

German Sparkassen: a model to follow?

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The stabilising role played by German savings banks in the country's economy is regularly lauded. The "Sparkassen" are members of a large network combining autonomy, economies of scale and range, regional roots and financial solidarity. Although their success is no myth, it is also true that it is based in part on distortions of competition. Although some argue for network structures following the German model, this seems hard to transpose to economies with structural characteristics which are less helpful to this model than in Germany.

The German Sparkassen are attracting imitators. The cornerstone of the financing of Germany's industrial fabric, the German tradition of the "house bank" has long been praised for its quality of governance and its proximity to a customer base of individuals and small and medium-sized enterprises (SMEs). The business model, serving the local economy and remote from the capital markets, proved particularly resilient during the financial crisis of 2007-2008.

Historically, both savings banks and cooperative banks have played a central role in most European financial systems (Bülbül, Schmidt and Schüwer, 2013). The case of Germany is, however, unique, to the extent that these two types of institution have retained most of their original characteristics, whereas in Austria, Spain, France and Italy, the wave of liberalisation in the 1980s and 1990s changed the roles and institutional structures of such banks. In some European countries, savings banks and mutual banks have completely disappeared as a separate class of financial institutions. In others they have adopted features similar or identical to those of commercial banks¹.

The German Savings Bank Association (DSGV) has long promoted the model, but other voices have recently been added in support, notably in the UK and Latin America, where politicians and financial commentators alike have promoted the merits of the Sparkasse model. Delegations from banks in Bolivia, Ecuador and Mexico have been flocking to the DSGV seeking to find out more about the success of German savings banks. In

the UK, think tanks and MPs from various parties have argued for the development of a similar network of retail banks, investing in public interest projects.

The foundations of the German savings banks are, however, more complex than they look. First, far from consisting of small isolated institutions, they are members of a financial network, whose business model is, to a certain extent, similar to that of a universal bank, albeit one that is incomplete because it is not integrated. Secondly, although the Sparkassen model has some undeniable benefits, it is based on distortions of competition that affect the profitability and stability of the German banking system. Moreover, their success is intimately bound up with the structure of household savings. Their model is also based on the "recycling" beyond national borders of excess savings. The regional public banks responsible for investing the excess liquidity of savings banks in the debt markets are removed from any market discipline. Lastly, although the good health of the German economy is an advantage for the savings banks, their model is put to the test in a context of low interest rates and the management of their liquidity constraint.

Success of German savings banks: between myth...

Germany is one of the few European countries to have retained a three-pillar banking system (see Box 1). With strong roots in the real economy, savings banks make up the basis of the public network. Their model is generally



associated with the competitiveness of the German economy, and particularly that of the Mittelstand (or SMEs), for which this network provides more than two-thirds of financing. Their close links with their business customers also have stabilising effects during a financial crisis (see Box 2). Their market share and financial performance, the envy of other segments of the German banking industry, provide a model for success.

Business model and institutional structure of the savings banks

Although established as legally independent entities, the German savings banks are members of a broad financial group (*Sparkassen-Finanzgruppe* or S-Group) within which they cooperate closely with other members (Schackmann-Fallis, 2008; Schackmann-Fallis, 2011). We examine here the structure of the public network and the devolved role of each of its members.

Box 1:

The three pillars of the German banking system

Despite a continuous consolidation since the early 1990s, the German banking sector remains very dense. The Bundesbank listed 1,775 German credit institutions in December 2015 (from 2,015 in 2007) or 2.2 institutions for every 100,000 people, compared to 0.7 in France. Taken together, the five biggest German banks accounted for only 32% of total banking assets, against 48% for the five biggest French banks. The German banking sector has three main pillars. The 271 private commercial banks make up the first pillar. The second pillar consists of the credit cooperatives, which comprise 1,023 independent institutions linked by their federations and two central institutions² (DZ Bank and WGZ Bank). Public-sector credit institutions, which also have a network structure, make up the third pillar. They include 414 local savings banks (Sparkassen) and 7 public regional banks³ (Landesbanken)⁴. This network also includes Dekabank (financial services provider and centralised asset manager), regional real estate savings banks (Landesbausparkassen) and public-sector insurance companies⁵. The Sparkassen are the shareholders in Dekabank (owning all shares since June 2011) and in the Landesbanken (alongside the Länder regional governments). Alongside these three main pillars are private mortgage banks and building and loan associations as well as banks with special functions and the development banks (including KfW, the public-sector investment bank).

Autonomous publicly-owned companies

The savings banks make up the basis of the network. They are autonomous publicly-owned companies: they carry out missions in the general interest but without the government, town or district owning their capital. They were removed from municipal ownership in the 1930s and given the status of “public company”. As this status is based on the principle of subsidiarity, to a certain extent a Sparkasse “belongs” to its municipality. Or, as the Association puts it, “to the citizens”. Sparkassen do not have the same financial profitability targets as commercial banks, but this is not to say that they are ‘not-for-profit’ organisations. Indeed, as they can only strengthen their equity through the incorporation of profits as reserves, maintain stable profitability is essential.

