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A Case for Boring Banking and Re-Intermediation

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I. Introduction: Will the change to re-intermediation and “boring banking” be successful?

The global financial crisis put an end to the deregulation myth: the idea of a mostly self-regulatory financial system characterised by disintermediation was suddenly being questioned critically.¹ Having been forced to assume liability, politicians demanded to be the decision-makers once again – on the one hand, in order to close regulatory gaps and on the other hand, to strengthen regulatory requirements in general, especially concerning own funds and liquidity reserves.²

Disintermediated financial systems turned out to have structural weaknesses, which, in turn, lead to distorted incentives and misdirected allocations. Against this background, it was the broad political consensus to revert the banking system to its traditional functions, and to extensively revitalise “boring” business models of deposit-based lending.³ This also implied questioning⁴ the assumption of a growing financial sector positively⁵ affecting non-financial activity. Accordingly, scepticism (re-)emerged that a very extensive financial sector⁶ ties up too many parts of economic resources – or deprives the real economy of them⁷ – and that, at a certain level, indebtedness is no longer sustainable. In addition, risks and competitive distortions induced by “too big to fail” made their way into public awareness.⁸ The fiscal costs arising

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¹ Cf. G20 Leaders’ Declaration, Washington DC November 2008 (G20 2008): “... 3. During a period of strong global growth, growing capital flows, and prolonged stability earlier this decade, market participants sought higher yields without an adequate appreciation of the risks and failed to exercise proper due diligence. At the same time, weak underwriting standards, unsound risk management practices, increasingly complex and opaque financial products, and consequent excessive leverage combined to create vulnerabilities in the system. Policy-makers, regulators and supervisors, in some advanced countries, did not adequately appreciate and address the risks building up in financial markets, keep pace with financial innovation, or take into account the systemic ramifications of domestic regulatory actions...”

² Cf. in particular G20 Leaders’ Declaration, Washington DC November 2008 (G20 2008), London April 2009 (G20 2009a) and Pittsburgh September 2009 (G20 2009b). For the implementation of Basel III in Germany, cf. in detail Deutsche Bundesbank (2013).

³ Cf. exemplarily for the European civil society Finance Watch (2014: 68): “[T]he crisis did not show that all banks were too risky and that we consequently need more capital markets. It showed instead that some universal and investment banks were too risky and that we need more traditional banks. It is essential to distinguish between business models and promote those that have proven both more robust and more useful for the financing of the real economy”.

⁴ Cf. among others Law/Singh (2014) or Cecchetti/Kharroubi (2015).

⁵ Cf. summarised Levine (2005).

⁶ Between 1980 and 2007, the value of global financial assets increased from USD14 trillion to USD 206 trillion and thus, in relation to the worldwide GDP, from 120% to 365% (United Nations Conference on Trade and Development [2013: 17]).

⁷ Cf. also Tobin (1984).

⁸ For the problem of an excessive risk taking induced by too big to fail cf. e.g. Barrell et al. (2010), Brewer/Jagtiani (2013), Marques et al. (2013). Reduced refinancing cost and the extent assumed implicit state liability resulting from too big to fail are addressed by e.g. Boyd/Gertler (1993), Soussa (2000), Fecht et al. (2008), Völz/Wedow (2009), Gandhi/Lustig (2010), Ueda/Di Mauro (2012), Siegert/Willison (2015).

from implicit fiscal guarantee for institutions considered too big to fail led to a deep scepticism in society vis-à-vis parts of the financial industry, and investment banking business models.

This also explains why the so far common policy of creating major and globally active credit institutions as “national champions” (which might even have entailed consciously permitting lower regulatory standards to generate competitive advantages) was discontinued after the global financial crisis. At least during the acute period of the crisis, the G20 started pursuing a more distinctive international regulatory policy. At the same time, regulatory and supervisory competences underwent an extensive centralisation in the EU and, even more, in the euro area. This vast step of European integration not only includes a common set of regulations based on the Capital Requirements Regulation (CRR), but also – with the banking union in force – a centralised European supervisory institution (the Single Supervisory Mechanism [SSM]), a joint bank resolution financing (the Single Resolution Mechanism [SRM] with a Single Resolution Fund [SRF]) and harmonised standards for the deposit insurance schemes.⁹ By means of banking union and European Stability Mechanism (ESM) Europe has de facto created a transfer union in the areas of financial market stabilisation and public finances.

The impact of the wave of regulations implemented on the banking sector in the wake of the global financial crisis is extensive, and cannot yet be fully assessed. What we can already see, however, is a distinct deleveraging process in the banking sector. In general, equity capital has turned out to be the core restrictive factor in the banking business, thus tending to make balance sheet transactions more difficult. In addition, especially given the implementation of the Net Stable Funding Ratio (NSFR), long-term deposits are becoming increasingly important for banking operations – or conversely, long-term loans are becoming scarce. Generally, wide areas of the banking sector are clearly less profitable than before the global financial crisis. There are various reasons for this development, ranging from write-downs of non-performing loans and cost increases due to rising regulatory requirements, to lower earnings on the back of the continued global low interest rate environment.¹⁰ The general trend of digitalisation in the banking business combined with the emergence of new providers, notably in the areas of payment transactions, as well as growing shadow banking activities, e.g. crowdfunding and credit funds, create additional pressure on earnings.¹¹

With regard to organisational structures, re-regulation has led to a marked expansion in the areas of risk management and compliance. In fact, regulation imposes a higher minimum business size upon banks, which has led to an extensive merger trend, especially affecting smaller credit institutions.¹² Regarding Europe Alessandrini et al. (2016: 17) criticise: “Given that a

⁹ Insights into the debates and necessities at that time are offered by e.g. Kotz (2009), (2011) and (2014).

¹⁰ For empirical research regarding interest rate levels, yield curve and profitability of credit institutions, see e.g. Demirgüç-Kunt/Huizinga (1999), Alessandrini/Nelson (2015), Borio et al. (2015).

¹¹ Cf. in detail German Council of Economic Experts (2015) and e.g. Rehm (2016).

¹² Over the last nine years (January 2008 to January 2017), the number of credit institutions in the European Union (EU 28, fixed composition) has declined by approximately 1,700 or 21%, and in the euro area (euro area-19, fixed composition) by approximately 1,400 or 22% (ECB Statistical Data Warehouse: Financial Corporations / Number of Financial Corporations). In Germany, the number of credit institutions has reduced by 326 between January 2008 and January 2017. At the same time, the average size of German cooperative banks increased by 71% (from 506 million EUR to 868 million EUR) and the size of Sparkassen from 2.3 billion EUR to 2.9 billion EUR, i.e. by 26% (Deutsche Bundesbank: Banking Statistics, table I.3).

large part of meeting regulation is a fixed cost, its burden falls proportionally more on small, local banks than large banks. While this asymmetric burden is recognized and in part corrected in the United States, it is instead almost ignored in the European Union, where the “one-size fits all” rule prevails... There is an apparent contradiction between the policy of banking consolidation and retrenchment and the objectives of financial stability and economic development”.

The United States and Europe have chosen different paths regarding differentiated regulation. While the EU implements a *one size fits all* approach with virtually no exceptions, the regulatory approach of the US differentiates (especially in its implementation of the Basel standards) between the size of banks,¹³ and aims to achieve heterogeneous market structures.¹⁴ In this context, Alessandrini et al. (2016: 6) note: “The last wave of regulation is relatively unfriendly to local banks, reflecting the position of regulators, especially European, that a consolidation of the banking system can lower systemic risk. American regulators, unlike their European counterparts, appear to be convinced that variety of organisational forms in banking is worth preserving”. European Union politicians obviously accept – or even aim for – induced structural changes on the banking market leading to less heterogeneity and larger entities.

In this context, the question arises as to whether the process of disintermediation was only interrupted briefly by the global financial crisis – whether driven by markets or political intention. Currently, international institutions such as the Basel Committee on Banking Supervision (BCBS), the International Organization of Securities Commissions (IOSCO) or the International Monetary Fund (IMF)¹⁵ as well as the European Commission¹⁶ are trying to revive securitisation, with the aim of disengaging the lending process from banks’ equity restrictions and, overall, to expand it. In 2015, BCBS and IOSCO introduced the “Criteria for identifying simple, transparent and comparable securitisations”: the number of securitisation levels is to be reduced and transparency increased, whilst securitising only the less risky receivables.¹⁷ In future, such so-called “qualifying securitisations” will have lower capital requirements than securitisations in general. Europe will probably introduce this with the release of the amended CRR II¹⁸.

In principle, securitisation is an instrument which permits a broader diversification of risk. In order to prevent moral hazard in the context of securitisation, the CRR imposed a credit risk retention upon originators, amounting to 5% of the nominal value of the securitised receivables, or of the first-loss piece (Article 405 CRR).¹⁹ It is, however, debatable whether the asymmetric

¹³ Cf. in detail for thresholds e.g. Tarullo (2016).

¹⁴ Cf. Yellen (2014): “I believe a healthy financial system relies on institutions of different sizes performing a variety of functions and serving different needs”.

¹⁵ Cf. Aiyar et al. (2015).

¹⁶ European Commission’s securitisation initiative adopted on 30 September 2015 comprises two legislative proposals: Proposal for a Regulation Laying Down Common Rules on Securitisation and Creating a European Framework for Simple, Transparent and Standardised Securitisation (STS) [COM(2015) 472 final] and Proposal for a Regulation Amending Regulation (EU) No 575/2013 [COM(2015) 473 final].

¹⁷ Cf. Basel Committee on Banking Supervision / International Organization of Securities Commissions (2015).

¹⁸ COM(2016) 850 final (Proposal for a Regulation amending Regulation EU/575/2013) and COM(2016) 854 final (Proposal for a Directive amending Directive 2013/36/EU)

¹⁹ In immediate response to the global financial crisis, Germany had imposed a credit risk retention of 10% (German Banking Act Section 18a, old version until July 2013), but lowered it in accordance with the CRR when the latter came into force.

distribution of information and the associated risk of securitising especially bad risks can be overcome with credit risk retentions of this scale. In addition, the weak points on the rating market continue to be unresolved. Europe has been trying to restrict possible misconduct with the introduction of the Credit Rating Agency Regulations I to III²⁰ and corresponding supervision by the European Securities and Markets Authority (ESMA), yet without finding a solution to the structural problems.²¹

In view of the economic environment outlined above, the question arises whether the principal political objective aimed for after the global financial crisis – making the banking business “boring” again – has in fact been achieved. Or is it not a fact that many market players have relapsed into crisis-prone thinking patterns? With that in mind, it seems indispensable to discuss whether boring banking is an economically and socio-politically appropriate goal at all.

The aim of the essay at hand is to do exactly this. For this purpose, chapter 2 will discuss the economical functions of banks, and debate whether a widely disintermediated financial system can work without friction. Following up on this, chapter 3 will evaluate the concepts of bank based and capital market based financial system from the perspective of providing loans to small and medium-sized enterprises (SMEs). In this context, this essay also deals with the potential risk of a credit crunch for the real economy, and the experience Germany gained in the global financial crisis. Chapter 4 analyses the structure of the German banking market and the different business models from the perspective of boring banking. The essay concludes with economic policy recommendations deemed necessary to promote – or at least preserve – the business models of boring banking.

II. Economic functions of banks and the sustainability of disintermediation

II. 1. Reduction of asymmetric information and moral hazard

Financial theory often assumes the ideal of a perfect capital market. This implies a market which is information-efficient, i.e. a market in which prices accurately reflect the information available. Accordingly, a financial contract would have to have a well-defined price at any given point in time – a price that applies to all market participants and to both sides of the market.²² In such a state, the behaviour of savers and borrowers would not be influenced by financial intermediaries’ activities. In fact, the contracting parties on credit markets possess different information and the price does not reflect (or only partly reflects) all the material information; in general, the borrower knows more about his ability and his willingness to repay than the lender.

²⁰ Regulation EC/1060/2009 on Credit Rating Agencies (CRA I), Regulation EU/513/2011 on Credit Rating Agencies (CRA II), Regulation EU/462/2013 on Credit Rating Agencies (CRA III)

²¹ Cf. in detail e.g. Stuwe et al. (2012) and Kotz/Schäfer (2013).

