of rating systems, it remains unclear whether modern regional banks decide credits at a shorter distance to their SME clients than large banks. The comparison reveals varied distances of credit decision making; hence the big bank studied in-depth decides on certain SME credits at shorter distances than the observed savings bank. Nevertheless, the comparison suggests that the assumption of informational advantages for regional banks holds true.

Furthermore, the book contributes to the debate on geographical distance and knowledge transfer. It is well recognised that short geographical distance (e.g. co-location) between actors says little about their capacity to exchange knowledge (Boschma 2005; Torre 2008; Bathelt and Henn 2014). This work analyses information transmission in credit decision processes and discusses metric and non-metric aspects of distance between the actors involved and their interplay. According to the findings of the analysis, geographical distance tends to be subordinated to organisational embeddedness for information transmission in credit decisions of the banks studied. Nevertheless, face-to-face interaction plays a role for the reliable transmission of so-called soft information.

This book also contributes to the comparative financial systems studies on decentralised versus centralised banking systems, i.e. the geographical classification of banking systems. In line with the distance and small firm finance debate, scholars argue that proximity to customers is an important characteristic of decentralised banking and is associated with enhanced access to finance for SMEs (Klagge 1995; Gärtner and Flögel 2014, 2017). However, if regional banks do not reach credit decisions at a shorter distance to their clients than large banks, then the proximity argument for a geographical classification loses its validity. According to the findings from the comparison, the savings bank observed tends to decide at shorter distances than the big bank studied in-depth when soft information influences SME credit decisions most, indicating the explanation power of the proximity argument for the geographical classification. In this context, the book relates the geographical classification of banking to the debate on diversity in banking. Researchers commonly approach diversity by differentiating according to the ownership structure of the banks (Ayadi et al. 2009, 2010) and argue that diversity enhances the resilience of banking systems. This book argues that distance differences in the credit granting of regional and supraregional banks foster divergent lending decisions and hence diversity.

Finally, this book contributes to the research field of SME finance and (uneven) regional development (Chick and Dow 1988; Dow and Rodríguez-Fuentes 1997; Klagge 2003; Pollard 2003; Klagge and Martin 2005; Gärtner 2008). Despite several calls for research (Baumeister and Zademach 2013; Hall 2013), studies on the causalities between the centralisation of banks, firm finance and polarised regional economic development are still rare. The findings presented in this book support the notion of a positive association between decentralised banking and reduced credit rationing to SMEs.

The remainder of this book is structured in four chapters. Chapter 2 deduces the theory basis for the empirical comparison and is subdivided into four sections. Section 2.1 places this research in the broader field of financial system studies, outlining the potential of the geographical classification of decentralised and centralised banking to explore the impact of finance on economic development. Section 2.2 reviews theories and empirical studies that explain why distance matters in SME finance, and Section 2.3 critically advances the previous section by conceptualising rating systems as non-human actors that influence credit decisions. Taking these three sections into account, Section 2.4 outlines how distance in bank-based lending to SMEs is approached. Chapter 3 introduces the research object, the German banking system, and outlines the methodology. In this context, Section 3.1 justifies the selection of ethnography as the research methodology and explains the empirical execution of this study. Section 3.2 describes the German banking system, and Section 3.3 introduces the actual bank cases under study. Chapter 4 presents the empirical results of the study by contrasting the SME lending of regional and large banks in three parts. Section 4.1 outlines the informational sources that banks draw upon when conducting lending decisions, and Section 4.2 compares the organisation of lending processes between the regional and large banks by reviewing the human and non-human actors involved. Section 4.3 discusses the effects of the observed differences on SME finance. The conclusion is outlined in Chapter 5.

2 Financial systems, the geography of firm financing and rating systems

2.1 Financial systems and economic development

Following Schmidt and Tyrell (2004: 21ff), the financial sector is defined as:

That part – or sector – of an economy which offers and provides financial services to the other sectors of the economy. It consists of the central bank, other banks, non-bank financial institutions, organized financial markets and the relevant regulatory and supervisory institutions.

The financial sector is one part of a financial system. A *financial system* in general is defined as “the interaction between the supply of and the demand for the provision of capital and other finance-related services” (Schmidt and Tyrell 2004: 21). In addition to the financial sector, a financial system also comprises the demands of the users of financial services (e.g. savings and investment preferences) and the state that demands and regulates finance. Furthermore, the flows of information and influence (or power) that mirror financial flows belong to a financial system (Schmidt and Tyrell 2004; Zademach 2014).