The savings banks have specific public interest missions. They are involved in the development of their towns and regions and in financing retail customers (individuals, non-profit organisations, self-employed persons and SMEs). They are also very heavily involved in their regional voluntary sectors. The network has more than 15,000 branches and offices spread across Germany. Under the principle, enshrined in German law, of local administration of certain services in the general public economic interest, they serve a local or regional market (depending on whether they were created by a municipality or a district). They are not allowed to open branches or conduct operations outside their region of competence. This regional principle is intended to ensure that the sums invested in a region are reinvested there. It thus avoids the risk that any region is under-served or impoverished. It also gives the Sparkassen a strong link to their local economies and protects them from competition from other regional banks. Lastly, it provides greater stability in financing. As we will see below, the regional principle has made a sizeable contribution to the success of Sparkassen. By way of comparison, in 1988, the abolition of the regional principle which had governed the Spanish savings banks, or Cajas, increased competition in the banking sector. Later, the bursting of the real estate bubble, against a background of excessive borrowing and a concentration of risk on the books of these same Cajas, caused a serious shock to these institutions.



The advantages of a network structure

The structure of S-Group allows the savings banks to operate under a single banner whilst remaining independent in the management of their balance sheets, to generate economies of scale by the pooling of certain functions (particularly the back office)⁶ and to offer a large range of services to their customers by outsourcing some business areas to central institutions that form part of the network.

Activities that lie outside the ambit of savings banks, such as securities trading, financing requiring substantial exposure or foreign investment support for German companies, are covered by the Landesbanken, which are very active in the capital markets. The Landesbanken also act as regional banks, and central banks and clearing and settlement houses for the savings banks. They manage cheque payments and transfers for the Sparkassen, as well as their liquidity management and long-term lending. The savings banks are both shareholders in and net creditors of the Landesbanken. They invest their surplus resources with the Landesbanken in the form of short term deposits, or by subscribing to Landesbank share issues (on their behalf or on behalf of their clients). These interbank, intra-network relationships are advantageous for all members. They reduce the dependence of Landesbanken – which lack access to a stable deposit base – on market financing, and allow the Sparkassen to manage the maturity transformation risk more effectively (see below). However, they increase the exposure of the Landesbanken to interest rate risk.

A solidarity mechanism within the network

The savings banks, in common with the mutual banks, have for several decades had a mechanism in place aiming at two objectives: protecting the solvency and liquidity of members and guaranteeing customer deposits (*Institutssicherung* or Institutional Protection Scheme). In July 2015, the German supervisor confirmed the compliance of this structure with the German law transposing the new European directive on deposit protection, requiring only a few changes (Deutsche Bundesbank, 2015a). The intra-network

solidarity mechanism could also be considered as an alternative solution to the resolution framework scheduled in application of the EU's Bank Recovery and Resolution Directive (BRRD). To do this, it would need to be triggered sufficiently early and eliminate any risk of failure within a reasonable period. This structure is advantageous for all members of the network (lower financial cost, regulatory advantages).

The structure consists of thirteen rescue funds: eleven regional funds, which the savings banks pay into, one fund financed by regional public banks and another funded by the regional building societies (Landesbausparkassen). If a Sparkasse experiences difficulties, the regional fund to which it belongs is called on first, followed by those of the other regions and then finally the Landesbanken and Landesbausparkassen funds. Similarly, a Landesbank would first be supported by the Landesbanken fund, with the Sparkassen funds only being called upon if this fund is exhausted. The European criterion, of fund reserves equivalent to 0.8% of the deposits covered, will increase the structure's capacity. This will require funding of EUR 4.9 bn, compared to the current level of EUR 1.6 bn. In order to remove all moral hazard, the contribution of each member is weighted by volume of deposits covered by the guarantee and also by the risk profile (in 2013, contributions from the Sparkassen, Landesbanken and Landesbausparkassen were 49.4%, 44.1% and 6.5% respectively). Three-quarters of the deposit guarantee fund can be used in the event of a rescue situation, but resources must be rapidly rebuilt through exceptional contributions. Aid to a network member can take the form of loans and advances, capital or guarantees. The preventative structures, which should allow the system to be triggered early enough to avoid the collapse of a member, have been strengthened. Measures to clean up the balance sheet, restructure or adjust the business model may be imposed on the institution in difficulty. These enhanced powers could help better align the business models of the Landesbanken with the interests of the Sparkassen. Since its creation in 1973, none of the network's members have defaulted on their debt. Only thirty-three institutions have ever had recourse to the funds and the supra-regional funds have been used on only four occasions.



Within the framework of this solidarity mechanism, the German regulator considers the financing of Landesbanken by the Sparkassen as intra-group transfers: whether it concerns loans, Pfandbriefe⁷, unsecured debt securities or capital instruments, any

exposure of a savings bank to a regional bank (or vice versa) is weighted at 0% in the calculation of capital ratios⁸. The large exposure rule (which limits exposure to any given counterparty) is also removed where it relates to a network member.

Box 2:

The stabilising effects of a local bank

During the financial crisis of 2007-2008, the problems of Germany's major private commercial banks and public regional banks, which were very active in the international markets, highlighted the merits of the small "house bank" in such circumstances. The savings banks had virtually no recourse to government support and their close cooperation with German companies had stabilising effects.

Savings banks were not a drain on public finances...

S-Group as a whole was severely affected by the 2007-2008 financial crisis. Five Landesbanken (BayernLB, HSH Nordbank, LBBW, NordLB and WestLB) suffered substantial losses, requiring recapitalisation programmes and a clean-up of balance sheets. Some drastically scaled back their balance sheets, some merged, and others went into liquidation under pressure from the European Commission. Considered in isolation, the savings banks came through the crisis virtually unscathed and required virtually no state aid. The structure of the network protected them from direct exposure to risk products and the debt market. Depositor confidence in the deposit guarantee scheme (and in the German government) saved them from the threat of a run on their resources. Their regional roots, which ensure stable resources and comfortable margins, allowed them to absorb the defaults caused by the economic slowdown. The rare cases where some of their number experienced difficulties were handled internally by the rescue fund.