²² Cf. Fama (1970), Bernstein (1992), Malkiel (1992).

One of the banking sector's economic functions is to reduce asymmetric information concerning the borrower, primarily by assessing the credit quality, and to limit moral hazard on the side of the borrower, i.e. the risk of a subsequent riskier use of funds.²³ Economically, this is relevant to avoid capital misallocation, i.e. the use of (scarce) economic resources for unproductive investments.

In this context, banks are better placed to overcome asymmetric information than securities markets, provided the following constellation is given:²⁴

- Local knowledge: A regionally focussed bank has an “informational edge” regarding the borrowers in the respective region. Thus, the degree of information asymmetry decreases.
- Relationship banking, meaning the existence of a long-term business relationship including numerous banking transactions (within the scope of a primary banking relationship): With such a client relationship, the bank gains private information about the borrower's financial situation and behaviour, practically ruling out asymmetric information.²⁵ Undesirable business developments and a possible misuse of loans can be detected in a timely manner.

A primary banking relationship is also advantageous on borrower's side, because the bank is often the one most likely to perpetuate the availability of credit, even in difficult times.²⁶ Due to asymmetric and incomplete information, capital markets, on the other hand, often react abruptly (and in an undifferentiated manner) in case of signs of crisis or even driven by rumours, easily leading to the creation of boom-and-bust cycles. Overall, thanks to their unique ability to reduce asymmetric information, banks contribute to a reduction in market failure.

II. 2. Risks inherent in the banking business, and how they are supposedly overcome by disintermediation

Reducing asymmetric information is the core role of the banking sector, besides the transformation of lot sizes, maturities and risks as well as the preservation of a flowing macroeconomic income cycle.²⁷ However, in this process, banks also assume significant risks which can ultimately lead to a bank facing insolvency or a liquidity crisis. Thus, managing the risks linked to transformation functions is an important part of a bank's internal risk management, as well as the starting point of banking regulation.

Three key risk areas are relevant in this context:

1. Interest rate risk occurs due to a mismatch between long-term contracts (with fixed interest rate) on the assets side, and short-term variable funding rates on the liabilities side.

²³ Cf. Diamond (1984) regarding fundamental research about positive effects on economic efficiency due to delegated monitoring done by specialised financial intermediaries in financial contract relationships.

²⁴ Cf. in detail Allen/Gale (2000) as fundamental literature and basis for several subsequent research, in particular regarding information asymmetries.

²⁵ Cf. e.g. Puri et al. (2011), Van Hoose (2010) and for previous research Hodgman (1960).

²⁶ Cf. e.g. Petersen/Rajan (1995) and Fried/Howitt (1980) for earlier discussion.

²⁷ For the following cf. in detail e.g. Mishkin (2016).

2. Funding risk arises because the bank constantly needs to find revolving funding for long-term receivables. This is mandatory, given the fact that several assets can hardly be sold at short notice – and in any case not without losses.

3. Default risk occurs especially where the credit quality assessment was unreliable, and mechanisms to counter moral hazard are missing after the approval of loans.

A global disintermediation trend was seen between the 1980s and the outbreak of the financial crisis 2007/08, also in response to these risks inherent in traditional banking business. In this context, the term “disintermediation” is defined as a process replacing deposit-based lending with a straight use of securities markets, and hence, a shift towards a capital markets-based financial system.

For the most part, the disintermediation process was supported by economic policymakers, and stimulated by a general market deregulation environment.²⁸ From the perspective of economic theory, market failures were assigned only a petty existence, and the markets were deemed capable of regulating themselves. Politically, size and global activity were favoured and the creation of national champions was considered the only path in that direction. It appeared that a traditional banking sector – that is, one focused on deposit-based lending – was no longer needed: on the contrary, it appeared to be detrimental to financial market stability. On a technological level, disintermediation was enabled by the rapid development of information technology and promoted by a global interconnectivity of markets and an extremely fast information availability. On the academic side, the emerging financial engineering and the “art of securitisation” seemed to have set the mathematical-statistical basis for a redesign of financial transactions.

In the wake of the disintermediation process, banks increasingly assumed a mere agent role between the client and the capital markets. From a client’s perspective, banks continued to function as lenders; however, they followed the originate-to-distribute model, quickly selling on receivables instead of keeping them on their own books as they had done traditionally. Accordingly, investment banking businesses gained importance within banks, as reflected on the income statement, with earnings shifting from the interest margin to commissions.

Beyond the presumed benefits of market deregulation in general, from an economic perspective, disintermediation was linked to the thought that the opportunity of a broad risk diversification might increase the risk-bearing capacity, via the capital markets. Corporate financing via capital markets also seemed superior as the latter were deemed more liquid, risk-friendlier and (almost) unlimited in quantitative terms.

The first signs leading to doubts about the sustainability of disintermediation were various accounting scandals, particularly the ones at Enron and WorldCom in the years 2001 and 2002, during which extensive assets, especially those held by private households, were lost. At the

²⁸ Cf. in detail e.g. Alessandrini et al. (2016: 3): “... we have had two peaks of financial regulation, the first in the wake of the GD [Great Depression] of the 1930s and the second after the GFC [Great Financial Crisis] of 2008-2009. Between these two peaks we have experienced a long wave of deregulation that started in the 1980s and progressed in the 1990s”.

latest, the global financial crisis in 2007/08 revealed the wrong incentives which had been created in the course of the disintermediation process. Overall, it was obvious that the transfer of monitoring (associated with disintermediation) to rating agencies and investors had not worked at all. The combined system of securitisation, tranche splitting, an absence of credit risk retentions, and investment vehicles, all provided the lending banks with the incentive to waive detailed credit checks. This was the way in which the vast volumes of sub-prime loans could be extended, which ultimately caused misallocation of capital on a massive scale.

When it became more and more obvious that the assets behind the securitisations had only a low value, the market collapsed. Additionally, multi-level securitisations created through tranching led to enormous intransparency. Ultimately, this led to market participants fleeing in droves, followed by a process of adverse selection: due to the risk premiums required by buyers, securitising good risks was no longer worthwhile. The bad risks remained, leading to a further loss of trust in the market and finally to its inoperability. With the loss of the securitisation option, the financial system based on disintermediation was robbed of one of its central functional mechanisms.²⁹

Investing in money market funds, especially widespread amongst US private households, proved to be value preserving only to a limited extent. On the other side, corporate financing via issuing commercial papers – bought by these money market funds – proved unreliable. The year 2008 turned out to be a serious crisis year for the US money market funds, accompanied by financial shortages for real economy enterprises.

II.3. After the crisis: is waiving the banks' traditional functions an option?

As the global financial crisis showed at its peak, the fundamental problem of disintermediation is to adequately handle the associated increase of asymmetric information (and the consequential problems of moral hazard and adverse selection). It became obvious that the availability and reliability of information from financial accounting and reporting, as well as from ratings, were not given – yet they are key requirements for a functioning capital markets-based financial system.

Specifically, the principle of extensive loan securitisation without sufficient retention of credit risk (or the first-loss piece) by the issuer resulted in insufficient pre-credit checks. This was a problem especially with subprime exposures in the US, and with so-called “Ninja” loans (no income, no job, no assets). Basic structural problems on the rating market, but also – in particular – the absence of liability for mistakes in assessment, were reasons for rating agencies' failure to achieve a reliable risk assessment, and thus for their inability to replace the monitoring function carried out by banks so far.

²⁹ Cf. as well King (2016).

Consequently, the structures established by the disintermediation process were unable to adequately reduce information asymmetry.³⁰ Capital misallocation and a solvency crisis of institutional financial market players were the results of insufficient (or sometimes completely missing) pre-credit checks of borrowers, or of the solidity of the investment. Likewise, the disintermediation structures developed were inadequate for handling the funding risk incurred from the maturity mismatch between asset and liability side, leading to (potential) illiquidity in business models focused on extremely short-term capital market funding, or an excessive exploitation of yield curve spreads. In Germany, this was the case with Hypo Real Estate and other institutions which had created investment vehicles as securitisation conduits – hence, business models which did not have a “boring” focus.

Thus, the experience gained in the crisis demonstrates that – in the course of the progressing disintermediation, combined with a corresponding change in banks’ business models – an adequate handling of risks was not realised. Risks mostly materialised in cases where business models had deviated from “boring banking” and a risk-sensitive governance; proof that traditional deposit-based lending business models – boring banking, in essence – is indispensable. Holding receivables on their own books sets the right incentive for banks to carry out thorough pre-credit checks of borrowers, or of the solidity of the investment project. The deposit-taking business acts as a stable funding basis for long-term receivables.

Banks with a deposit-based lending business model firstly finance private households, especially the acquisition of consumer durables and residential property. From the perspective of economic theory, the banks thus enable the realisation of microeconomic intertemporal budget balancing. Secondly deposit-based lending business model finance small and medium-sized enterprises what is especially relevant as they are the key to economic value-added and high employment rates.³¹ In addition, SMEs counteract regional disparities and offer structurally weak regions the possibility of a catching-up process. Thus and in a next step, it is worth analysing lending to SME in lending.

III. Lending to small and medium-sized enterprises

III. 1. Bank financing vs. capital market financing for SMEs

Enterprises can cover their borrowing needs – which they largely require to finance investment projects, or to pre-finance production – via bank loans, or by issuing debt securities (mainly

³⁰ The European real estate crisis taking place in Spain has been a result of previous faulty political structural changes. The statutory abolition of the Cajas’ regional orientation led to an unrestricted expansionism and ruinous competitive behaviour which, along with the lack of local knowledge in other regions, created credit exposures subject to extreme risks.

³¹ In the EU-28 (2015), the SME sector contributes 57% of the real economy’s value added and 67% of employment (cf. European Commission 2016). For specific details on Germany, cf. e.g. German Federal Ministry of Economics and Technology (2013).

bonds)³² on the capital markets. Economically regarded, both alternatives are equivalent in principle – yet the relevant benefits will differ according to the real economy market structure.

For SMEs raising borrowings, bank loans exhibit clear advantages in terms of transaction costs; no external rating and no costly placing services are required. Bank loan borrowing benefits from lower disclosure obligations compared to a bond issuance (in some cases, especially family businesses, public disclosure is even explicitly unwanted). Moreover, small volume borrowings are possible.³³ Given this scenario, it is almost exclusively larger companies which use the capital markets directly, because fixed costs arising by issuing bonds are more likely to amortise.³⁴

Moreover, the presence of asymmetric information is particularly severe as far as capital market financings are concerned. Given the absence of direct communication channels, investors respond directly to actual (or rumoured) difficulties a company might be facing. In some cases, their response might be exaggerated, in which case the yield spreads required would make it difficult for the company affected to overcome its weakness.³⁵ In contrast, thanks to direct communication paths, defined communication partners, and long-term business relations, bank lending provides better opportunities to overcome periods of economic distress – especially given the opportunity to renegotiate loans and to find flexible solutions.³⁶ Thus, long-term bank relationships are very relevant for SMEs, because they may be facing phases of weakness more frequently, given their lower financial buffers available.³⁷

Beside this, capital market financings do not necessarily offer borrowing cost benefits: when comparing loan interest rates and capital market yields, one needs to bear in mind that such a gross comparison neglects the costs involved with capital markets financings (costs of the issuing process as well as rating and reporting costs). It is also striking that even gross benefits depend upon the timing (cf. figure 1) – a factor which does not support planning reliability for companies. The predictability of capital market financings is further complicated by the fact

³² Besides traditional exchange-traded bonds, borrower's note loans and private placements play a role for corporate financing; meaning non-listed (long-term) bonds, accounted as a loan at cost and held by institutional investors looking for long-term capital investments (insurance companies and pension funds). Other forms of debt financing include merchandise liabilities, bills of exchange, liabilities against affiliated companies, shareholder loans, or advance payments received. For a detailed empirical review, cf. Deutsche Bundesbank (2012).

³³ The average issuance volume of so-called SME bonds in Germany was 48 million EUR over the period from 2010 to 2015. Compared to this, the median borrowing of a corporate client of the Sparkassen amounted to 0.5 million EUR, which highlights the significant discrepancy in borrowing volumes (cf. Hauschild/Kral 2013).

