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Problems and Opinions

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Governance, Cohesion and Banking in Spain from a Spatial Perspective¹

Abstract

During the global financial crisis, regional banks – dependent on local savings and only able to lend these savings to customers within their respective regions – helped avoid a credit crunch in some countries; while in others, they did not fulfil this function. This paper elaborates governance structures that influenced the success of regional banking systems in Spain, with regard to regulation principles, the overall economic and political structures, and self-organisation of regional banks. With respect to the high importance of the decentralised banking sector in Germany, the paper compares the state of decentralised banking between Spain and Germany, concluding that the regional principle in Germany, a decentralized state structure with mechanisms of regional balance, and the self-governance of regional banks are important factors.

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Key words: oligopoly and other forms of market imperfection; consumption, saving and wealth; financial crises; banks, depository institutions, micro finance institutions, mortgages; government policy and regulation; size and spatial distributions of regional economic activity

1. Introduction

The decentralised German banking system, with its more than 1,400 regional savings and cooperative banks, counts as one success factor of the German economic model and explains Germany's rapid return to economic prosperity and growth after the global economic crisis of 2007–2008 [Gärtner 2011; Hardie and Howarth 2013b; Audretsch and Lehmann 2016]. In fact, German regional banks prevented a credit crunch in 2008/2009 by continuing to provide access to credit or even enhancing loan offers, especially for small- and medium-sized enterprises (SMEs) [Gärtner and Flögel 2016]. However, the significance of regional banks differs greatly between the banking systems of European countries. Despite the implementation of initiatives to both create a common European market and integrate diverse national banking systems, the European financial system remains spatially complex and uneven, especially in terms of the degree of geographical concentration of its banking and financial institutions [Manna 2004]. By revealing their underlying mechanisms, many differences between the countries' financial banking systems, apart from the traditional dichotomy of bank-based and market-based systems, become visible [Hall and Soskice 2001; Allen and Gale 2001]. Alternative taxonomies and concepts are therefore required. Attention has been drawn, for instance, to differences between public utility versus capitalist credit and banking systems [Gowan 2009], or to the differentiation between Islamic and non-Islamic financial systems [Pollard and Samers 2007].

Our approach is based on the presumption that banking systems can be distinguished as either decentralised or centralised banking and financial systems [Klagge 1995; Verdier 2002; Gärtner 2013; Gärtner and Flögel 2014], as well as the hypothesis that this differentiation helps to explain the varieties of financial systems, especially with respect to SME finance [Gärtner and Flögel 2014]. On the one hand, we raise the question of what role decentralised and centralised banks play in business lending, as well as how, i.e., at which distance to clients, regional and large banks organise their lending decisions. On the other hand, against the backdrop of corporate and state governance [Shleifer and Vishny 1997; Verdier 2002; Levine 1998], factors which explain the persistence of decentralised banking will be identified.

The results of this paper were generated from a broader research project, sponsored by the Hans-Böckler Foundation, that compared the financial and banking systems of Germany, the UK and Spain. The three country cases were selected because they putatively demonstrate substantial variety in terms of centralised banking. Germany supports a comparably strongly decentralised banking system as a result of the specific regional structure of the Federal Republic of Germany [Hakenes and Schnabel 2006]. The UK, on the other hand, exemplifies a centralised system, as London represents one of the most important financial centres of the world. The degree of Spain's banking system centrality could be considered to lie between the German and UK cases. In addition, Spain constitutes an outstanding research example, as the country's formerly regional savings banks were liberated from their geographical constraints in 1988, leading to a decline in decentralised banking. Furthermore, Spain is a country in which savings banks played a significant role until the financial crisis, while its savings banks association, compared to its German counterpart, does not even remotely play an equally important role.

Accordingly, this paper revisits the state of decentralised banking in Spain through a German lens. Our aim was to understand the significance of decentralised banks in Spain and to assess success factors for decentralised banking systems. The identified success factors are not limited to banking business strategies, as we also focused on general banking group policy, state system and regulation principles. All in all, we explored banking group philosophy and its structure, as well as countryspecific governance structures, to understand regional banking.

The empirical results were based on data analyses and studies of reports of banking groups or individual banks. However, the results were also strongly based on qualitative research. For Spain, we conducted 32 interviews with bankers, regulators, representatives from banking associations, policymakers, researchers and SMEs. Furthermore, a short research stay at the University La Laguna in Tenerife was carried out (by Carlos Javier Rodriguez-Fuentes) to discuss our results and ideas.