... and protected the financing of German companies

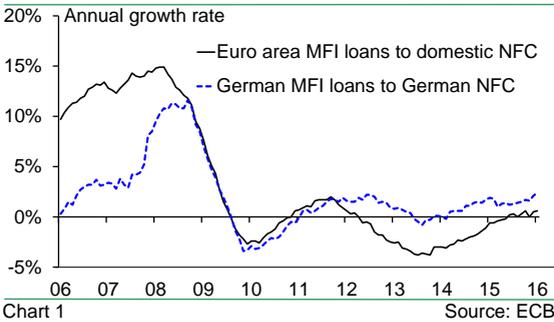
Overall, lending by German credit institutions to domestic non-financial corporations suffered in the period from 2009 to 2010 to an extent greater than the euro zone average (outstanding loans in Germany were down 3.4% on average in December 2009, against 2.2% in the eurozone as a whole [see Figure 1]). The contraction of demand for lending may well have contributed to this (the fall in investment rates in capital goods in 2009, capacity of large businesses to generate excess cash flow). The substantial repayments of debt in 2009 and 2010 also affected outstandings.

Outstanding loans did not, however, fall at all credit institutions. Indeed, the stability of the financing⁹ provided by the savings banks and cooperative lenders to German non-financial corporations helped attenuate, to an extent, the contraction of the lending by the banks with the greatest risk exposure (structured products, sovereign debt of the PIIGS countries) and those engaged in a deleveraging process (namely the private commercial banks and Landesbanken -- see Figure 2). The resilience of the Sparkassen had even greater stabilising effects because the German banks with the greatest exposure to the US real estate markets made their biggest cuts in lending in the most fragile regions and industries (with high default rates -- see Ougena, Tüner-Alkan and von Westernhagen, 2015).

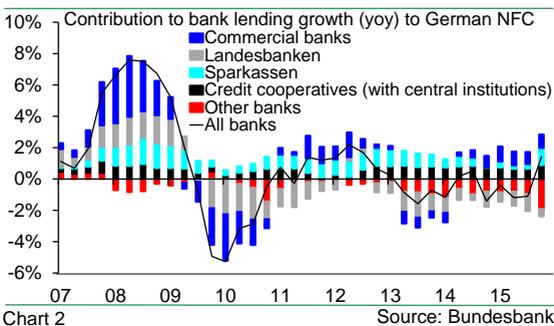
Between 2007 and 2009, German savings banks were not able to maintain their outstanding loans to households, in contrast to the cooperative lenders and private commercial banks (see Figure 3). Using individual statistics on refusal rates at a sample of institutions, Puri, Rocholl and Steffen (2011) observed that although household demand for credit fell slightly in 2006 to 2008 for all banks in the sample, the savings banks that were shareholders in those Landesbanken most exposed to sub-prime loans made more significant cuts in their credit offering than did other savings banks.



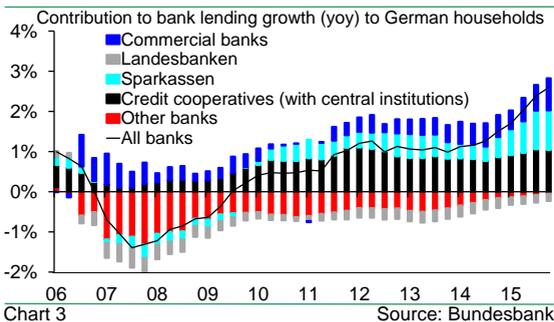
MFI loans to non-financial corporations (NFC)



Sparkassen: stability in financing to German NFC



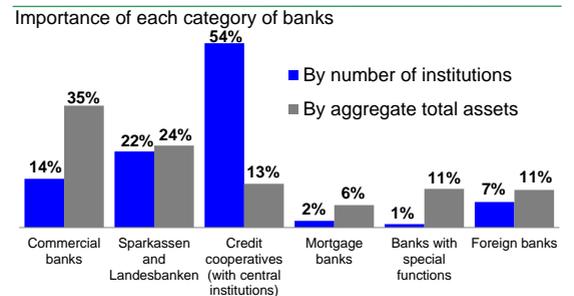
Sparkassen: household loans less resistant during the crisis



Enviably market share and financial performance

Savings banks and mutual groups make up three-quarters of German credit institutions (86% if one excludes foreign banks). Their approach, based on retail customers and a dense coverage of their regions, explains why they account for such a high proportion. They have very modest balance sheets: average assets of EUR 2.8 billion for the savings banks (with most being under EUR 1 billion) and EUR 800 million for the mutuals. Thus their assets account for less than a quarter of total assets for the German banking system. Although their central structures have substantial balance sheets, the total weighting of the two networks in terms of assets is half that when measured in terms of number of institutions (Figure 4). By way of comparison, commercial banks account for 14% of German credit institutions, but 35% of total assets. However, the two networks dominate lending to non-financial corporations (51%) and to domestic households (54%) and collect more than half (53%) of household deposits in Germany¹⁰ (Figure 5)¹¹.