³⁴ "The Best Practice Guide: Entry Standard for Corporate Bonds" (Deutsche Börse 2014) lists minimum recommendations for a successful bond issuance. It was published in response to bond losses and other distortions in the *Mittelstand* bonds segment. The report gives a cursory insight into factual minimum requirements and states among others that issuing companies should have minimum sales revenues of 100 million EUR (cf. *ibid.* 5). Hence, the vast majority of issuers of so-called SME bonds are not even covered by the *Mittelstand* definition.

³⁵ Such herd-like patterns induced by a strong orientation to the crowd – regardless of fundamental data – is one of the core findings of behavioural finance (cf. Tversky/Kahneman 1992).

³⁶ Cf. as well Deutsche Bundesbank (2012: 21): "As a result, long-term lending relationships, frequently with just one bank – known as the "house bank" – were the norm. This meant that banks in Germany, in contrast to capital providers with less close business relationships with enterprises, frequently had privileged access to information, enabling them to adequately assess the enterprise's economic situation and development potential. This also had a positive effect on enterprises' financing costs".

³⁷ For a detailed discussion, cf. Schackmann-Fallis/Weiß (2014).

that enterprises are more exposed to interest rate risks, given the fact that capital market financings tend to have shorter maturities than bank loans. Moreover, bond issuances always involve placement risk.³⁸

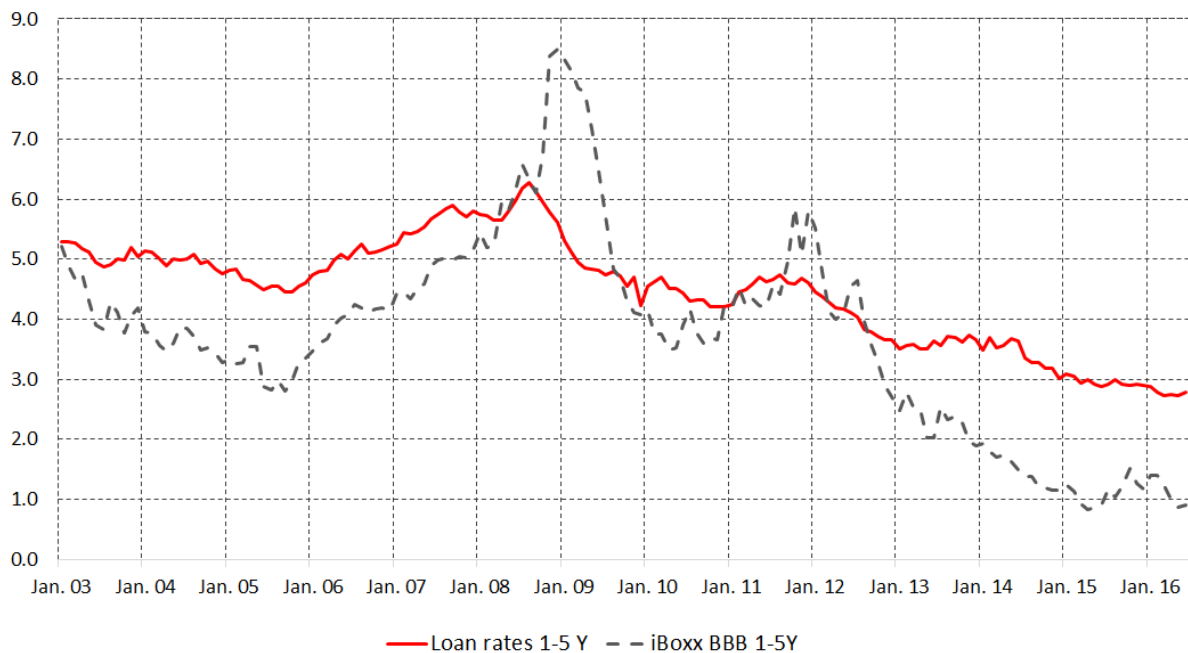


Figure 1: Loan interest rates versus capital market terms (gross comparison), Germany
Source: Datastream; own representation

III. 2. SME financings, local banks, rural areas and regional disparities

Even though loan financing might be advantageous from an SME's perspective, it also requires corresponding market structures on the supply side. Small to medium-sized regional banks exhibit a different structure in their loan receivables compared to large banks, with the former showing a significantly higher share of SME loans. Moreover, the credit portfolios of large banks show a lack of exposures to peripheral and structurally weak regions. These findings have meanwhile been extensively substantiated in literature, based on econometric findings, together with causal analyses.³⁹

A key factor for the lending divergence between small and large banks is related to banks' structural organisations. Both the individual institution's degree of complexity as well as geographical and socio-cultural distances between prospective borrowers and credit decision-makers play a significant role.⁴⁰ Especially when lending to SMEs, handicraft or agricultural businesses, soft information factors are of great importance. Yet such information and assessments are lost on the way between a local branch office and a centralised loan decision-maker – or

³⁸ In 2013, the difference between the volumes of SME bonds issued and ultimately placed amounted to 30%. The placement ratio is in particular low regarding issuing enterprises without well-known, established brand names (for details, cf. Scope Ratings 2013).

³⁹ Cf. e.g. Alessandrini et al. (2016) for a summarizing overview.

⁴⁰ Cf. e.g. Stein (2002), Alessandrini et al. (2005), Alonso et al. (2008).

they may not be conveyed at all. Moreover, any lending decision predominantly based on indicators is impracticable for potential SME borrowers, given a lack of comprehensive accounting and formalised controlling documents. This means that centralised lending decisions are exposed to a correspondingly high degree of actual informational asymmetry. Furthermore, personnel fluctuation is higher in the complex organisational structure of large banks; as a result, soft information generated locally will not be available for the long term.⁴¹ Reflecting the lower availability (and usage) of soft information factors, large banks generally show a lower relative share of SME loans, compared to the credit portfolio of all banks.⁴²

Obviously, given the same mechanism, the relative share of SME loans will decline following a merger of medium-sized banks, or the acquisition of a small bank by a larger institution.⁴³ In this context, a merger or acquisition often causes the lower generation or use of soft information factors, materially driven by the geographical or socio-cultural distance between persons having client contact and those authorised to take credit decisions.⁴⁴ Empirical data also shows that a decline in the share of SME loans in the overall credit portfolio will not necessarily enhance profitability of a merged bank. This is because a withdrawal from the SME business affects borrowers regardless of their credit rating.⁴⁵ Accordingly, the information asymmetry in loan relationships – which increases with bank mergers – will render a market dysfunctional: supply and demand will not fully match, creating a corresponding deadweight loss.⁴⁶

Differences in the relative structure on the assets side of small versus large banks can also be explained by the fact that within large banks, the allocation of available own funds and funding to local branches is not necessarily driven by local credit demand, but (at least partially) by subjective, socio-cultural assessments of decision-makers at head office. Such decisions are mostly taken at the expense of structurally weak regions.⁴⁷

The bias towards the home country (or the region of the domicile) which can generally be observed with large banks having functionally distant organisational structures has been documented in empirical literature, especially for the period following the global financial crisis. Corporate clients domiciled in regions where the respective bank is not headquartered were more affected by higher interest rates, lending restrictions, or even a credit crunch.⁴⁸ This is partly due to the fact that banks with global or multinational operations respond to liquidity shocks with a disproportionate internal withdrawal of liquidity from peripheral regions, in favour of the bank's residence.⁴⁹

⁴¹ Cf. for a detailed treatise Alessandrini et al. (2016).

⁴² Cf. for empirical analyses e.g. Cole et al. (2004), Scott (2004), Berger et al. (2005), Uchida et al. (2012), Ogura/Uchida (2014).

⁴³ Cf. e.g. Strahan/Weston (1998), Bonaccorsi/Gobbi (2001), Focarelli et al. (2002).

⁴⁴ Cf. e.g. Mian (2006), DeYoung et al. (2008), Liberti/Mian (2009), Filomeni et al. (2016).

⁴⁵ Cf. e.g. Sapienza (2002), Degryse et al. (2011), Presbitero et al. (2014).

⁴⁶ Cf. Alessandrini et al. (2008).

⁴⁷ Cf. e.g. Scharfstein/Stein (2000), Landier et al. (2009).

⁴⁸ Cf. e.g. Giannetti/Laeven (2011), Popov/Udell (2012), De Haas/Van Horen (2013), Gambacorta/Mistrulli (2014), Gobbi/Sette (2015).

⁴⁹ Cf. e.g. Cetorelli/Goldberg (2012), Berrospide et al. (2013), Dekle/Lee (2015), International Monetary Fund (2015).

Likewise, a home bias is evident for Germany, associated with unstable lending during times of crisis, given the loan portfolios of foreign bank branches and of the German big banks (“Großbanken”) with centralised operations (cf. figure 2). In contrast, lending of regionally oriented Sparkassen and cooperative banks was stable, exercising a levelling function during the global financial crisis.⁵⁰ Thanks to stability in corporate lending by regionally focused Sparkassen and cooperative banks, credit restrictions were markedly lower (and less volatile) than in the euro area in general.⁵¹

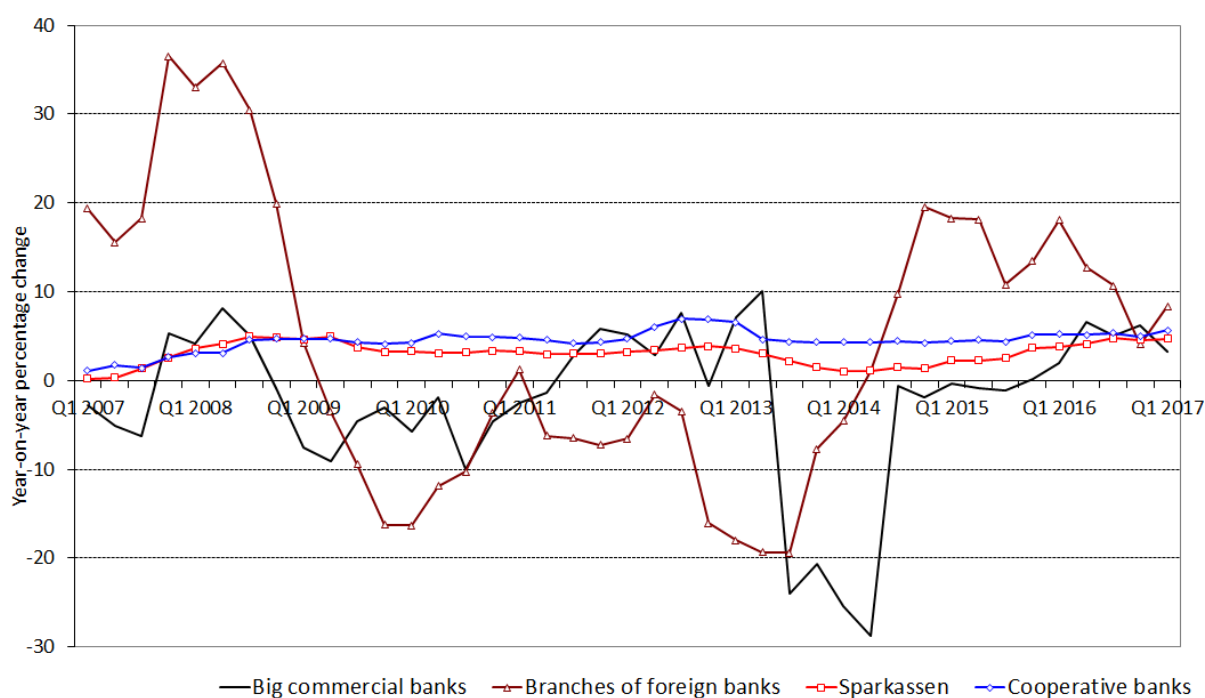


Figure 2: Lending to domestic enterprises and self-employed persons (percentage change from the previous year), for selected banking market segments in Germany
Source: Deutsche Bundesbank (Banking Statistics, table I.7b); own representation

Broadly speaking, with a share of 46% the regionally orientated Sparkassen and cooperative banks form the basis of lending to enterprises and self-employed persons in Germany.^{52, 53} As a consequence of the specialised lending focus of small and medium-sized banks, empirical research has shown a positive effect of such a banking market structure on regional economic growth.⁵⁴ Especially for Germany, Hakenes et al. (2015) find a positive effect of small and

⁵⁰ Cf. in detail e.g. Gischer/Reichling (2010). Cf. Behr et al. (2017) for an analysis on the stability in lending over business cycles.