In the following section, we will outline key theories, while the subsequent section will present relevant facts about the structure of the Spanish banking system. Then, in the fourth section, success factors will be explained, after which some conclusions will be drawn.

2. Decentralised and centralised banking

As early as 1995, Klagge argued in favour of a classification of banking systems into decentralised and centralised systems [Klagge 1995]. Essentially, decentralised banking systems are associated with small local and regional banks, which are considered to be superior in the field of SME lending and are often publicly or cooperatively controlled [e.g., Berger et al. 2005]. Centralised banking systems comprise large national and international banks, which have the capacity to realise economies of scale and scope in lending.

In his historical cross-country comparison, Verdier [2002] analysed the influence of politics on financial systems. Examining the conflict between large and small banks, as well as between financial centres and peripheries from 1850 onward, Verdier showed that centralised countries tend to support centralised banking, whereas the power of municipal and regional governments aspire to protect local and

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regional banks from their centralised competitors. Liberalisation, privatisation, the abolishment of regional restrictions and financial market-friendly regulations were and are more pronounced in centralised countries (e.g., France, the UK), whereas regional savings and cooperative banks were and are protected in countries with a federal structure, such as Germany and Switzerland (for the Cantonal Banks) [Verdier 2002]. Although Verdier [2002] mentioned the advantages of centralised banks in overcoming information asymmetries and promoting access to finance within peripheral regions, his empirical study suggested that decentralised banking needs to be protected from overwhelming competition from nationwide, large commercial banks. Therefore, Verdier [2002] argued that regional governments must possess appropriate power to protect their regional banks.

As our approach was shaped by observations of the German banking market, in which state aid for decentralised banks does not play a role and regional banks are not protected from competition by nationwide banks, we proposed two related characteristics of the banks themselves to determine whether banking systems are centralised or decentralised [Gärtner and Flögel 2014]:

The first characteristic is the geographical market orientation of a bank's business activities: Do banks operate at the regional level, e.g., by collecting money from regional savers and loaning it to regional borrowers, or do they instead rely on business at the supraregional scale, by either borrowing from and investing in national/global capital markets or operating within supraregional branch systems (regional vs. supraregional banks)? Our consideration was based on the theoretical foundations of polarisation theory and post-Keynesianism with respect to regional banking markets and interregional flows of capital [Chick and Dow 1988; Dow and Rodríguez-Fuentes 1997; Klagge and Martin 2005; Gärtner 2008]. In particular, the oft-debated ability of regional banks to slow capital drains from peripheral to core regions suggests that regional banking may make a difference when it comes to access to finance in peripheral regions and may thus stimulate more balanced regional development [Gärtner 2008].

The second characteristic is the place of decision-making: Do banks make decisions (e.g., whether to grant a loan) in close proximity to their clients, or are decisions made from afar; for example, from remote headquarters? Decentralised banking capitalises on the close proximity between creditors and borrowers to conduct lending decisions. From a theoretical point of view, localized lending is associated with reduced information asymmetries and a reduction in credit rationing, especially in the case of lending to SMEs [Stein 2002; Pollard 2003; Berger et al. 2005; Gärtner 2009; Alessandrini et al. 2009; Flögel 2017]. The relevance of difficult-to-transmit, so-called soft information in lending to informationally opaque SMEs restrains remote decision-making processes and favours a decentralised banking system in which banks' head offices and decision makers are located in proximity to their clients. In contrast, centralised systems capitalise on their proximity to other financial institutions in order to facilitate financial innovation and indirectly organise and control investment decisions. Centralised banking is associated with

transaction-oriented lending, in which hard (easy to transmit) information as well as information and communication technology (ICT)-based evaluation methods are used to make credit decisions [Udell 2008; Gärtner and Flögel 2017]. As a consequence, centralised financial institutions require geographical proximity to other banks, rating agencies, lawyers, regulatory bodies, tech firms, etc., which explains the rise of financial centres [Friedmann 1986; Sassen 2001; Taylor et al. 2003; Lo 2003; Grote 2004; König et al. 2007; Hall and Appleyard 2009; Schamp 2009; Therborn 2011; Gärtner 2013; Dörry 2015].