Savings banks and credit cooperatives account for 3/4 of German credit institutions



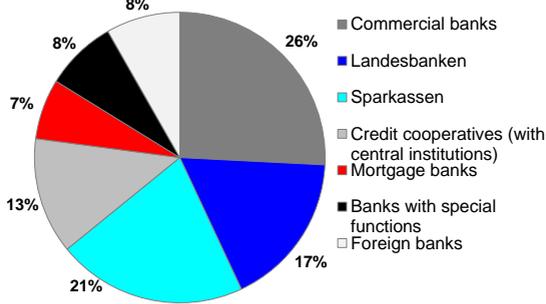
Reflecting their core business, a large share of assets (two-thirds) and resources (three-quarters) at the Sparkassen consist respectively of loans and deposits to and from non-bank customers. It is clear that their



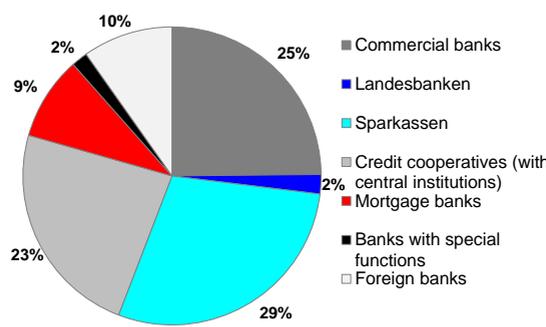
strong local ties give them access to a broad deposit base, which comfortably covers their lending portfolios. By way of illustration, in December 2015, deposits from domestic households covered 140% of the loans made to them by the savings banks.

Market shares

Networked institutions dominate lending to non-financial companies...



...lending to households...



...and collect more than half of household deposits

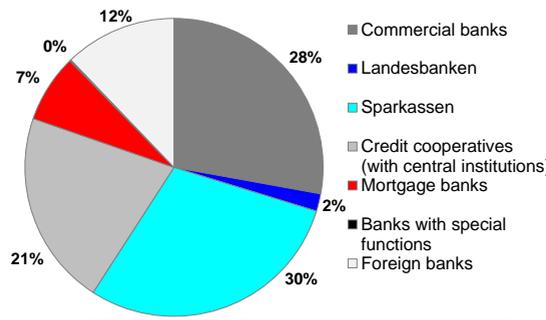
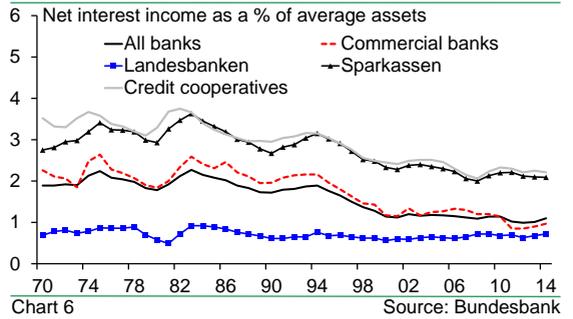


Chart 5

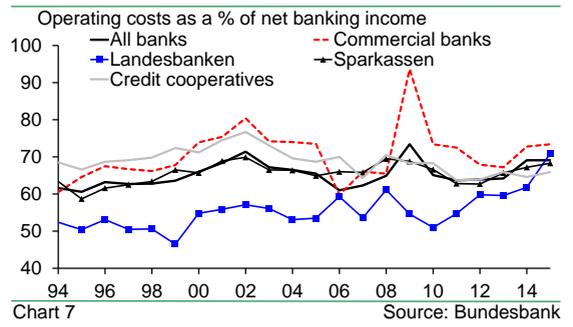
Source: Bundesbank

On average, since the 1990s, savings banks, in common with the credit cooperatives, have posted very good financial performances: net interest margins have been very comfortable in comparison to other types of credit institutions (Figure 6), cost to income ratios lower than those of private commercial banks (Figure 7) and net returns on capital higher than and more stable than at private banks (Figure 8).

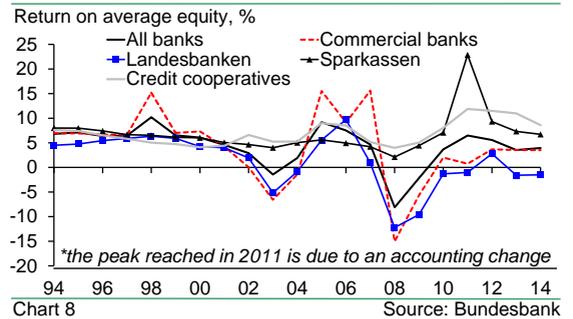
Sparkassen post comfortable net interest margins



Cost to income ratios by category of banks



Sparkassen post stable profitability*



Thanks to their influence with German public authorities, and the power of the latter within European bodies, the savings banks (with the exception of the Hamburg and Frankfurt Sparkassen) have not been placed under the ECB's direct supervision¹². Although the share of credit institutions falling outside the Single Supervisory Mechanism (SSM) is small in most countries, it is much larger in Germany (and also in Austria and Italy). Measured in terms of outstanding loans, a large section of the German banking sector thus remains under the supervision of the national authorities – Bafin and the Bundesbank.

...and reality

The Sparkassen clearly offer a successful model. Their intimate knowledge of their customers, their responsible lending policies and their conservative risk management all contribute to this. But their success is also based on distortions of competition, that have persisted for many years, which deprive German commercial banks of recurrent revenue streams. Moreover, their business model could be hard to transplant to economies with structural features that are very different from those of Germany. Lastly, the climate of persistently low interest rates could eat into their profitability.