This chapter elaborates on the connections between financial systems and economic development and focuses on the institutional design of financial systems. It shows the need of structural classifications of financial systems in light of “too much finance” (Arcand et al. 2012) and outlines the rationales for a geographical classification of banking systems in the context of the diversity in banking debate. Section 2.1.1 reviews the finance–growth nexus. Section 2.1.2 considers the structure of financial systems and indicates that several structural variables influence economic development. Section 2.1.3 demonstrates that the geographical classification explains the varying lending practices of decentralised and centralised banks and tends to be one relevant structural variable of financial systems.

2.1.1 Finance–growth nexus

The importance of financial systems for economic development is contested. Whereas most scholars state that financial system development supports economic

growth (Schmidt and Tyrell 2004; Klagge and Martin 2005; Beck 2012; Deller-Schneil 2012; Zademach 2014), other researchers claim its neutrality (Lucas 1988).

Capital allocation, i.e. the channelling of savings into productive investment, is recognised to be the primary function by which financial sectors impact economic development. The literature specifies this general function and elaborates catalogues of the functions of financial systems (Merton and Bodie 1995; Levine 2005; Turner 2010; Beck 2012). The selection and monitoring of capital investment represents the primary function of financial systems. Financial systems help to select quality investments *ex ante* by collecting information about potential investment projects/borrowers. The quality of this information influences investment decisions and thus the success of investments (Beck 2012). Monitoring, i.e. enforcing financial contracts, is related to the selection function. Financial systems monitor capital investment by executing corporate governance (Beck 2012). Both functions increase economic growth by supporting efficient capital allocation and thus capital accumulation (Pagano 1993; Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung 2008; Deller-Schneil 2012). With the risk, size and maturity transformation functions, financial systems stimulate savings and increase the rate of investment (Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung 2008). Developed financial systems manage to offer all savers products that fit their preferences (e.g. concerning risk–return mix) and supply borrowers with the funds they demand (Turner 2010). Thus, as illustrated in Figure 2.1, overall financial systems fuel economic growth by influencing the rate of investment and accumulation of capital.

Most researchers who question financial system influence on economic growth do not deny different functionalities between the financial systems of high-income countries (HIC) and low- and middle-income countries (LMIC). They rather argue that financial system development follows economic development (Merton and Bodie 1995), or as Robinson (1952, cited in Deller-Schneil 2012: 11) put it, “where enterprise leads, finance follows”. Against this background, research on the finance–growth nexus must examine the direction of causality between the size of the financial sector and economic development (King and Levine 1993; Levine et al. 2000). This research has a long tradition, going back to Bagehot and Schumpeter (Stolbov 2013) and Goldsmith (1969), and has yielded extensive output (Levine 2005; Ang 2008; Beck 2012; Havránek et al. 2013; Zademach 2014). According to the meta-analysis of Havránek et al. (2013), ca. 50% of all reviewed estimations find a positive and significant correlation and about 10% report a negative and significant effect between the size of the financial sector and economic growth. Also the issue of causality is settled in favour of the finance–growth nexus (Havránek et al. 2013); the positive influence of financial system development on economic growth is accordingly taken largely for granted.

However, since the financial crisis of 2008, the finance–growth nexus has been revisited in light of “too much finance” (Arcand et al. 2012; Turner 2010;