In bank-based SME lending, the distance between two actor pairs matters [Alessandrini et al. 2009]: First, the relationship between SME customers and their advisors (called operational distance); and second, the relationship between customer advisors and supervisors, i.e., head offices (called functional distance). As Flögel [2017] argued, the incorporation of aspects of distance in Stein's [2002] model on decentralisation, hierarchy and soft information implies the following relations: Whereas short operational distance improves the ability of customer advisors to gain access to soft information, short functional distance is associated with enhanced bank-internal use of soft information, which in turn encourages local staff to actively collect soft information [Flögel 2017]. In this context, a purely metric understanding of distance would insufficiently explain information transmission, as short geographical distance is neither necessary nor sufficient to facilitate knowledge exchange between actors [Boschma 2005; Torre and Rallet 2005; Torre 2008; Bathelt and Henn 2014]. More likely, other forms of closeness, such as social and organisational embeddedness and cognitive affinity, need to be considered to fully understand the effect of distance in banking [Uzzi and Lancaster 2003; Klagge and Martin 2005; Alessandrini et al. 2009]. Yet, short geographical distance eases the transmission of soft information because it facilitates face-to-face interaction and supports other forms of closeness.

The two characteristics of the classification do not render one another redundant, because bank regulation and the standardisation of decision-making processes (especially rating and scoring systems) tend to have an effect on the tendency to centralise lending decisions for regional banks as well [Degryse et al. 2009; Dixon 2014; Gärtner and Flögel 2014]. For example, if a regional bank were to lend only on the basis of credit agencies' rating scores, then this bank would not conduct credit decisions within close proximity to their customers. On the other hand, supraregional banks can and will delegate decision-making powers to the regional level [Flögel 2017]. This happens, for example, when a national bank with an extensive branch network delegates substantial lending authority to its branch employees. In addition, advances in ICT may reduce the stickiness of soft information in lending [Papi et al. 2017], as well as potentially eliminating the need for short distance to reduce information asymmetries.

3. The structure of the spanish banking system

The fact that savings banks have not been as important in Spain as they are in countries with elaborated savings banks systems is clearly evident when considering the number of Spanish savings banks. Figure 1 shows that there were just 74 savings banks in Spain in 1988, compared to 585 in Germany in the same year [Deutsche Bundesbank 1990]. Four years later, in 1992, the number of Spanish savings banks had been reduced by 35%, to 48. Due to the financial crisis, only two 'real' savings banks remain in Spain as of 2017. This trend must be viewed against the backdrop that, in 1988, the regional principle, which limited the reach of savings banks to their home region, was abolished, Spanish savings banks had open branches all over Spain [Illueca et al. 2005]. To gain market shares, savings banks lent to customers who had not received loans from local banks. Other causes of the crisis included savings banks' late development towards becoming universal banks, the lack of funding bases on the local level, the partial lack of professional competence in management, governance problems in supervisory boards, and of course the Spanish property boom.

Also in 1988, a seven-year process of concentration in the cooperative bank sector began. Until 1988, there were 112 cooperative banks in Spain; by 1995, however, that number had been reduced to 96, as most had been acquired by savings banks [Romero 1997]. The main factors relevant to their numerical decline since the beginning of the 1990s revolved around viability problems [Romero 1997]. Even though a similar concentration of cooperative banks had also taken place in Germany, from 3,385 banks in 1988 [Deutsche Bundesbank 1990] to just 975 in 2016 [Deutsche Bundesbank 2017], the number of currently active cooperative banks in Germany is clearly much higher than that in Spain during the peak period. The concentration process of Spanish cooperative banks has continued, with varying intensity, until today.

Germany had, and still has, substantially more regional banks: Indeed, in 2015, savings banks and cooperative banks together accounted for 1,463 individual banks. The number of large commercial banks, on the other hand, is relatively small: only four as of 2015.

As we can see in the following figures, in Spain, commercial banks control the main shares of the loans to the industrial and service sectors (construction and real estate activities are excluded). Over the course of the last 25 years, savings banks have caught up to commercial banks, with a shift from 10% of market shares in 1983 to 34% in 2004. Afterwards, their position remained stable until 2010. Due to the financial crisis and substantial reduction of savings banks, data distinguishing between different banking groups no longer exist for Spain. The reduction of the gap between savings banks and commercial banks is related to the geographical expansion of the former. However, the whole share of the increase in market shares was not obtained exclusively from commercial banks. Rather, it was more likely gained in line with the formation of new kinds of enterprises in the course of the economic development of Spain.