⁵¹ Cf. among others Puri et al. (2010). A credit crunch relating enterprises in the US is among others analysed by Lux/Greene (2015).

⁵² Cf. Bundesbank Banking Statistics (tab. I.7a)): Lending to enterprises and self-employed persons in total EUR 1,347.5 billion, thereof Sparkassen EUR 378.1 billion and cooperative banks EUR 237.5 billion (end of 2016).

⁵³ A management survey of around 400 companies in the German financial sector conducted by the Frankfurt University’s Center for Financial Studies confirms the vast importance of regionally-oriented Sparkassen and cooperative banks in lending to small and medium-sized enterprises (Center for Financial Studies 2017):

“The financial industry is in broad overall agreement (62%) that the three-pillar model of the German credit industry (commercial banks, savings banks, cooperative banks) has proven effective... On the question of the respective importance of each of the pillars, over 40% of the survey respondents from the financial industry agree that savings banks and cooperative banks equally make the crucial contribution or at least an important one. Only 20% of the respondents regard the commercial banks as crucial... ‘The savings banks and cooperative banks are essential for the financing of German SMEs,’ Professor Volker Brühl, Managing Director of the Center for Financial Studies, interprets the results.”

⁵⁴ Cf. Lucchetti et al. (2001), Berger et al. (2004), Usai/Vannini (2005).

medium-sized credit institutions on the number of new business registrations, especially in structurally weak regions.

Small or medium-sized banks with a regional focus stimulate regional information production and are therefore particularly relevant for financing the SME sector, and in mitigating regional disparities.⁵⁵ The structure of the banking market therefore plays a significant role in achieving socio-political goals as well.⁵⁶ Even though a bank-financed or capital markets-based financial system cannot be assessed in isolation, but only in relation to existing economic structures, dynamic interdependencies must not be ignored: if the strengthening of the real-economy SME sector is an economic policy objective, this requires suitable (bank-based) structures in the financial system.⁵⁷

Anyone who questions the reliability of bank financing in Europe, citing developments in Southern Europe over the time of government debt crisis since 2010, fails to recognise that to a large extent, weak lending in those regions reflected supply restrictions due to regulation and deep recession. It was especially the high level of uncertainty associated with the Asset Quality Review, ahead of the ECB assuming banking supervision, which contributed considerably to reticence in new lending exposures. This was exacerbated by false incentives from monetary policy, which promoted exposures to (Southern European) sovereign bonds rather than corporate lending or corporate bond investments.⁵⁸ The shortage in lending in Southern Europe was thus largely induced by regulation and economic policy, whereby the decidedly contractionary fiscal policy exacerbated the recession in the real economy – and hence, the loss of corporate credit quality. Lending only started to stabilise – and lending conditions return to normal – when regulatory uncertainty the economic recession have ceased.⁵⁹

⁵⁵ Cf. Gehrig (2011).

⁵⁶ Cf. Hall/Soskice (2001) regarding the underlying debate in political economy about (historically caused) differences between various institutional arrangements, their social rationale and their contribution to economic success.

⁵⁷ Cf. in detail Schackmann-Fallis/Weiß (2014).

⁵⁸ Cf. in detail *ibid.*.

⁵⁹ Cf. European Central Bank (2016).

IV. The banking market in Germany: who is boring?

IV. 1. Structuring the German banking market

Various approaches are possible for characterising banks, and hence, the structure of a banking market:

- (a) Differentiation by the institutions' geographical scope of activities,
- (b) Differentiation by the institutions' client base and business focus,
- (c) Differentiation by the institutions' legal form and commercial objectives,
- (d) Differentiation by the institutions' size,
- (e) Differentiation by the institutions' main field of activity, or by the scope of banking services offered, i.e. universal banks vs. specialised banks.

In its statistics on the German banking market, Deutsche Bundesbank classifies institutions in a first step as universal banks or specialised banks. In a second step, universal banks are further broken down by their legal form, and specialised banks by their main area of activity. This way of structuring the German banking market is generally recognised, and is used for the following descriptions as well.

Applying Deutsche Bundesbank's classification, "commercial banks" ("Kreditbanken") represent the so-called "first pillar" of the universal banking sector. "Commercial banks" comprise all banks established under private law and being privately owned. Amongst "commercial banks", the four "big banks" ("Großbanken") – Deutsche Bank AG, Deutsche Postbank AG, Commerzbank AG, UniCredit Bank/HypoVereinsbank – command a prominent position, with approximately 57% of aggregated total assets (end-2016). The so-called "second pillar" comprises institutions under public law – local "Sparkassen" and "Landesbanks" at Federal state level. The "third pillar" refers to the cooperative banking sector, comprising local cooperative banks and their central institution. The three pillars or segments differ in their legal form, as well as in their business focus and/or corporate objectives.

In addition, Deutsche Bundesbank's general classification covers specialised banks, which focus their activities upon individual types of banking business. This includes real estate banks (mortgage banks) specialised in commercial real estate finance (office and retail trade properties, housing properties) and funding their lending business via "Pfandbriefe" (German covered bonds). The specialised banking segment also includes German savings and home financing institutions ("Bausparkassen"), offering private home loans, as well as state-owned banks with a business development or promotion mandate.

Total assets of all banks in Germany:
(end 2016) EUR 7,836 billion

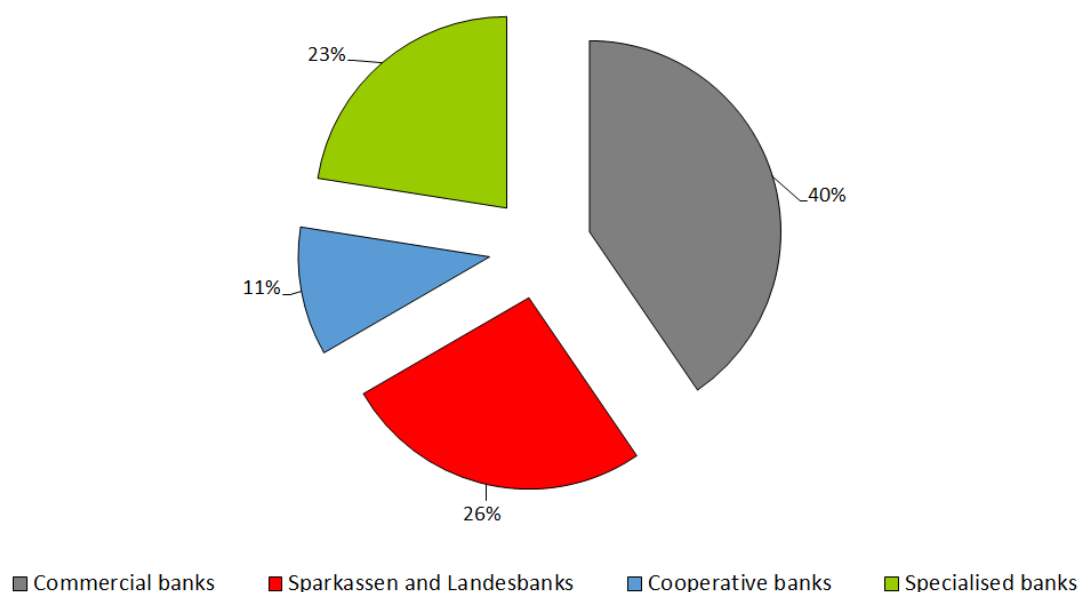


Figure 3: Share of universal banks and specialised banks in aggregated total assets, Germany
Source: Deutsche Bundesbank (Banking Statistics, table I.3); own representation

At the end of 2016 (cf. figure 3), balance-sheet assets of all banks active in Germany totalled EUR 7,836 billion. Universal banks account for 77% of the overall market, with specialised banks accounting for the remaining 23%. With 40% of all bank assets, the four big banks and other commercial banks are the largest pillar of the German banking market. Sparkassen (EUR 1,173 billion, or 15%) and Landesbanks (EUR 879 billion, or 11%) together form the second-largest segment within the universal bank sector, together accounting for 26% of the overall market. With a share of 11% of aggregated total assets of all banks operating in Germany, the cooperative banking sector is the smallest segment within the German universal bank sector.

IV. 2. The public-law banking sector in Germany and the concept of a financial services network

Public-law credit institutions are an important element of the German banking market. This comprises Sparkassen as local institutions with a regional business focus as well as DekaBank Deutsche Girozentrale, which provides capital markets products and investment funds for Sparkassen' customer business, and the Landesbanks.⁶⁰ The latter are particularly active in business with larger SMEs, and also supplement the product range for Sparkassen' corporate banking business – e.g. underwriting services, derivative hedges, large or syndicated loans, or international banking services for corporate clients.

⁶⁰ For a detailed treatise cf. e.g. Civitas (2013) and Schmidt et al. (2016). German Sparkassen and US community banks are compared by e.g. Gischer/Herz (2016).

Sparkassen are established as public-law institutions, with the respective municipality acting as the trustee (“Träger”)⁶¹ – a function that does not imply ownership. Hence, municipalities cannot sell a Sparkasse, or issue directions in terms of business policy. “Träger” are no longer liable for institutions’ debts, and are not obliged to provide financial support.⁶² However, municipalities nominate a certain share of members in the Board of Directors (“Verwaltungsrat”). As such, they determine the fundamental principles of business policy and supervise the Management Board, without having any direct operating influence upon the business policy adopted.⁶³

There are approximately 400 German Sparkassen (July 2017: 390), in the vast majority under public law and under municipal trusteeship.⁶⁴ These Sparkassen were historically founded by municipalities, but are de facto now owned by themselves. Trustees may be towns, municipalities or administrative districts, which is evident from the Sparkassen’s name. The business activities of the Sparkassen have a regional focus – being their respective trustee’s geographical area, especially with regard to the branch network and the corporate banking business, but less so in the private customer business.

Sparkassen are credit institutions within the meaning of Section 1(1) German Banking Act (“Kreditwesengesetz [KWG]”) as well as Article 4(1) European CRR. Hence, they are subject to all German and European bank regulation requirements, and to supervision by Deutsche Bundesbank and German Federal Financial Supervisory Authority (“Bundesanstalt für Finanzdienstleistungsaufsicht [BaFin]”), and/or the European Central Bank (ECB). On average, a Sparkasse in Germany has total assets of EUR 2.9 billion (end-2016), ranging from Hamburger Sparkasse (EUR 44 billion) down to Sparkasse Bad Sachsa with only EUR 129 million.

The Sparkassen’ main line of business is retail banking, i.e. deposit-based lending to private retail customers and SMEs, which may be supplemented by capital markets products, investment funds and international business (via the central institutions). Bank lending to public-sector entities is less important, and predominantly directed at local authorities and public-sector enterprises. Due to the high volumes required and the virtual absence of information asymmetry, higher government levels finance themselves nearly exclusively via the capital markets.

A special feature of Sparkassen in Germany is their “public mandate”, under which they are committed to serving the local stakeholders (“öffentlicher Auftrag”).⁶⁵ Consequently, whilst

⁶¹ The concept of public sector institutions (“Anstalt des öffentlichen Rechts”), in lieu of (private) ownership, was established in 1931, following the Great Depression. Since then, German Sparkassen have no longer been dependent municipal institutions; municipalities were thus no longer able to exert direct influence, making it impossible to exploit Sparkassen in order to support public-sector budgets.

⁶² Until 2001, “trustee institutions” (i.e. municipalities or Federal states) – as a backstop – had ultimate liability for debts of Sparkassen and Landesbanks in the event of illiquidity (so-called “guarantor liability” [“Gewährträgerhaftung”]). This was abolished in July 2001 due to European single market reasons. The transitional period expired in July 2005, covering liabilities with a maximum term up to the end of 2015.

⁶³ Cf. in detail e.g. Gischer/Spengler (2013). For a debate about corporate governance structures in the German banking market cf. Kotz/Schmidt (2017).

⁶⁴ Due to historical reasons, there are five Sparkassen in Germany, which are not bound to municipalities and not established as public-law institution, among others the “Hamburger Sparkasse”. Those so-called “independent Sparkassen” have been founded by socially involved private individuals at the end of the 18th and the beginning of the 19th centuries. Despite some differences in governance structures, the “independent Sparkassen” are obliged to the general public as well.