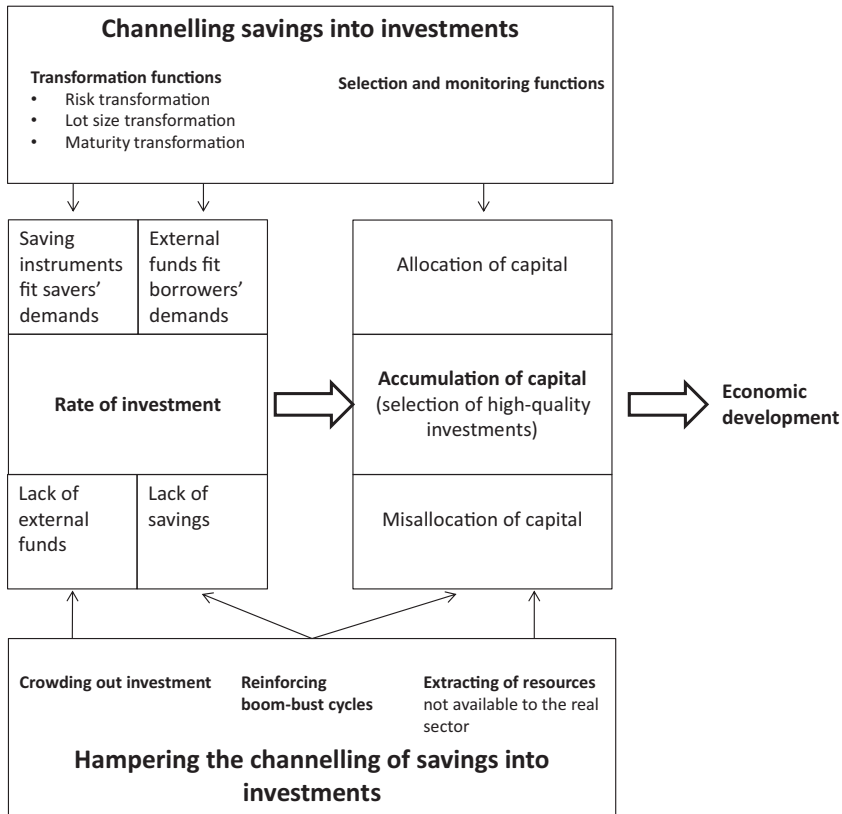


Figure 2.1 Functions and dysfunctions of financial systems and link to economic development

Source: author's figure following Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (2008: 12) and Pagano (1993)

Capelle-Blancard and Labonne 2011; Epstein and Crotty 2013). Rousseau and Wachtel (2011) report that the positive association between finance and growth between 1960 and 1989 vanished in the period from 1990 to 2004. Arcand et al. (2012) argue that the causality between finance and growth is non-linear. The initially positive association between the size of the banking sector and economic growth vanishes at a certain level of financial deepening, i.e. when credit to the private sector reaches ca. 80% to 100% of gross domestic product (GDP). These new empirical findings indicate that large and active financial sectors hamper economic growth.

These findings are hardly new. Marx and Keynes pointed out the risk of excessive speculation caused by deep financial sectors (Harvey 1982; Tobin 1984).

Basically, the literature advances three related dysfunctions of large and complex financial systems that explain hampering effects on economic development (Turner 2010):

- Firstly, the extracting of resources dysfunction. At a certain point of financial deepening, the input of capital and labour into the financial sector far exceeds the social benefits this sector produces (Tobin 1984), causing a misallocation of resources from the non-financial sectors to finance (Sawyer 2014).
- Secondly, the reinforcing boom-bust cycles dysfunction. In their profit-generating manner, overlarge financial systems over- and underscore economic cycles and accelerate cyclicality (Minsky 1992). Large financial sectors enable highly leveraged investments and real estate price inflation that, in turn, cause unnecessarily high losses in bust phases (Brunnermeier et al. 2009; Turner 2010).
- Thirdly, the crowding out investments dysfunction. During economic boom cycles the danger exists that “exuberant lending will tend to crowd out that element of lending which is indeed related to the funding of marginal productive investments” (Turner 2010: 28). For example, it becomes difficult for SMEs to gain loans during a real-estate boom because banks gain profits in the mortgage business more easily. In this way, deep financial sectors paradoxically tend to cause a reduction of funds for firms, and thus diminish the rate of investment of an economy.

Against the background of the empirical findings and the dysfunctions of financial systems, the view that the growth of financial sectors always causes economic growth must be rejected. Especially in HIC more finance is no longer associated with economic growth (Arcand et al. 2012). Thus, other factors need to be taken into consideration to understand the finance–growth nexus, which brings the structure of financial systems into the spotlight of research.