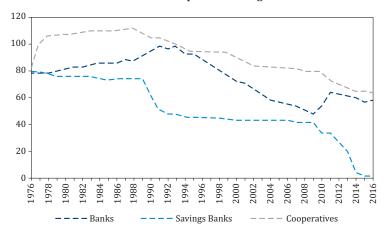
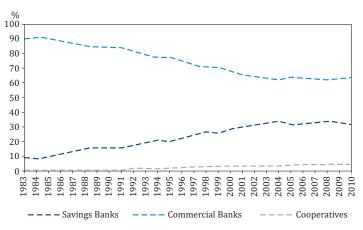


Figure 1. Number of institutions within the Spanish banking sector

Source: Banco de España, own calculation.

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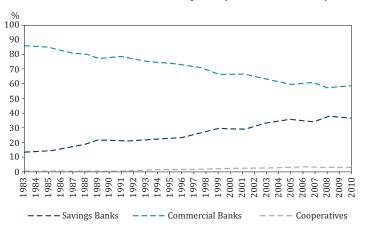


Source: Banco de España, own calculation.

To this day, cooperative banks in both markets represent the smallest of the three banking groups: At the end of our investigation period, cooperative banks only represented 5% of the market for credit to the industrial sector, and only 4% of the market for credit to the service industry. In Germany, decentralised banks hold much more market power in the loan business market. In 2015, savings banks and cooperative banks together were responsible for more than 46% of loans to the German economy (self-employed and companies). The four big commercial banks, as well as the state banks (Landesbanken) – which we call centralised banks

to distinguish them from decentralised or regional banks – claimed 35.4% (see section 2). In 1999, the numbers differed noticeably from today, as centralised banks claimed a market share of 44.2% of the loans, while regional banks accounted for only 35.5%. Thus, a strong increase in the market share of decentralised banks occurred in Germany [German Central Bank, own calculations].

Figure 3. Market shares of loans to service enterprises (real estate excluded)



Source: Banco de España, own calculation.

When contrasting decentralised and centralised banking and their potential for differential effects on the decision-making process, both operational and functional distance must be considered (see section 2). To approximate distance, adequate quantitative data are needed to ensure comparability between different countries, which has thus far not been demonstrated.

Therefore, for operational distances, we looked at the geographical distribution of the banks' employees. Using employment data for spatial comparisons of financial systems is still a new approach [for its first applications, see Gärtner 2013; Wójcik and MacDonald-Korth 2015]. Unlike other indicators, employee data are often available at the micro level; for example, at the level of districts and towns (Nuts-3), which are 402 for Germany 'Kreise and kreisfreie Städte' and 52 for Spain 'provincias'. This makes it possible to analyse the spatial concentration of the financial system in each city/county. All employees who pay social insurance were included, while self-employed individuals were excluded. To analyse the spatial concentration of bank employees, we compared the shares of the employees in finance to the rest of the economy in one region with those to the rest of the economy in the whole country. See the following formula:

$$RKI_{j} = \sum_{j} \left| \frac{b_{ij}}{B_{i.}} - \frac{b_{j}}{B_{..}} \right| * 0.5$$

 b_{ii} = Number of employees, sector i, region j

 $\vec{B_i}$ = employees, sector i

 b_{i}^{n} = all employees, region j

 \vec{B} = all employees

The range of the indicator is from 0 < 1. An index value of 1 would indicate that all employees were located in one region (see the next figure).

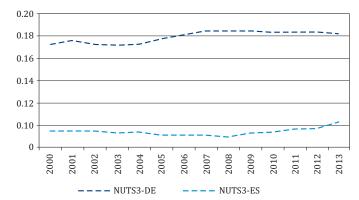


Figure 4. Spatial concentration of the employees in finance for Spain and Germany (Nuts-3)

Own figure; source: Bundesagentur für Arbeit (Register data/social insurance) and Ministerio de Empleo y Seguridad Social (Register data/contracts).

The low index value for Spain demonstrates that Spanish employees in finance are less spatially concentrated than those in Germany, which is above other factors caused by the expansion of the banking branch network. The increase in spatial concentration since the 2008 crisis in Spain can likely be traced to the reduction in savings bank branches and to increased concentration in specific regions. The fact that the Nut-3 level varies between Spain and Germany and the Spanish regions are bigger than the Germans has to be taken in consideration: The difference in spatial concentration between Germany and Spain is therefore smaller in reality but still exists.

However, credit decisions are made at the branch level only occasionally; therefore, both functional distance and operational distance are relevant. To proxy operational distance within a cross-country comparison, we used the spatial distribution of the headquarters (see figure 5). The data come from European Central Bank (ECB) and are unfortunately only available for the €-Countries and for actual year 2014.