Significant distortions of competition

The public body status of the members of the Sparkassen network, together with favoured business conditions, produce competitive distortions. Structurally, the profitability of the German banking sector suffers from the fragmentation of this market and these distortions of competition.

An oligopolistic structure in the retail banking market

The Sparkassen and the cooperative banks, that is to say two-thirds of German credit institutions, follow the principle of a regional division of their areas of activity. This oligopolistic structure in the local retail banking market makes competition difficult. Hit by the fragmentation of market share, net interest margins in Germany are narrow when compared to those in other eurozone countries, particularly for private commercial banks. By compressing margins, the fragmentation of

market share makes the management of operating coefficients all the harder. The downturn in the credit cycle (which is relative, as the fall in lending rates and the good prospects for employment and income have driven an increase in mortgage lending in recent months) and the concentration of market share in the hands of the savings bank and mutual bank networks not only limit the business volumes of the commercial banks, but also deprive them of a stable source of revenue which could help offset the volatility of investment banking revenues.

A lack of market discipline at the regional public banks

In the Mittelstand market, there is competition from the Landesbanken on top of that from savings banks and mutuals. Benefiting from the explicit support of the Länder (their shareholders alongside the savings banks), the regional banks have remained insulated from any market discipline, at least until the financial crisis, offering their clients products on terms that the commercial banks could not match without threatening their own profitability. Although the public liability guarantees enjoyed by the Landesbanken have been abolished, the Länder's commitment to protecting their banks and the advantages flowing from the intra-network solidarity mechanism help preserve a favoured business framework.

Granted, the Landesbanken no longer benefit from the same advantages as they enjoyed before the financial crisis.

First, their debt is no longer backed by public guarantee. The European Commission took the view that they represented a distortion of competition and decided in 2001 to abolish the public guarantees granted to Landesbank creditors (for debt issued after July 2005)¹³.

Secondly, the cohesion within the public pillar of the banking industry was seriously shaken during the financial crisis. The Landesbanken, fearing a significant increase in the cost of resources, anticipated the effective withdrawal of public guarantees by issuing a large stock of guaranteed debt between 2002 and 2005. They then increased their borrowing from the Sparkassen and expanded their



balance sheets beyond what was necessary to remain viable. Although far removed from their core business, they used these resources to finance non-domestic customers, most notably investing in higher-risk markets (structured products backed by US sub-prime mortgages, shipping, other international financing in the aviation and commercial real estate sectors). Concerned by the difficulties of the Landesbanken, the Sparkassen played a very small role in the rescue of the banks experiencing the greatest difficulties. Although historically the ownership of the Landesbanken was equally split between the Länder and the Sparkassen, it has shifted since the financial crisis, with the burden of recapitalising the regional banks falling largely on the former. The indefatigable support of the regions (and thus the German taxpayer) thus saved the Sparkassen from heavy losses. Last year, at the time of the revision of the solidarity mechanism, the tone of negotiations showed just how fragile cohesion within the public pillar has become. Some rumours suggested that regional groups of savings banks intended to create informal alliances with a view to potentially vetoing assistance to a Landesbank in difficulty. Unlike the protection of depositors, the triggering of the mutual support structure is not legally mandated, but is subject to a vote by representatives of the savings banks sitting on the DSGV (the use of the funds of other members requires a 75% majority).

Thirdly, the European Commission has called on all the Landesbanken to review their business model. The failures in governance and supervision revealed by the crisis are likely to become less common now that the regional public banks¹⁴ have been placed under direct ECB supervision. For several years now, it has seemed essential for the Landesbanken to restore the viability of their business models and increase their profitability levels if they are to survive and protect the financing of companies and regions. Moreover, this would help remedy some of the structural deficiencies of the German banking sector.

Although cohesion looks fragile, we believe that the German law enacting the European BRRD directive makes it more likely that the financial solidarity

mechanism would be triggered if required. The law would also appear to protect the ability of the Länder to recapitalise their banks under certain conditions (sufficiently early detection of difficulties, involvement of all shareholders and network members, viability of the business model of the bank receiving support).

A refusal to implement the solidarity mechanism would have negative effects on the network and could have an impact on the financing conditions for regional economies. This would affect the reputation of the group and increase borrowing costs for the Landesbanken. Ratings agencies and investors alike continue to take account of the close ties between the Landesbanken, the Sparkassen and the Länder in their assessment of the quality of Landesbank debt. The yields paid to investors on unsecured Landesbank debt are thus well below the price of protection against the risk of their default.

The advantageous prudential treatment of intra-group exposures could also be called into question. Whilst it looks unlikely that the German regulator would seek to punish the savings bank network in this way, the European Commission could become concerned by the repeated reluctance of the banks to trigger the mechanism.

Moreover, in the absence of any rescue, circumstances where a Landesbank was put into resolution would be costly for the Sparkassen; although they are no longer the principal shareholders they are significant creditors (Fitch Ratings calculated in June 2015 that they provided between 40% and 60% of unsecured financing).

Limits on the transposition of the model

Contrary to its generally accepted presentation, the German savings bank model does not simply boil down to a network structure combining a regional focus and a public interest mission. It is also based, in part, on the availability of a large base of stable resources and, in addition, on the “recycling” outside Germany’s borders of excess savings held.