2.1.2 Financial systems’ structure and economic development

The distinction between bank-based and market-based financial systems represents the prominent structure classification (Allen and Gale 2000; Demirgüç-Kunt and Levine 2001; Hall and Soskice 2001; Krahnen and Schmidt 2004) and is applied in economics and other social sciences (Hardie et al. 2013). In the broader varieties of capitalism (VoC) classification, bank-based financial systems represent a key element of coordinated market economies (e.g. Germany, Japan), and market-based financial systems are an important pillar of liberal market economies (USA, UK) (Hall and Soskice 2001; Dixon 2012). VoC scholars point out complementarities between the institutions of the financial and economic systems (Hall and Soskice 2001; Schmidt and Tyrell 2004; Hackethal et al. 2006), and thus expect bank-based and market-based financial systems to persist.

In contrast to VoC, several scholars see the homogenisation of financial systems under the pressure of financialisation. *Financialisation* refers to the global development of contemporary capitalism towards financial market capitalism and is characterised by “the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies” (Epstein 2005: 3; see also Froud et al. 2000; Aglietta and Breton 2001; Epstein 2005; Windolf 2005; Corpataux et al. 2009; Beyer 2009; Leyshon and Thrift 2007; Pike and Pollard 2010; French et al. 2011). While financialisation has also changed liberal market economies (Epstein 2005), scholars expect the strongest transformation in coordinated market economies like Germany, where capital markets have been less important. Accordingly, the transformation of the German economy has attracted great academic interest (Deeg 2001; Schmidt et al. 2001; Beyer 2002; Krahen and Schmidt 2004; Dixon 2012). The erosion of the close capital and personal interconnections of major German companies and large banks as well as a range of changes in German taxation, pension and finance regulation systems indicate the move towards market-based finance (Deeg 2001; Beyer 2002, 2009; Dixon 2012). In contrast to this, Schmidt et al. (2001; Hackethal et al. 2006) highlight that despite the changes for the large corporations, the majority of firms continue to gain finance from the banks they have long-term relationships with. Also, no major shifts between the three banking pillars arose (Hackethal et al. 2006), indicating persistence in the German financial system.

The homogenisation of national financial systems may have become evident with the global financial crisis of 2008 as it affected most market economies, which is naturally a challenge for VoC, which claims that differences between countries’ financial and economic systems persist (Beyer 2009; Bruff and Horn 2012). A range of banks of the German bank-based financial system were hit surprisingly strongly by the financial crisis, including also the government-owned banks (e.g. *Landesbanken*) that were seen as the backbone of Germany’s coordinated market economy (Beyer 2009). While not denying these developments, other authors argue that the traditional classification into bank-based and market-based financial systems is no longer sufficient to observe differences and call for alternative classifications of financial and banking systems (Hardie and Howarth 2013a; Gärtner and Flögel 2014; see Figure 2.2).

This section reviews established and alternative structural classifications of financial and banking systems and discusses the extent to which the structural differences explain economic development. Gärtner (2013b) lists five possible classifications of financial and banking systems (Figure 2.2). The first classification of Figure 2.2 refers to financial sector deepening, as discussed in Section 2.1.1. In the following sections the other classifications of Figure 2.2 are discussed, starting with the traditional classification in bank-based and market-based financial systems (Section 2.1.2.1). The other three classifications solely focus on the banking sector. This focus accords with Hardie et al.’s (2013) call to carefully distinguish within banking, rather than naïvely contrast bank-based