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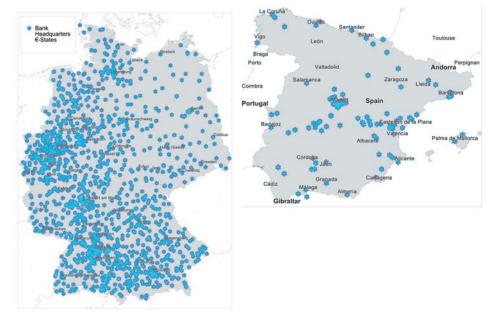


Figure 5. Bank headquarters locations in Spain and Germany, 2014

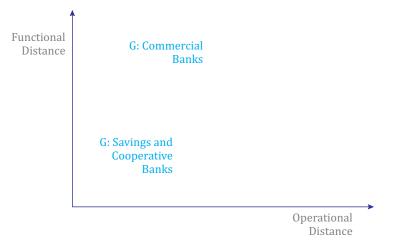
Own figure; source: ECB.

The comparison between Spain and Germany is definite: Western Germany especially contains many banking headquarters, which are broadly distributed regionally. In Spain in 2014 – six years after the crisis – few banks existed. Thus far, the quantitative data analyses have indicated a shorter operational distance in the Spanish banking market, which is in particular explained in the substantial branch expansion before the financial crisis and shorter functional distance for Germany, as there are less banks in Spain and their headquarters appear to be more concentrated in space. Unfortunately, a separate data analysis, including functional and operational distance for the different types of banking, is not possible.

Taking together the results of the data analyses and the empirical findings from the interviews allow for the development of a heuristic classification of categories of banks with respect to operational and functional distance (see the two figures in the following). The position on the x- and y-axis was estimated and not calculated. For Germany, the situation is quite clear (see figure 6). Here, we can put the savings banks and the cooperative banks together in one group, which show low operational (many branches) and functional (each bank decides locally) distance. The second group could comprise the commercial banks (above all, Deutsche Bank AG and Commerzbank AG). These banks still have a broad branch network, but are more focused on urban areas, which lead to their operational distance being lower than that for savings and cooperative banks. However, the main difference between these

two groups for Germany lies in functional distance. For Spain (see figure 7), we do not have the clear a group distinction, and one could at least define four groups in regard to operational and functional distance.

Figure 6. Operational and functional distance in Germany



Source: author's own work.

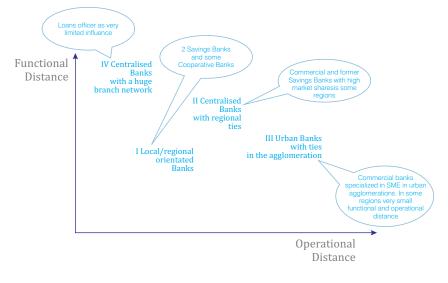


Figure 7. Operational and functional distance in Spain

Source: author's own work.

Bank type I: Local- and regional-orientated banks

The first group consists of local- and regional-orientated banks. Particularly, it includes the two remaining savings banks and some of the cooperative banks. The group of cooperative banks in Spain is again heterogeneous. Some act on a national level; others specialise in farming only; still others are local-orientated universal banks similar to the German cooperative banks. These we would put in the group of local- and regional-oriented banks. This group is similar to the German group consisting of savings and cooperative banks, but is much smaller in regard to market shares. Institutions in this group are characterised by a dense branch network in its region and local decision authority.

Bank type II: Centralised banks with regional ties

The second group demonstrates a slightly higher distance in comparison to group I, in terms of both the operational and functional levels. This group consists of centralised banks which are building strong regional ties in some regions. Large banks have bought smaller regional banks, or the regional banks have merged. These banks have retained the decision-making authority in some regions. This can occasionally be traced back to direct economic factors; while at other times, more political reasons are at work. This group consists of former savings banks and commercial banks with high market shares in some regions.

Bank type III: Urban banks with ties in the agglomerations

These institutions have the smallest branch network, presenting a medium-high functional distance. The strategy of these institutions is to focus on the mediumsize enterprises located in highly populated urban areas. For this reason, they have a high number of employees per branch and have been operating in the territory for many years. Depending on the density of the branch network developed in the region, a risk department may be present or credit operations may be studied at the headquarters.

Bank type IV: Centralised banks with a huge branch network but less decision power

This type of banking institution presents low operational distance but high functional distance. Such institutions have developed a dense branch network but demonstrate substantial functional distance. This implies that the location of the risk analysts is distanced. There is nearly no option for employees in 'ordinary' branches to talk to the analysts personally. These branches have some power in decision-making processes depending on the strategy of the institution, but this situation can easily change. An example of this kind of institution would be Banco Santander.