A strong preference for liquidity

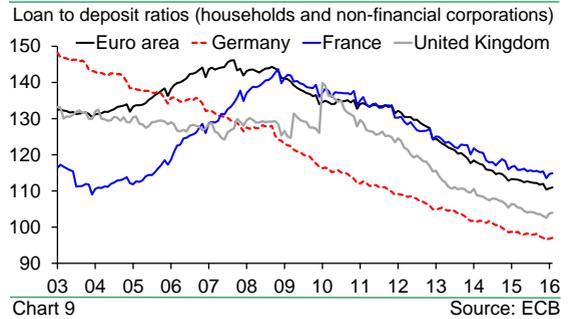
German households save a larger share of their income than other Europeans. Savings by households in the broad sense of the term¹⁵ represented 17% of Gross Disposable Income (GDI) in September 2015, compared to averages of 13% in the eurozone and 10% in the European Union as a whole. Although cultural and demographic factors make a contribution, this high savings rate is due largely to low levels of borrowing. This is because the savings rate measures savings flows (real and financial) net of credit flows. In September 2015, German household debt stood at 83% of GDI (54% of GDP) compared to an average of 96% in the eurozone (61% of GDP), and figures of 87% in France, 108% in Spain and 127% in the UK.

Thus although the savings rate¹⁶ of German households is relatively high, their financial wealth relative to GDI or their stock of debt is lower than that of their European neighbours. It represented 2.7 times GDI of German households in September 2015, compared to an average of 3.3 in the eurozone, 3.4 in France and 4.8 in the UK, and 3.3 times their stock of debt, compared to 3.9 in France and 3.8 in the UK.

However, whilst British households invest their savings primarily in pension plans or real estate investments, their German counterparts hold a higher proportion of their savings in bank accounts. Bank deposits represented 37% of the financial assets of German households in September 2015, compared to 23% in the UK (and an average of 31% for eurozone households).

As a result, German banks enjoy an abundant source of stable resources: in December 2015, deposits by households and non-financial companies represented 33% of liabilities at German credit institutions, a higher proportion than at their French or British peers (22% and 23% respectively). In Germany, since the beginning of the 2000s, the rapid growth in deposits has resulted in a continuous improvement in the rate of deposit coverage of loans. Thus for ten or more years now, German banks have enjoyed better loan to deposit ratios than banks in other eurozone countries (Figure 9). The German savings banks and mutual banks have particularly low ratios (85% in December 2015).

German banks enjoy better loan to deposit ratios than other European banks



The tight control of public finances, a relatively robust economy and high-quality domestic loan books are further strengths of the German banking system.

Savings surpluses

The Sparkasse model is also based on the international allocation of surplus German savings. The major moderation in wages following the labour market reforms of the 2000s and the outsourcing of a share of production to lower-cost countries have helped improve Germany's cost competitiveness. This, coupled with strong non-price competitiveness, has allowed Germany to run substantial trade surpluses for more than ten years. Germany's current account surplus reflects the country's status as a net exporter of goods and services and a net investor internationally. The deficit of domestic investment relative to the savings of households and companies has as its corollary net outflows of capital and low interest rates.

One of the key features of the savings bank network is the circulation of liquidity between members. The savings banks direct their surplus resources (in this case deposits) towards other members of the network that are active in securities markets (the Landesbanken and Dekabank) either by lending them the cash or by subscribing to their debt issues. With a lack of opportunities to invest in the domestic market, the Landesbanken generally "recycle" the surplus savings collected by the Sparkassen by lending or investing abroad. The revenue generated from these loans and investments by the major institutions in their networks



allows the savings banks to offer the best returns to their savers, without exposing them to risks. Without such a system, the recurrent surplus deposits would no doubt have driven down the rates paid on deposits (even in the absence of a highly accommodating monetary policy).

Thus the development of the German savings bank model, applied in an economy such as the UK, would no doubt run into difficulties faced with the lower availability of deposits and be very different faced with the current account deficit that the country has run since the mid-1980s.

Sparkassen facing the challenges of low interest rates

As mentioned above, backed by their networks and sheltered from the competition of their peers, the Sparkassen have higher net intermediation margins than German commercial banks. As part of their client relationships they also carry out a substantial transformation of maturities by holding the loans they make to maturity and collecting substantial deposits. They are thus highly exposed to interest rate and liquidity risks. The persistent context of low interest rates could hit their profitability and increase the risks associated with the transformation of maturities.

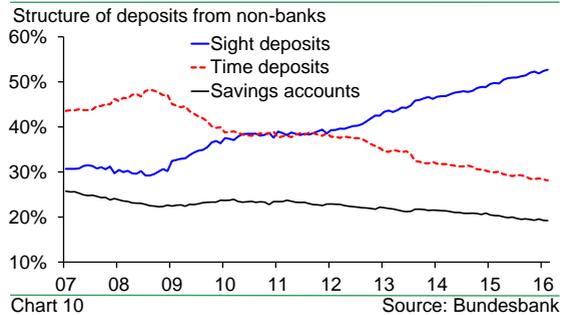
Towards an erosion of net interest margins

According to Bundesbank figures, the low interest rate environment and the flattening of the yield curve have so far had only a limited effect on Sparkassen margins (Figure 6). Admittedly, interest income and costs, expressed as a proportion of average assets have fallen, but by similar amounts. The savings banks have been able to stabilise their net interest income thanks to growth in low-yield deposits and in their loan books.