⁶⁵ Cf. as well Brämer et al. (2010).

Sparkassen are for-profit entities, they do not seek to maximise profits. Sparkassen have the specific mandate to ensure access to financial services for financially weak groups of persons, to promote savings and the creation of wealth (for example, by way of financial education in schools, etc.), to maintain a presence throughout their geographical area of business (including in rural areas) and, in particular, to safeguard the provision of loans to regional real economy enterprises (provided a sufficient financial soundness).⁶⁶ Furthermore, Sparkassen act as sponsors for social and cultural projects in their region, and support the sports.

Together with the Landesbanks and DekaBank, the Sparkassen form a financial services network. Even though this network is called the Savings Banks Finance Group (“Sparkassen-Finanzgruppe”), it is a network of independent credit institutions and insurance companies, not a corporate group. A financial services network is a special form of cooperation between enterprises;⁶⁷ other forms of such cooperation are a corporate group, a franchise system, or a strategic alliance. As a key difference compared to a corporate group, network members are legally and commercially independent (a “bottom-up” organisation) but concur in defined areas, and maintain a joint Institutional Protection Scheme (IPS) in accordance with Article 113(7) CRR. Cooperation within the network is organised by regional associations and the German Savings Banks Association (“Deutscher Sparkassen- und Giroverband [DSGV]”) as the umbrella organisation – without any formal authority to issue instructions.

Specifically, cooperation within the network relates among others to a joint brand (the red “Sparkassen-S”), joint IT solutions, and the bundling of back-office tasks, e.g. the implementation of regulatory obligations. Moreover, the Landesbanks supplement the product range of the Sparkassen. The concept underlying a financial services network is to use the benefits of centralisation without sacrificing the advantages of a decentralised organisation. The network allows the generation of economies of scale, for example in IT, brand building and maintenance, engineering bank management tools, or in product development. At the same time, the benefits of decentralised decision-making, client proximity and local expertise are preserved. This is particularly important in corporate banking with SMEs and craft enterprises.

⁶⁶ In this sense Sparkassen as credit institutions under public law can be understood as a specific institutional arrangement of strategic coordination in a coordinated market economy as categorized by Hall/Soskice (2001); it allows economic subjects to share information and to commit themselves credibly despite incomplete contracts.

Nowadays and in the context of development economics, the institutional concept of regional oriented credit institutions – combined with the historically social idea of savings banks and cooperative banks – can be refound as microfinance and inclusive banking. Fact finding analyses suggest several conditions necessary for successful microfinance structures in the today’s developing countries: addressing a broad range of private retail and SME customers, credit lending based on available savings deposits, and the combination of social responsibility and economic soundness. For this purpose, specific governance structures are necessary to avoid pure profit maximisation on the one hand and to restore the original institution’s objectives on the other hand. Moreover and to gain from economies of scale, an entering into forms of cooperation structures is needed (cf. Schmidt et al. 2016). Insofar, the historic idea of establishing savings banks and cooperative banks in the 19th century in Germany – offering financial services for a large range of private retail and SME customers – and the subsequent gradual development into genuine inclusive local financial intermediaries can be seen as valuable lessons for successful inclusive banking structures in developing countries (ibid.).

⁶⁷ The allowance to form a financial network organisation, including an institutional protection scheme according to Article 113(7) CRR, is not limited to a certain kind of institutions’ legal structure; meaning a financial network is possible for institutions under private law as well. Besides the Sparkassen, the cooperative banks in Germany form a financial network, named “Volksbanken Raiffeisenbanken Cooperative Financial Network”.

IV. 3. Lending structures in the German banking market

In relative terms, the balance-sheet assets of all monetary financial institutions active in Germany are roughly equivalent to 2.5 times German GDP. Which is low in international comparison and straight denies a broad over-capacity on the German banking market (cf. figure 4).⁶⁸ Some European countries (including Cyprus, Ireland, Luxembourg, and the United Kingdom) show significant higher multiples.⁶⁹

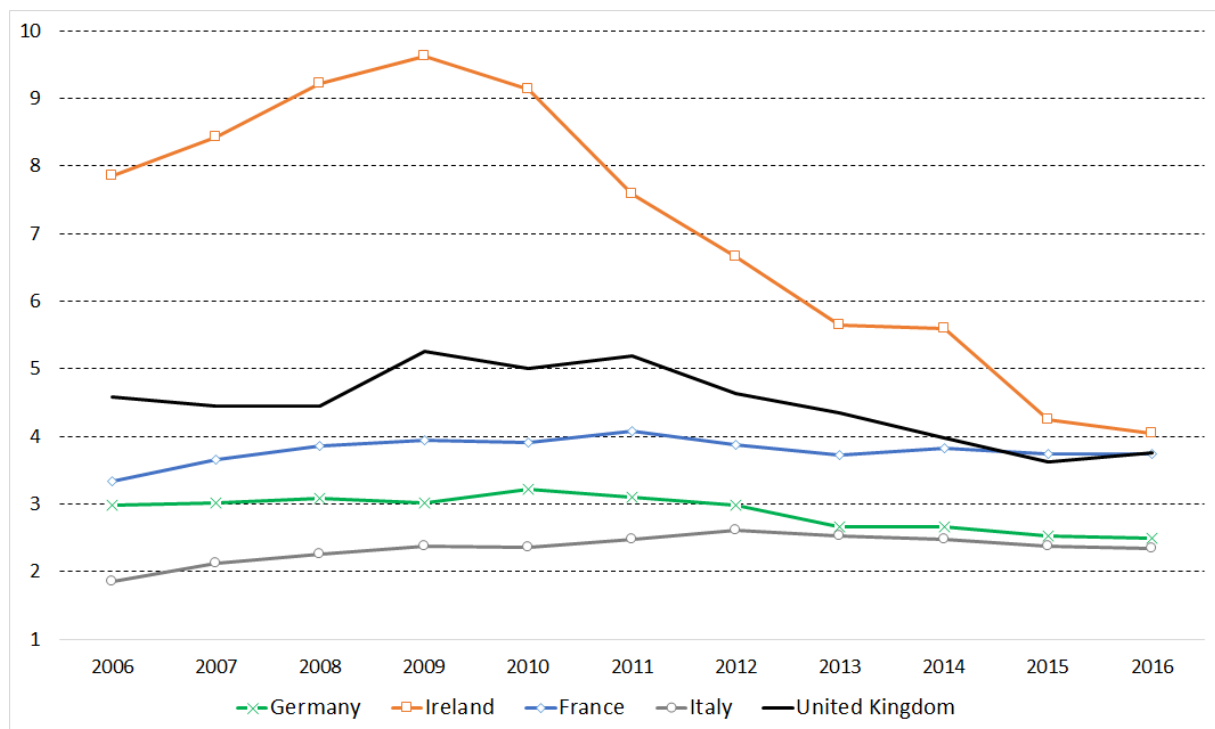


Figure 4: Monetary financial institutions' (excluding ESCB reporting sector) total assets (outstanding amounts at the end of the year) in relation to GDP, selected European countries

Source: ECB (Statistical Data Warehouse, MFI balance sheets), Eurostat (GDP and main components); own calculation and representation

Even though the size of the German banking market shows a below-average ratio to GDP, compared to other countries, the German financial system has traditionally been characterised by a strong influence of banks. The ratio of “non-financial corporation loans to the outstanding volume of corporate bonds” was almost nine times at the end of 2016, markedly higher than in the United States or the United Kingdom (cf. figure 5). Accordingly, Germany shows a distinctly bank-based corporate financing structure, especially by international comparison.

⁶⁸ Based on empirical evidence, academic literature (cf. Law/Singh 2014) assumes that any further increase in lending volume over and above a ratio of private-sector lending volume to GDP of between 90% and 100% has a negative impact on GDP growth. In fact, this would be an indicator for an “overbanked” economy. At 89%, the indicator for Germany would support the notion of Germany not being overbanked. Cf. *lending of monetary financial institutions (excluding ESCB) to domestic enterprises and households (loans and securities), end of 2016: EUR 2,805.6 billion (Deutsche Bundesbank, Monthly Report Banking Statistics, table IV.1); GDP Germany, end of 2016: EUR 3,134.1 billion (Eurostat, GDP and main components).*

⁶⁹ Flögel/Gärtner (2017) offer a comparison of banking market structure in Germany, Spain and the United Kingdom.

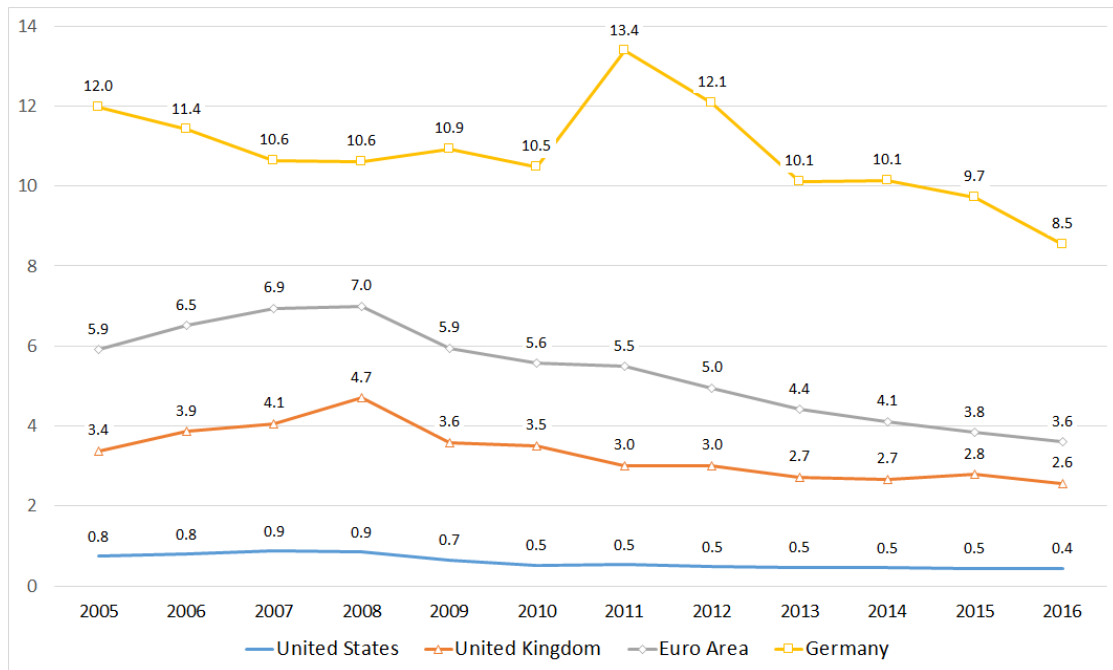


Figure 5: Ratio of non-financial corporation loans to outstanding amounts of debt securities issued by non-financial corporations, United States and selected European countries

Source: UK Office for National Statistics (Economic Accounts, Non-financial corporations), Federal Reserve Bank of St. Louis (FRED Economic Data, Nonfinancial corporate business), ECB (Statistical Bulletin, table 2.4: MFI loans / table 4.2: Securities other than shares), ECB (Statistical Data Warehouse, Debt securities issued by non-MFI corporations in Germany), Deutsche Bundesbank (Banking Statistics, table 8: Lending to domestic enterprises); own calculation and representation

The German loan market is characterised by a distinct prominence of long-term loans (defined as loans with an agreed term exceeding five years), which accounted for 78% of all loans on average during the period between 1999 and 2016. In fact, the dominance of long-term tenors even slightly increased further in recent years: at the end of 2016, 81% (EUR 2,042 billion) of outstanding loans to domestic enterprises and private individuals had a term of more than five years (cf. figure 6).