What this means is that access to finance for SMEs in Spain is dependent on the region where they are located. In a significant number of Spanish regions, savings banks (and cooperative banks) only play a limited role in SME finance. The number of savings and cooperative banks and their shares of loans to SMEs have never been

similar to the number and shares in Germany. Some of the nationwide commercial banks, e.g., Banco Sabadell (based in Sabadell, northwest of Barcelona), have specialised in SME financing. In Spain, the banking groups are much more similar to each other, yet possess more within-group differences, than in Germany.

4. Governance, cohesion and banks

As outlined in the introduction, the structure of financial systems has traditionally been approached by distinguishing between bank-based versus market-based systems. In the former, external corporate finance is mainly facilitated by bank loans, in the latter, shares, bonds and venture capital have become more important [Beck et al. 2001; Levine 2005; Beck 2012]. While research in the field of the varieties of capitalism has explained similarities in performance with institutional complementarities [Hall and Soskice 2001], we sought to understand the degree of success of regional banking by focusing on governance. Corporate governance and finance have been researched in general, and attention has been paid to their embedding in national legal systems and forms of capitalism [for an early overview, see Shleifer and Vishny 1997; for regulation and finance, see Levine 1998]. In a historical analysis, Verdier [2002] showed how regional banking is connected to other national structural factors. Below, we identify these regional banking success factors.

4.1. Distance and banking group associations

As described, one advantage of decentralised banking is the shorter distance between creditors and debtors. However, lending within close proximity to clients comes at the price of a longer distance to financial centres. Banks at decentralised locations, far from financial centres, have the disadvantage of also being far from other banks, rating agencies, specialised lawyers, etc. This poses the risk of a lack of specific (financial) knowledge, skills and access to services. A well-organised association of regional banks would be able to create closer proximity to their member banks, as well as facilitate knowledge spillovers and learning – i.e., access to the knowledge base of the financial centres – for geographically remote regional banks [Bülbül et al. 2013; Gärtner and Flögel 2017; Greenham and Prieg 2015]. Therefore, in addition to short functional and operational distances, embeddedness within supportive associations of regional banks tends to be one success factor of decentralised banking,

The comparison of banking associations makes clear that Germany strongly differs from Spain in this regard. The banking associations in Germany are aligned with the pillars of the banks, as banks are exclusively embedded in their associations. Savings banks belong to their corresponding regional savings banks associations and the Deutscher Sparkassen- und Giroverband (DSGV), forming the savings bank financial group. Cooperative banks are embedded in the cooperative banks' financial group and its association. The Bundesverband Deutscher Banken (BDB) and its regional subsidiaries represent the private banks. Such a pillared system of associations does not work in the same way for Spain any longer, as many former savings banks are still members of the Spanish savings banks association (SECA) but are no longer publicly owned savings banks. In Germany, the associations for savings banks and cooperative banks are both very powerful. They help small and regional banks to realise economies of scale and scope. This relationship can be illustrated by the fact that in Germany, the DSGV had 3,217 employees in 12 regional savings banks associations in 2015; whereas CECA, the Spanish equivalent, had only four employees in 2015 [CECA annual report, 2015].

Associations have tended to become even more important as the new, complex regulatory environment (Basel III) penalises small banks more than large banks, since the implementation of new regulations involves substantial fix costs [Alessandrini et al. 2016]. Supportive associations could help to apply the regulation requirement to small regional banks, which cannot afford to employ many experts, in a more cost-efficient manner.

4.2. Regional principle in the combination of regional balance

From a historic and geographic perspective, regulations have restricted the business activities of savings banks in many countries to their regions. In Germany, this restriction continues to exist with the so-called regional principle (enacted in the savings banks acts of the federal states [Bundesländer]). The regional principle obligates savings banks to lend to institutions, companies and private individuals in the region of their responsible municipality first, which, in particular, implies only running branches within the region. Unlike in Germany and a few other countries, many banking systems have seen large-scale legal reforms, reorganisations and (partial) privatisations [Engerer and Schrooten 2004; Hakenes and Schnabel 2006]. Since the late 1970s, international institutions (e.g., the International Monetary Fund, the World Trade Organization) and the European Union have advocated for deregulation, privatisation and open financial markets as a way to - as they believe – increase efficiency and thereby increase general wealth [Gärtner 2013]. Especially, the goals of financial integration, the creation of large banks (to have large transnational players) and increasing competition are supported by the European Commission [Commission of the European Communities, 2009] and the European Central Bank [Cabral et al. 2002].