The share of deposits from non-bank customers on the balance sheets of all German banks rose by 7 percentage points between December 2007 and December 2015 (and by 10 points for the Sparkassen). As with other banks in the eurozone, German banks have in addition benefited from a marked shift in the structure of deposits (particularly those from households) towards sight deposits¹⁷. Whereas at the

end of 2007 sight deposits represented 30% of the total, with term deposits making up 46% and savings accounts 24%, the figures eight years later were 52%, 29% and 19% respectively (Figure 10). Against a background of low rates and dull economic prospects, the reduced opportunity cost on sight deposits which receive little or no interest and the increased preference for liquidity have encouraged households to create provident savings reserves in sight accounts, thus reducing the cost of banking resources (Deutsche Bundesbank, 2015b). The Sparkassen and mutual banks have benefited more than others.

Shift in the structure of deposits



However, persistent low rates raise fears of a lasting erosion of margins. First, the transmission of lower market rates to the cost of banking resources (deposits and debt securities), which had been observable since 2012, came to a stop during 2015. The weighted average cost of debt for German credit institutions (which is amongst the lowest in the eurozone) thus seems to have reached its floor. Secondly, although the unprecedented increase in lending to households (up 2.9% in February 2016) is welcome, new loan production and the renegotiation of loans at lower rates will have a lasting effect on the margin on the loan book. Moreover, any sudden increase in rates, which would affect the cost of resources sooner than it would feed through into the average return on the loan portfolio, would also be highly negative. Thus in mid-2015, the Bundesbank estimated the losses arising from a sudden 200 basis point increase in interest rates could wipe out 21.5% of savings bank capital, compared to a figure of 18.3% at the end of 2011.



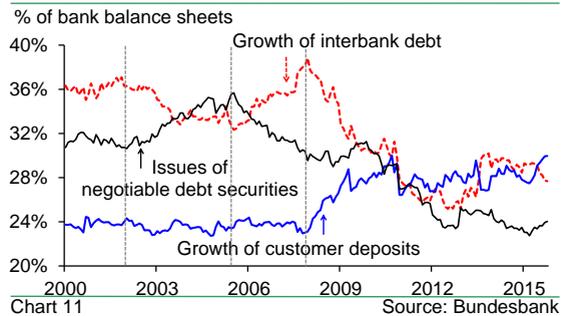
The preservation of the profitability of the Sparkassen, and thus their ability to generate capital internally, is essential to their survival. However, the inherently lower profitability of the Sparkassen's lending business will combine with the lower returns provided by the Landesbanken, under pressure from the European Commission as well as their shareholders to change their fundamental approach and thus withdraw from their higher-risk activities. Encouraged to refocus on their core business, the public regional banks are increasing competition in the business lending segment. This increased competition, and the associated opening of new offices, is denting margins and operating coefficients whilst their cost of risk remains high. Although the definition of viable business models remains a prerequisite, mergers between these banks, to benefit from synergy and economies of scale, would be beneficial. However, although the savings bank association, the DSGV, has long argued for the maintenance of only two or three independent Landesbanks, the Länder themselves have so far hampered any move towards greater consolidation. Issues of regional sovereignty, political prestige and the preservation of jobs continue to win out over economic logic. Against a background of gloomy international conditions, maintaining this excess capacity could become incompatible with new solvency and liquidity requirements.

Increased transformation risk

Within the two major networks, interbank relationships are structured to allow small banks specialising in retail customer finance (the savings banks and cooperative banks) to transfer some of the maturity transformation risk to their central structures, which are better placed to cover these risks in the derivatives markets (Deutsche Bundesbank, 2000). The banks borrow on the medium to long term from the Landesbanken, which in turn they finance on the short term. The net debtor position of the savings bank on the interbank loan market is offset by their holding of bank debt securities, which gives them a net creditor position. As a result, they have liquidity which can easily be mobilised in the event of a shock. The circulation of liquidity within these networks explains why the theoretical hypothesis that small banks tend to restrict their lending offer more tightly than their larger rivals following a monetary tightening is not empirically verified in Germany (Ehrmann and Worms, 2004).

The net credit position of the Sparkassen relative to other German banks increased significantly from 2005 onwards. The available data does not allow the savings banks' counterparties in the interbank and negotiable debt securities markets to be identified. However, the Bundesbank (2000) and Ehrmann and Worms (2004) have estimated that three-quarters of the Sparkassen's net credit position was held with their central institutions. This increase is echoed in the change in the structure of the Landesbanks' liabilities: the period of excess issuance of negotiable debt securities in the run-up to the ending of public guarantees (to investors outside the network, between 2001 and July 2005, see above) was followed by a period of growing interbank borrowing by the Landesbanken up until the end of 2007 (see Figure 11).

Landesbanken' liabilities: from one debt instrument to the next



Since 2009, deleveraging programmes and the reduction of the Landesbanks' balance sheets (-40% between the end of 2007 and the end of 2015) have been accompanied by a rebalancing of the structure of liabilities in favour of deposits from their customer base of financial and non-financial firms (Figure 11). On the Sparkassen's balance sheets, credits to domestic banks (loans and debt securities) have fallen: at the end of 2015 they represented only 15% of total assets (4% in net terms) from 30% (20% net) at the beginning of the 1990s and 25% (7%) at the end of 2008.