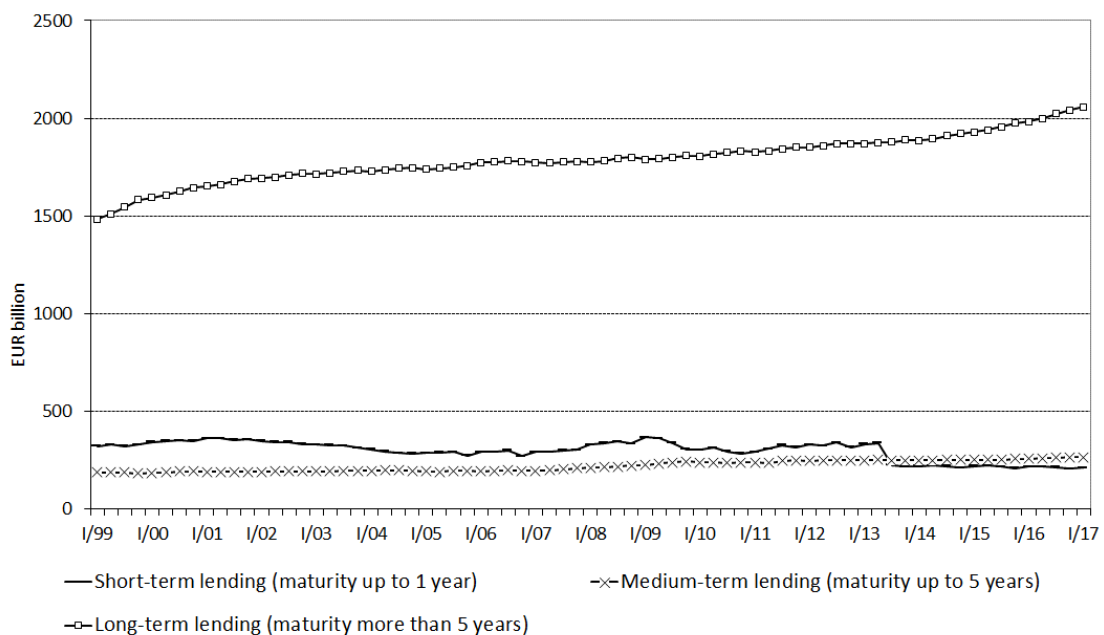


Figure 6: Lending to domestic enterprises and private households, by maturity, Germany

Source: Deutsche Bundesbank (Banking Statistics Database, Lending by banks [MFIs] in Germany to domestic enterprises and households); own representation

At 38%, Sparkassen and Landesbanks exhibit the largest share of long-term loans (cf. figure 7). The growing role of cooperative banks in long-term lending is visible as well: their market share in this segment rose from 15% in the first quarter of 1999 to 22% in the first quarter of 2017.⁷⁰ Long-term exposures or fixed-interest rate lending is extremely advantageous to borrowers, since they provide the corresponding planning certainty. Conversely, the banking sector is very active in terms of maturity transformation. It is thus important, from a banking supervisor’s point of view, to keep a close eye on funding risks and interest rate risks.

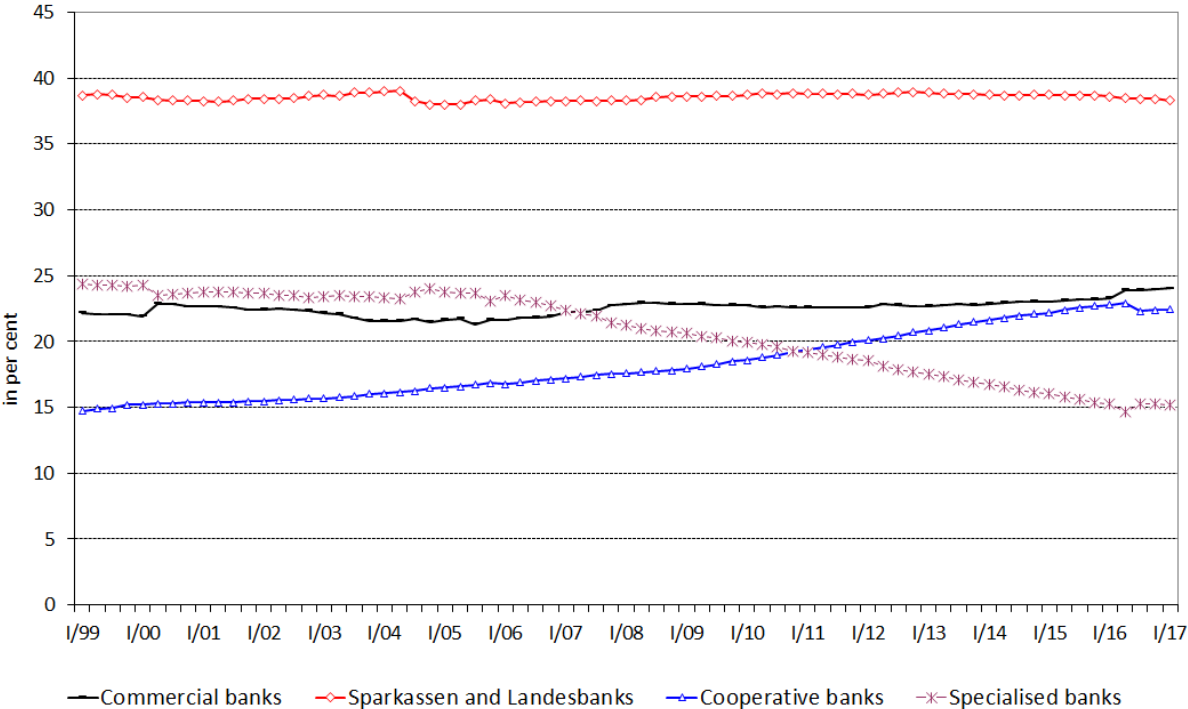


Figure 7: Long-term lending to domestic enterprises and private households, shares of banking market segments, Germany
 Source: Deutsche Bundesbank (Banking Statistics, table I.6b); own representation

Empirical evidence regarding transaction cost benefits of bank loans – especially for small and medium-sized enterprises – can be found by analysing the financing mix of Sparkassen’ corporate clients in detail (cf. figure 8). Small businesses (with annual revenues not exceeding EUR 0.5 million) have a distinctly high degree (most recently 63% or 72% respectively) of bank loans in their overall borrowings. Conversely, the relative importance of bank loans is diminishing with increasing size of the enterprise: the share for larger SMEs (annual revenues not exceeding EUR 5 million) is approximately 30%. For large corporations (annual revenues above EUR 5 million) the share of bank loans in the overall borrowings is a mere 25%. Large companies are more likely to be able to bear the fixed costs incurred with bond issuance.

⁷⁰ Because of their regional business orientation (forced by the legal regional principle or induced by the member mandate in case of cooperative banks respectively), their refinancing structure using deposits and their specific governance, Sparkassen and regional cooperative banks in Germany show a highly distinctive degree of long-term lending. Long-term lending to domestic enterprises and private households account for 54% of total assets (Sparkassen) and 54% (cooperative banks) respectively; in contrast to only 15% of total assets (private commercial banks) and 12% regarding big banks (end of 2016; source: Deutsche Bundesbank, Banking Statistics Database, Lending by banks [MFIs] in Germany to domestic enterprises and households / Assets and liabilities by banks [MFIs]). Sparkassen and regional cooperative banks produce long-term financial means as a quasi-public good.

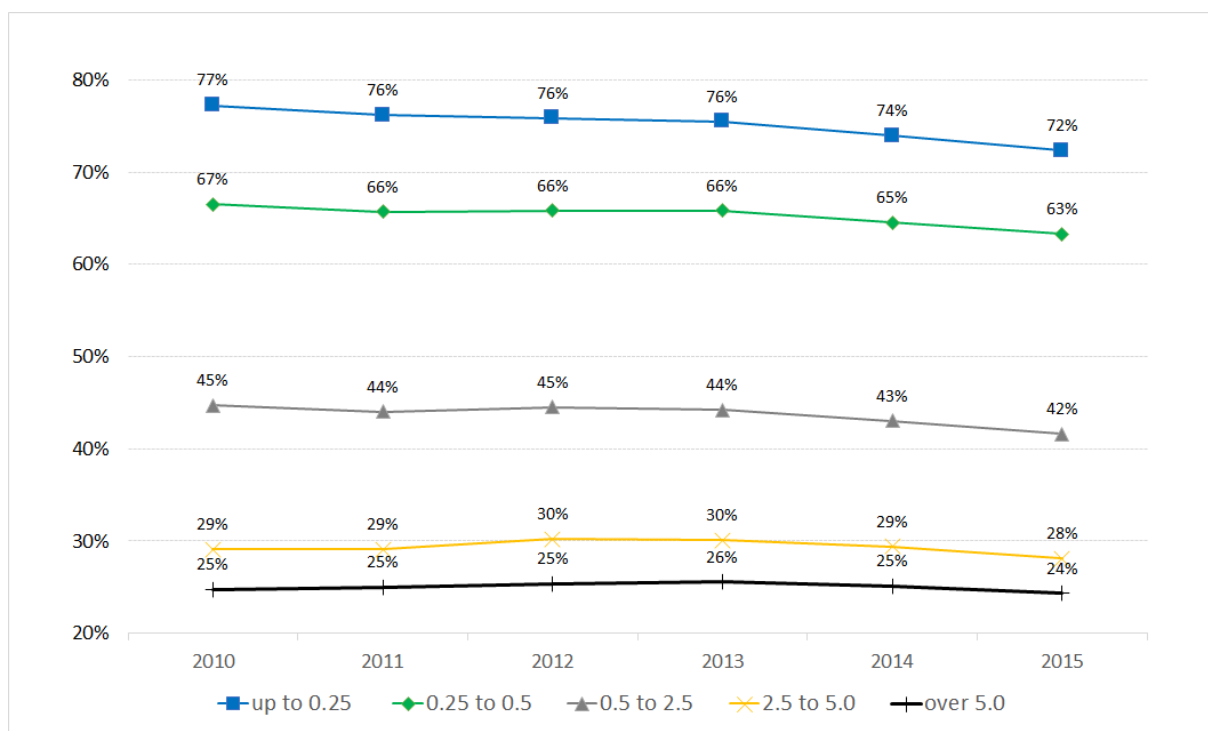


Figure 8: Share of loan liabilities in overall borrowings, by enterprise size (yearly turnover plus inventory holding in millions of euros), Germany

Source: German Savings Banks Association (SME Diagnosis, mimeo); own representation

To summarize: On the one hand, the low importance of direct capital markets financing reflects the German business landscape, with a distinct SME sector. Bank loans involve lower transaction costs for SMEs. On the other hand, the nationwide presence of credit institutions with a regional focus provides stable house-bank relationships;⁷¹ there is thus no need to call upon other sources of external capital.

IV. 4. Identifying boring banking: analysis of balance sheet structures

Table 1 shows the aggregated balance sheet of all banks operating in Germany. The assets side is dominated by lending to non-banks, accounting for 51%, which in turn is broken down into 81% book receivables (EUR 3,275 billion) and 19% (EUR 755 billion) securitized and other receivables. Lending to other banks account for 31% of aggregated total assets, illustrating the importance of the interbank market.

Deposits from non-banks account for 45% of equity and liabilities of all banks operating in Germany, followed by liabilities to banks (22%), relating to funding via the interbank market. Whilst bearer debt securities are still important funding vehicles, accounting for just under 15% of equity and liabilities, their share has been declining over time. The non-risk-weighted equity ratio (Leverage Ratio) of all banks operating in Germany is 6%.

⁷¹ Cf. Behr et al. (2013).

All banks (end of 2016)					
Assets			Equity and liabilities		
	EUR bn.	% of total assets		EUR bn.	% of total assets
Cash and central bank balances	323.4	4.1	Liabilities to banks	1,729.0	22.1
Lending to banks	2,420.8	30.9	Deposits from non-banks	3,532.9	45.1
Book receivables from non-banks	3,275.1	41.8	Bearer bonds	1,131.9	14.4
Other receivables from non-banks	755.4	9.6			
Receivables from the derivatives portfolio	651.6	8.3	Liabilities from the derivatives portfolio	618.8	7.9
Participating interests	119.9	1.5	Equity	489.7	6.2
Other assets	290.1	3.7	Other liabilities	334.0	4.3
Total assets	7,836.2	100	Total assets	7,836.2	100

Table 1: Aggregated balance sheet of all banks in Germany (2016)

Source: Deutsche Bundesbank (Monthly Report Statistics table IV.1; Banking Statistics, table I.1 / I.2); own representation

Using the overall market as a reference, differences in the business models become evident. Whereas Sparkassen' and cooperative banks' balance sheet structures are strongly made up of non-bank business, lending to non-banks and deposits from non-banks count in big banks' balance sheet about 30% only (cf. figure 9).