Spain deregulated the banking market and abolished the regional principle with the Royal Decrete 1582 in 1988, just 11 years after the savings banks were allowed to act as universal banks. The 1988 liberalisation caused a geographical expansion of savings banks to new and distant markets, as well as a reduction in the number of savings banks due to M&A and defaults.

If banks are not restricted by region, there is a danger that the centres will absorb capital at the expense of either the periphery or old industrial areas. Positive effects cumulatively reinforce successful (centre) regions and begin to diffuse into the surrounding areas once a certain level of concentration has been reached [Dow and Rodríguez-Fuentes 1997; Gärtner 2009]. As early as the 1950s, Myrdal recognised that 'different studies in many different countries have shown how the tendency of the banking system to remove savings from poorer regions and invest them in richer and more advanced areas offering high and guaranteed profits unless intervention forces it to act otherwise' [Myrdal 1959: 26]. Banks that are restricted to a regional market can slow cumulative causation and support regional savings–investment cycles, which helps peripheral regions to invest their capital regionally.

However, regional savings-investment cycles can only work if peripheral regions have sufficient savings. People too poor to save money cannot save at their regional bank. It is generally assumed that the profits of regional banks directly depend on the strength of the regional economy [Alessandrini and Zazzaro 1999]. A regionally segregated, decentralised banking system 'may not be an unmixed blessing to the periphery: while such a system may guard against a monetary outflow to the center, periphery banks are exposed to extra risk where peripheral regions have, as they tend to do, quite specialized and strongly cyclical economies' [Chick and Dow 1988: 240]. This relationship does not prove empirically true for Germany, however. Here, the regional banks are at least as successful in poor peripheral regions as they are in economically strong regions [Gärtner 2008; Conrad 2010; Christians 2010; Christians and Gärtner 2014]. Several interrelated reasons can be used to explain the counterintuitive empirical observations.

First, the regional principle not only slows centripetal backwash effects, it also keeps functional distance short and allows regional banks to develop strong relationships with their regional customer base. This is possible especially in weak regions where less competition from national commercial banks exists. Less competition is, on the one hand, associated with poor market outcome for customers, in line with the structure-conduct-performance paradigm [Fischer and Pfeil 2004]. On the other hand, less competition enhances banks' access to information and reduces information asymmetries for borrowers, according to the relationship banking theory [Peterson and Rajan 1995]. Both lines of reasoning potentially explain the success of regional banks in weak/peripheral German regions. Having market power makes business easier and allows the realisation of obligatory rents. Informational advantages of regional banks in their respective peripheral regions allow superior screening and monitoring and potentially reduce credit default. In addition to these effects, the substantial regional redistribution mechanisms of the decentralised Federal Republic of Germany tend to guarantee a certain level of economic activity in all regions of Germany. An OECD comparison which calculated the regional range in household primary income as a % of income in the country's median region (for 2009) reveals some differences between Spain and Germany: In Spain, the range between the regions is 55.5 percentage points higher than in Germany (48.7%) [OECD, 2013]. This indicates that the spatial dispersion of income is higher in

Germany than in Spain. Against the background of the substandard development of the former GDR regions in Germany, it is astonishing that primary income is more equally distributed between the regions in Germany than it is in Spain.

The majority of primary income consists of wages and property, as well as entrepreneurial income. The disposable income adds all social benefits to the primary income, and transfers and subtracts taxes on income, wealth and social contributions (and transfers). If we consider the Gini index (which assumes values between 0 and 1), which measures inequality among the regions in each country, we see that in Spain (0.093), disposable income is also more unequally distributed between regions than in Germany (0.0792) [OECD, 2013]. Differences between primary income and disposable income reflect state redistribution mechanisms. Therefore, we also calculated the variation coefficient² [Leßmann, 2005] for regional disposable income of private households as a % of primary income. The statistical relation was positive, which means the higher the indicator, the higher the redistribution between the regions. The variation coefficient for Spain was 0.043495, lower than it was for Germany (0.079739), indicating that redistribution in Germany is higher than it is in Spain.