However, although the maturity mismatch between loans and deposits of non-bank customers has tended to increase, that between interbank loans and deposits



is falling. The maturity of the loans by the Sparkassen to domestic banks is rising. In the mid-1990s, 90% of such loans were for less than one year; today that figure is only around 50%. The structure of interbank debt has shifted slightly, to the detriment of term deposits¹⁸.



The savings banks are clearly major players and a structural factor in the German banking sector. They are members of a large financial structure, organised as a network, which deftly mixes the autonomy of its members, the pooling of processes, a public interest mission and the regional principle, all under the benevolent eye of the government authorities. It is clear that the Sparkassen have many virtues, but the financial crisis revealed the weaknesses in the three-pillar system, under which some generate profitability at the expense of the others. More generally, the imbalances in the German economic model, particularly in terms of the size of the current account surplus, are regularly criticised by European bodies but have provided fertile ground for the growth of the Sparkassen model.

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NOTES

¹ On the European level, savings banks and mutual banks are now a very heterogeneous group. For an overview of the history of these two types of institution in Europe, see Bülbül, Schmidt and Schüwer (2013).

² In November 2015, the two central institutions of the cooperative banks announced proposals to merge (by the end of July 2016).

³ The European Commission and German federal government agreed on 21 March 2016 that following restructuring, the regional HSH Nordbank would be privatised (by 2018).

⁴ The seven independent Landesbanken are Bayerische Landesbank, HSH Nordbank, Landesbank Baden-Wuerttemberg, Landesbank Berlin, Landesbank Hessen-Thuringen, Norddeutsche Landesbank and Landesbank Saar (following difficulties experienced by BayernLB, SaarLB, which had been under its control since 2002, regained its independence in 2010). The eighth Landesbank, Bremer LB, belongs to the Nord LB group.

⁵ The scope of action of each member of the network differs: the savings banks operate at the local level; the Landesbanken, public mortgage lenders and public insurance companies operate at the regional, or Länder, level; the other institutions, such as Dekabank, operate on a federal level. There are various regional associations and a national association, the German Savings Banks Association (DSGV), which represents the savings banks in their dealings with the authorities.

⁶ Members of the public pillar use a central computing system, which is considered one of the most powerful retail banking IT networks in the world. A company, operating a very large company and SME ratings database, develops and manages the internal rating process for the whole network. Client ratings are based on standard rating criteria but also take account of more qualitative variables such as the personality of the entrepreneur, the quality of succession planning (95% of companies registered in Germany are family firms) and the company's environmental behaviour. The network has a single database that compiles anonymised company balance sheet and income statement data to produce activity forecasts for more than 400 branches (Schackmann-Fallis, 2011).

⁷ German covered bonds.

⁸ Before the abolition in 2005 of public liability guarantees (see below), the Sparkassen were fairly significant subscribers to issuance of guaranteed debt securities by the Landesbanken (who in turn were subscribers to issues from other Landesbanken).

⁹ The Bundesbank does not provide credit flows data by type of credit institutions, meaning that it is not possible to calculate average annual growth rates under the ECB methodology. The advantage of this methodology is that it eliminates changes in scope (not corrected for in outstanding loan statistics).

¹⁰ After World War II, the German banking market was highly segmented, which allowed the savings banks and cooperative banks to become the main provider of local banking services to German households and SMEs. The major private banks did not turn their attentions to the mass market until the mid-1960s (Bülbül et al. 2013).

¹¹ With their strong local roots, the penetration of the retail banking market by new competitors, particularly foreign groups, or by the redeployment of the major commercial banks, has not, to date, weakened the savings banks' market share. However, costly measures are still required to adapt to the digitalisation of customer relationships and to protect against competition from on-line banks.

¹² The initial plan was that all eurozone banks would be placed under the direct supervision of the ECB, but under pressure from Germany, small banks were removed from the SSM's scope. Only those institutions with total assets of more than EUR 30 billion, or whose weight in national GDP is greater than 20% are considered as "significant" and thus under direct ECB supervision.

¹³ These guarantees allowed the regional banks to benefit from very strong ratings and therefore to refinance at lower cost. Contrary to expectations, the removal of these guarantees did not give rise to a movement of either consolidation or adaptation of the Landesbanken to market conditions, for two reasons: the main ratings agencies continued to assess the quality of Landesbank debt on the basis of their close links with the Länder and with the regional federations of savings banks (ownership structure, intra-group protection mechanisms and political considerations). The second factor for the slow transition lies in the fact that the Landesbanken anticipated the abolition of the guarantees and as a result ensured the coverage of their refinancing needs during the four-year transitional period prior to the effective ending of the guarantees. Bond issues prior to ¹⁸ July 2005 which matured before 31 December 2015 still enjoyed state guarantees (with bonds issued before 18 July 2001 covered by guarantees irrespective of their maturity date).

¹⁴ With the exception of SaarLB.

¹⁵ The household sector here includes individuals, self-employed persons and non-profit organisations providing services to households.

¹⁶ At the macroeconomic level, the very high savings rate in the German economy is related to the labour market reforms of the 2000s, which slowed the growth of wages relative to GDP and the weighting of consumer spending within GDP.

¹⁷ Whilst the share of household financial savings held in sight deposits in the eurozone rose by 4 percentage points between 2007 and 2015, the increase for German households was 9 percentage points.

¹⁸ The latter nevertheless still account for 90% of their interbank lending (from 96% before the financial crisis).



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