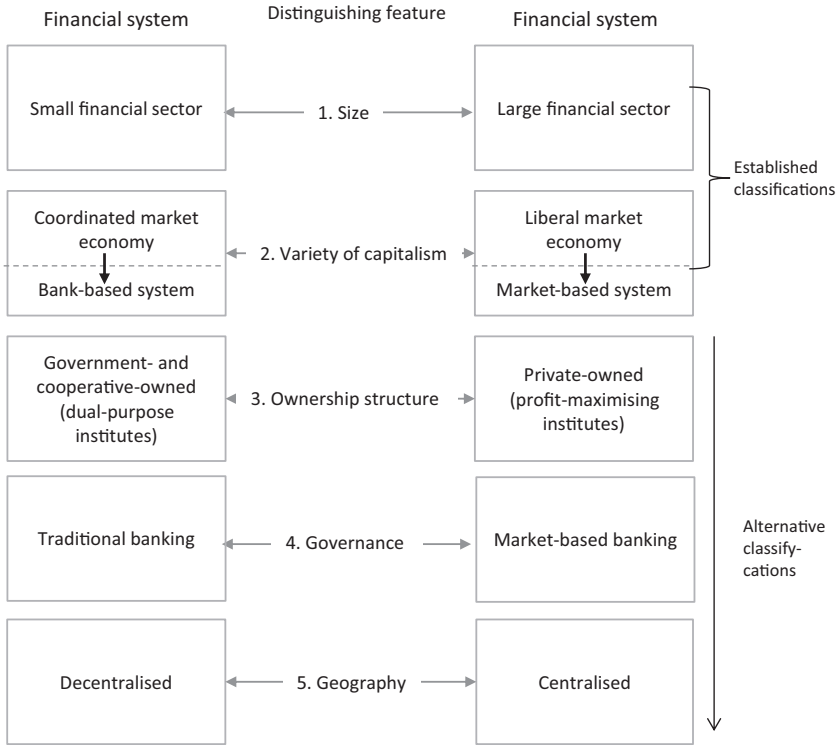


Figure 2.2 Established and alternative classifications of financial systems

Source: Gärtner 2013: 237 (translated and modified)

and market-based financial systems. The third classification looks at the ownership structure of banks and banking systems and discusses the pros and cons of dual-purpose banks versus profit-maximising banks (Section 2.1.2.2). The fourth classification builds on Hardie and Howarth's (2013a) concept of market-based banking and distinguishes between traditional and market-based banking (Section 2.1.2.3). Finally, the fifth classification – the conceptual foundation of this book – looks at the geographical organisation of banking systems and distinguishes between centralised and decentralised banking (Section 2.1.2.4).

2.1.2.1 Bank-based versus market-based financial systems

A considerable body of literature approaches financial systems according to the importance of banks (credits) versus capital markets (shares, bonds and venture capital) (Allen and Gale 2000; Krahnen and Schmidt 2004; Hackethal et al. 2006).

According to Allen and Gale (2000), a range of economists assume capital markets' superiority to banks because perfect markets lead to the optimal allocation of resources and to the model of perfect competition. However, Allen and Gale (2000) point out that financial markets appear to fit very poorly to the model of perfect markets – i.e. information asymmetries are high and agency problems apparent – arguing that banks and other financial intermediaries help to overcome market failures.

Actual financial systems usually consist of banks and organised capital markets and empirical comparison looks at the degree of usage of both institutions. In bank-based systems, SMEs and even large corporations are often owned by few associates, external finance is acquired through bank loans and savers hold their money predominantly as bank deposits. In market-based financial systems, banks also exist. However, large and even medium-sized firms are publicly listed, and private households invest their savings in shares and bonds, either directly or via institutional investors. Companies predominantly source external finance with stocks and bonds, and young and small firms acquire finance from private equity firms (Luintel et al. 2008; Hardie et al. 2013; Bijlsma and Zwart 2013).

The literature discusses several pros and cons of bank-based and market-based financial systems regarding their ability to deal with asymmetric information, regarding their ability to cope with risk and regarding their cooperative governance.

Organised capital markets and banks overcome informational asymmetries between savers and capital users in different ways (Allen and Gale 2000; Luintel et al. 2008; Beck 2012). On well-performing capital markets, the security prices comprise all (publicly) available information about companies instantly. In this way the price of shares and bonds reflects the diverse evaluations of companies by all market participants. Banks, in contrast, evaluate companies based on private information, too. Bank secrecy protects the dissemination of this information which hinders its circulation but encourages companies to reveal more private information as they do not have to fear that competitors, customers, suppliers etc. receive adverse information. In contrast, active financial markets tend to discourage information gathering because of the free rider problem; i.e. individual evaluations of companies are discouraged as the results quickly spread to all market participants (Stiglitz 1985; Allen and Gale 2000; Luintel et al. 2008).

Capital markets are deemed to be superior at coping with risk because they effectively diversify risk across actors, regions and sectors and develop tailor-made securities which fit the risk–return–maturity preferences of savers (Luintel et al. 2008). In contrast, Allen and Gale (2000) argue that banks perform an intertemporal smoothing of returns for deposit holders and offer constant and risk-free earnings to savers (mitigating intertemporal risk), “thus providing insurance to investors [savers] who would otherwise be forced to liquidate assets at disadvantageous prices” (11). Therefore, bank-based financial systems may be better placed to stimulate savings from risk-adverse savers. In this context, Turner