In sum, the gap between rich and poor regions in Spain is greater than the gap between rich and poor regions in Germany. This could influence the possibility in weaker regions to save money and deposit it in local banks. Additionally, the high increase of loans, especially in the building sector and in real estate, has led to high capital demand in all Spanish regions, which cannot be satisfied by regional savings alone. The need for exogenous capital in Spain has led to a securitising process intended to gain liquidity [Caterineu 2008; Carbó-Valverde et al. 2011; Otero-Iglesias 2013; Dymski 2013]. Otero-Iglesias [2013] considered that securitisation activity in Spain has fostered riskier lending behaviour.

4.3. Regulation (and real decentralised banks)

In many countries, savings banks were established in the 19th century to enable the poor to be more financially independent by encouraging savings 'for bad times' [Brämer et al. 2010; WSBI, 2017], and have traditionally been restricted to riskless investments of clients' deposits, especially in government bonds [Batiz-Lazo and Maixe-Altes 2006]. In Spain, giving loans to businesses only became possible in 1976: With the Decreto Fuentes Quintana, savings banks were given permission to offer the same services as commercial banks, including lending. In contrast, savings banks in Germany were founded as publicly supported self-help organisations, not only to help the poor to save but also to support small local firms with loans [Völter 2000]. In Germany, large commercial banks were latecomers in SME lending, as

² VC = $\frac{\text{standard deviation}}{\text{mean}}$

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they targeted small private and business clients only after World War II [Gall et al. 1995; Historische Gesellschaft der Deutschen Bank e.V. 2009].

The moment in time when savings banks became universal banks was crucial. As outlined above, when lending at a short distance, banks realise advantages in soft information processing, especially when lending to SMEs, which tend to be profitable for regional banks. Regional savings banks that have not been permitted to lend have been denied the opportunity to utilise these soft information advantages and, consequently, have missed the source of income from SME lending. The time of lending permission is significant, because short distance lending implies relationship lending, whereby close business relationships develop over time and, only after some time, do information advantages materialise, i.e., information asymmetries between borrowers and banks are overcome [Peterson and Rajan 1995; Boot 2000; Handke 2011]. Time dependency suggests that newcomers in SME lending face information asymmetries at the beginning, regardless of short distance in lending. The same relation tends to be the case for regional banks which extend lending to new regions, as was observed for the Spanish savings banks after the liberalisation of territorial restrictions. The permission to lend and publicly guarantee protection for deposits made by clients has been one important historical reason why savings banks were able to develop as strong universal banks in Germany.

5. Conclusion

Each of the three abovementioned success factors do not describe single conditions, but rather complex mechanism of action. In Spain, it was not just that the former regional savings banks were liberated from their geographical restrictions in 1988 and were transformed into national players; they were also latecomers in business loans and had just 11 years' time to develop as regional (restricted) universal banks. Additionally, the Spanish savings banks association was never comprehensive enough and, due to a lack of support, savings banks could not develop equally quickly.

Whereas Verdier [2002] explained that regional independent banks cannot survive without state subsidies or lobbying for regulations, which 'defend local banks against competition from the center' [Verdier 2002: 20], our comparison shows the opposite: Governance matters less for regulating and limiting the ability of centralised banks to defeat decentralised banks with overwhelming competitiveness. Rather, governance is needed to protect decentralised banks from damaging their own success factors by restricting them to their regional markets. In Spain, the abolishment of the regional principle initiated the end of savings banks.

However, this is not to say that the solution is just to adopt the German banking system and the system of regional cohesion and state structure. Different financial systems are developed in different contexts (markets, cultures, laws and regulations), strongly influencing which systems in which countries hold advantages or

disadvantages. This means that different countries require different solutions, and that a system with regionally independent banks requires certain circumstances. The question is to what extent a regional banking system of similar significance to that in place in Germany would be of unmixed benefit in other countries. It thus seems probable that other countries require different solutions.

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Interviews

We have conducted 32 interviews. Due to data protection, we just listed in the following the interviews with researchers and representatives of the associations

- Camino García Domínguez, Confederación Española de Cajas de Ahorros (CECA), Madrid, Institutional Relations Madrid (08/05/2015)
- de la Herrán, Joaquín; The Spanish Banking Association (AEB), Madrid (24/04/2015)
- Manuel, Illueca, University of Valencia (22/04/2015)
- Martínez, Ana, Instituto de Crédito Oficial (ICO), Madrid (24/04/2015)
- Maudos, Joaquín, University of Valencia (21/04/2015)
- Ródriguez Fuentes, Carlos, University of La Laguna, Tenerife (29/04/2015-06.05: research stay; several talks)
- Tulla-Pujol, A., University of Barcelona (17/06/2016)