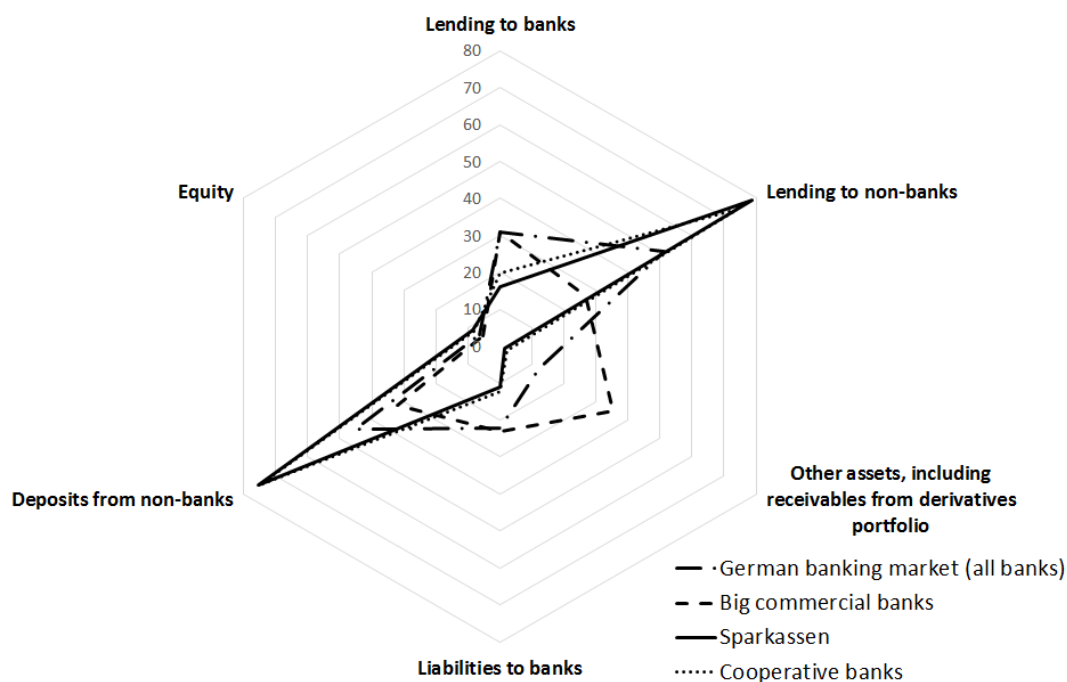


Figure 9: Balance sheet structures of selected banking market segments in Germany in comparison (end of 2016)

Source: Deutsche Bundesbank (Monthly Report Banking Statistics, table IV.2); own representation

Analysing the changes in time line, big commercial banks show a clear shift away from non-banks lending (cf. figure 10), whereas the Sparkassens' business model became even more non-bank focussed (cf. figure 11).

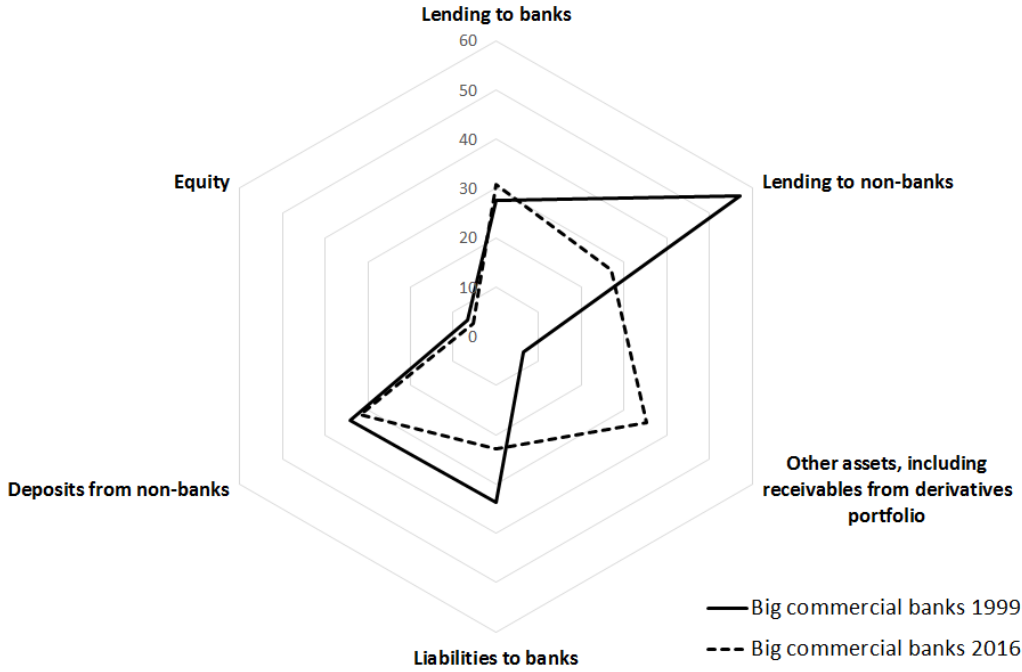


Figure 10: Balance sheet structures of the big commercial banks in Germany (1999 and 2016 in comparison)
 Source: Deutsche Bundesbank (Monthly Report Banking Statistics, table IV.2); own representation

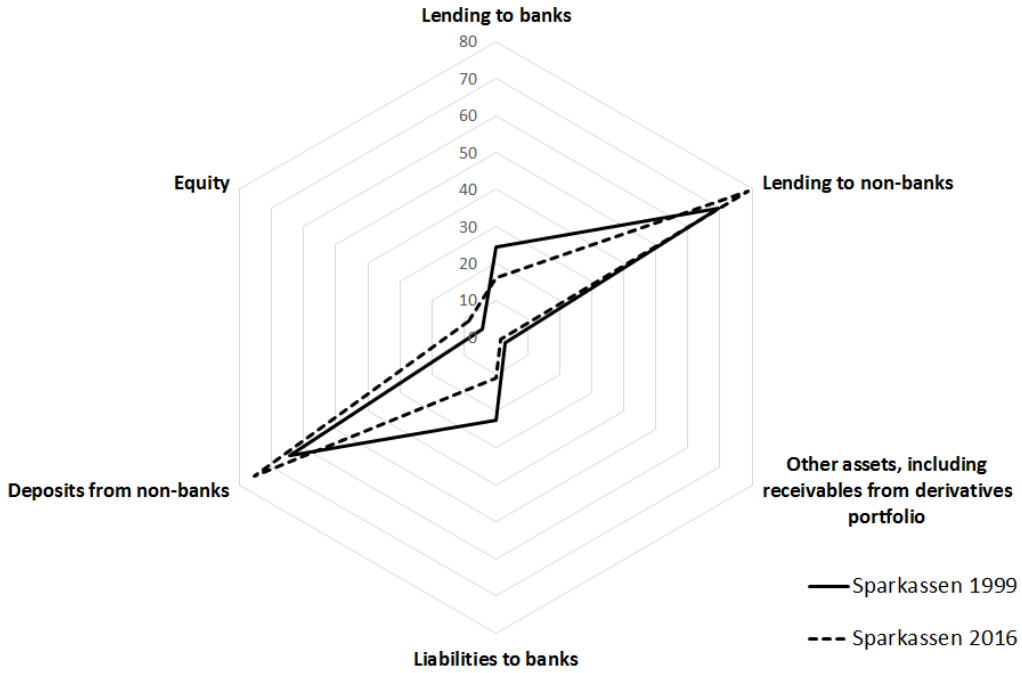


Figure 11: Balance sheet structures of the Sparkassen in Germany (1999 and 2016 in comparison)
 Source: Deutsche Bundesbank (Monthly Report Banking Statistics, table IV.2); own representation

Sparkassen (end of 2016)					
Assets			Equity and liabilities		
	EUR bn.	% of total assets		EUR bn.	% of total assets
Cash and central bank balances	30.8	2.6 (all banks 4.1)	Liabilities to banks	130.4	11.1 (all banks 22.1)
Lending to banks	188.0	16.0 (all banks 30.9)	Deposits from non-banks	884.4	75.4 (all banks 45.1)
Book receivables from non-banks	768.7	65.5 (all banks 41.8)	Bearer bonds	13.8	1.2 (all banks 14.4)
Other receivables from non-banks	154.6	13.2 (all banks 9.6)			
Receivables from derivatives portfolio	0.04	0.0 (all banks 8.3)	Liabilities from derivatives portfolio	0.03	0.0 (all banks 7.9)
Participating interests	14.5	1.2 (all banks 1.5)	Equity	101.2	8.6 (all banks 6.2)
Other assets	16.3	1.4 (all banks 3.7)	Other liabilities	43.1	3.7 (all banks 4.3)
Total assets	1,172.9	100	Total assets	1,172.9	100

Table 2: Aggregated balance sheet of the Sparkassen in Germany (2016)

Source: Deutsche Bundesbank (Monthly Report Banking Statistics, table IV.2, Banking Statistics, table I.3); own representation

A detailed analysis comparing balance sheet structures of Sparkassen and all banks (*figures in brackets*) highlights the “boring banking orientation” of Sparkassen: At 79% of aggregated total assets, the Sparkassen (cf. table 2) exhibit a distinct and above-average importance of lending to non-banks (or, a below-average share, therefore, of lending to banks). 83% of lending to non-banks are book receivables – traditional bank loans. Deposits from non-banks are the Sparkassen’ main funding source, accounting for 75% of aggregated equity and liabilities. Accordingly, liabilities to banks and bearer bonds are clearly underweighted. Derivatives are virtually irrelevant for Sparkassen. The high, above-average unweighted equity ratio of 8.6% is striking. Overall, deposit-based lending to non-banks – the Sparkassen’ business model – is evident both on the assets side and in equity and liabilities.

IV. 5. Profitability of boring banking

Differences in the business models are reflected in the balance sheet structure as well as in the composition of the income statement. Across the entire German banking market net interest income is by far the dominating income component, yet its relative importance has declined over time in favour of net commission received.⁷² While this shift has been observed for years, it intensified in the course of the contemporary ECB zero interest rate policy.

⁷² Cf. Deutsche Bundesbank (2016).

Besides the current monetary policy environment, the trend towards commission income has been argumentatively pushed by the IMF for quite some time, amongst other organisations, with the motivation of making the generation of income less dependent upon maturity transformation. However, this misses the point that commission income is subject to significant consequential risks, especially legal risks. Moreover, given the moral hazard issues associated with pure selling activities, a widespread pushing commission income needs to be seen critically. Given such a development, the banking sector would be less involved in the various transformation functions – lot size, maturity and risk transformation; yet these functions would need to be performed elsewhere in the financial system, even though the banking sector has an edge in terms of specialisation in this context. Nonetheless, country-specific recommendations by the IMF also show differences in fundamental thinking: The financial system in continental Europe has traditionally been bank-based. Banks are traditional intermediaries, taking on counterparty risks and generating income from the interest margin. In contrast, the IMF’s fundamental concepts tend to be biased toward the capital markets.

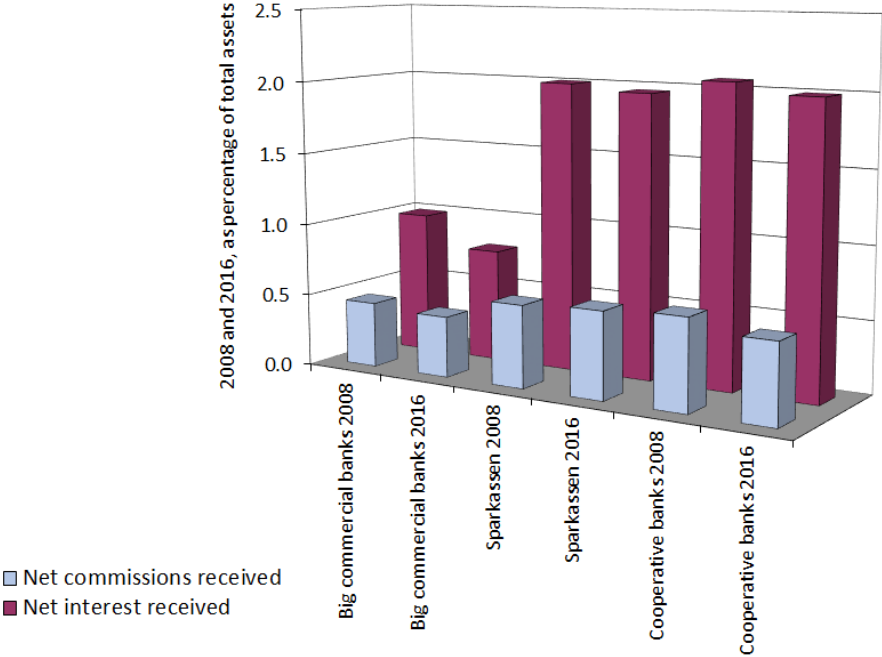


Figure 12: Net interest received and net commissions received of selected banking market segments in Germany
 Source: Deutsche Bundesbank, “The performance of German credit institutions”, *Monthly Report*, September 2009 (37-66) and September 2017 (51-85); own representation

Figure 12 breaks down net interest income and net commission income by the big banks, Sparkassen and cooperative banks, comparing 2008 data with 2016. Net interest income remains the most important source of income across all bank groups. Looking at relative importance, however, it is evident that the big banks derive a material portion of their income from commission-based business, the importance of which has increased over time: in 2008, net interest income was 2.2 times net commission income – by 2016, this had declined to 1.9 times. In contrast, net interest income is more important for Sparkassen and cooperative banks, amounting to about 3.5 times net commission income. Causes for this divergence are the structural changes the big banks underwent during the global financial crisis, strong increases in the lending business of

Sparkassen and cooperative banks, as well as fundamental differences in the respective business models.

Net interest income is projected to decline over the next years, largely due to the prevailing low-interest rate environment. In this way, monetary policy itself might have turned into a risk factor for the stability of the banking system⁷³, threatening the income-generating sources of traditional business models of deposit-based lending. Banks are thus forced to consistently charge negative interest rates on their liabilities side in order to maintain their interest margin or to expand their commission-based business – which would of course mean a departure from boring banking.

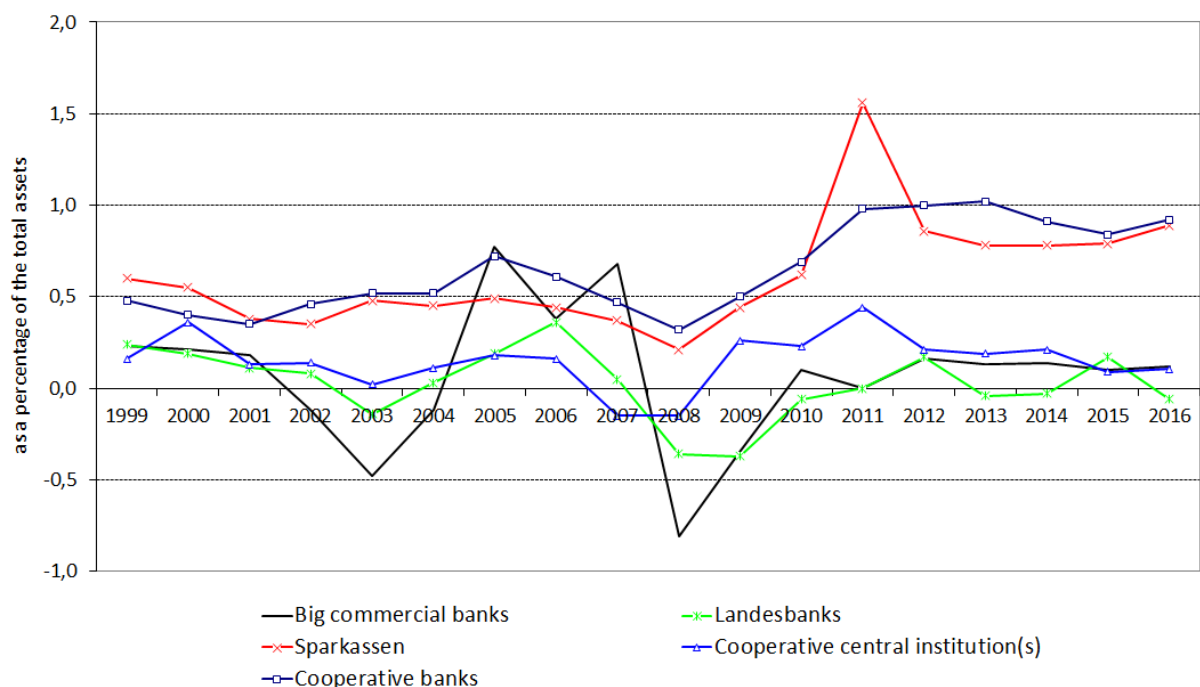


Figure 13: Return on assets of selected banking market segments in Germany
 Source: Deutsche Bundesbank, “The performance of German credit institutions”, *Monthly Report*, September (several years) / DZ Bank Annual Financial Statement 2016; own representation

The aggregate of net interest income and net commission income, plus net trading income and other income, minus administration and asset revaluation expenses, leads to net income before taxes. To analyse the long-term profitability of a bank or a business model, it is reasonable to analyse the ratio of net income before taxes to total assets (Return on assets [“ROA”]).

Figure 13 illustrates bank net income before taxes over the period 1999 to 2016. Business models or banking groups which have turned out to be particularly profitable were cooperative banks and Sparkassen, with an average of 0.6% of total assets, as well as other regional banks (0.3%). Looking at the return on total assets, the big banks are far less profitable (0.07%); the central institutions of the financial services networks show a similar picture. The standard deviation provides additional insights: RoA of the big banks during the observation period (1999

⁷³ For more details on this discussion, cf. International Monetary Fund (2016) or Deutsche Bundesbank (2015).

to 2016) was particularly volatile, with a standard deviation of 0.4. This is attributable to the cyclical nature of investment banking and capital markets business, whereas the retail and SME business conducted by Sparkassen and cooperative banks clearly yield more stable results.

V. Conclusions and policy recommendations

Strengthening SMEs across the regions is a core concern of German and European economic policy. Besides bureaucratic burdens, taxation and social security aspects as well as society's risk tolerance, this also encompasses the stability of financing facilities, and hence, banking regulation.

Traditionally, banks have taken a central role in corporate financing in continental Europe. This is advantageous because long-lasting business relationships help to establish a special informational relationship, which in turn allows for the best possible assessment of corporate credit risk. Looking at Germany in particular, given the prevailing economic structure with a distinct SME sector, bank loans have proven to be the more suitable form of financing, given transaction costs and corporate governance aspects. In contrast, capital markets-based financing would involve corresponding publication and rating costs, would require corporate governance to focus on a shareholder value, and would evidently bring about losses of control for senior management, which is mostly made up from the family owning the business. Hence, a stable banking market with a strong focus on real economy enterprises is of fundamental importance for Germany in particular.

Yet undifferentiated regulation, administrative requirements which impede SME lending to some extent, and a persistent zero interest rate monetary policy are currently relevant factors which threaten, or at least fail to support, the traditional business model of deposit-based lending. Unless banks charge negative interest rates on deposits, a long and drawn-out policy of zero (or negative) interest rates deprives traditional deposit-based lending business models of their interest margin, forcing institutions into commission-based business – a departure from the boring banking approach.

However, from the perspective of the deposit-based lending business model, the regulatory framework needs to be seen critically. This relates to specific instruments, but especially to the undifferentiated overall approach. The regulatory framework created puts small and medium-sized banks at a disadvantage: Firstly, systemically relevant banks still benefit from an implied state guarantee, providing them with cheaper funding costs whilst placing small and medium-sized banks at a competitive disadvantage. Secondly, the undifferentiated regulation involves excessive costs for small and medium-sized banks, given the fact that regulatory costs are largely fixed administrative costs – not “too big to fail”, but “too small to comply”.⁷⁴

⁷⁴ Cf. likewise Alessandrini et al. (2016: 5): “The uniformity of regulation penalizes local banks relative to larger banks because the implementation of complex regulation is to a large extent a fixed cost”. Cf. as well Feldman et al. (2013), Grammatikos/Panikolaou (2013), Koch (2013), Hackethal/Inderst (2015), Schackmann-Fallis et al. (2016).

In a second-round effect, such an asymmetric cost impact of regulation weakens SMEs and burdens peripheral or structurally weak regions. Moreover, lending to SMEs is being unnecessarily restricted, e.g. given specific instruments, such as the “Net Stable Funding Ratio (NSFR)”, the increasingly quantitative requirements for the loan approval process and growing reporting requirements.

Another threat to the “boring banking” business model is the growing dominance of banking regulation based on a plethora of indicators. This approach prevents the inclusion of soft factors which are crucial for SME lending. On top of this, a strongly quantitative approach in regulation and supervision creates a false sense of security, which is blind towards new risk factors that might emerge. At the same time, market participants may consciously seek “workaround strategies” – helping them to achieve formal compliance for business practices, which are in fact inappropriate. It would make more sense to implement supervision based on qualitative factors, with regulators monitoring business and (macro-)economic developments and responding on an ad-hoc basis – in line with the initial conceptual idea of Pillar 2 framework.

Renewed political attempts to strengthen securitisation must be seen critically. It comes as no surprise that large banks and investment banks, backed by the expectation of low-risk commission income from underwriting and financial engineering, are supporting such initiatives. The political argument that securitisation would revive lending growth (since this would circumvent the restriction of banks’ limited own funds) appears to be contradictory: following the crisis, politicians endeavoured to strengthen banks’ equity position in order to enhance the buffer against unexpected losses. Using a securitisation initiative to circumvent this would counteract that very objective. It is also not persuasive that only high-quality assets would be securities this time – especially given that these would hardly generate relief in equity. Rather, it seems that players are ready to succumb to the belief that “this time, things are different”.⁷⁵ Strengthening securitisation once again, as proposed within the framework of Capital Markets Union, would be tantamount to quickly forgetting historical experience, and testament to a seemingly inevitable belief in the superiority of capital markets.

Overall, the present regulatory environment – especially in Europe – is inadequate for helping boring banking towards a full-scale breakthrough. On the contrary: regulation puts such business models at a disadvantage. As such, regulators threaten to counteract their previous goal of returning banks’ business models to boring banking on a broad scale. The fact that politicians have once again returned to favour the ideas of securitisation and striving for size gives additional cause for concern.

What is required instead is a review of bank regulation, both in terms of proportionality for small and medium-sized banks, as well as regarding potential restrictive effects upon corporate

⁷⁵ Borrowed from the title “This Time is different: eight centuries of financial folly” (Reinhart/Rogoff 2009).

lending. The US approach of a differentiating, two-tier bank regulation is economically adequate.⁷⁶ A similar approach – the Simple Banking Box – is also available in Europe and should be considered in the impending amendment of the CRR.⁷⁷

The Simple Banking Box should comprise all credit institutions that are not classified as “global” or “other systemically important institution” (cf. Article 113(2) and 131(3) Capital Requirements Directive). A differentiation based on systemic relevance would avoid having to introduce a further threshold on the one hand and encompass various dimensions that are relevant for financial stability – size, complexity, interconnectedness, substitutability, and cross-border activities⁷⁸ – on the other hand.

The purpose of the Simple Banking Box is not to lower standards across the board: the point is that not all rules have to be applied to all kinds of credit institutions to the same degree of complexity.⁷⁹ Above all, administrative relief is required. Besides regulatory reporting, this relates to requirements for organisational structures, external reporting, and risk management, remuneration and MiFID compliance; it also involves the scope of quantitative analyses as part of internal stress testing and the Pillar 2 assessment.

Even though the recommendations made by the Basel Committee have traditionally been targeting large institutions with cross-border activities, Europe has turned the concept of coordinated regulation – which is correct *per se* – into a misconstrued “one size fits all” implementation. As a matter of principle, setting international regulatory standards is welcome, since this prevents an inefficient “race to the bottom”. Yet the problem with uniform international rules is that it is very difficult to consider special features of individual countries or regions, whereby international systems and market structures become ever more similar to each other. However, less heterogeneity makes shocks more symmetric and counteracts financial stability.

Therefore, rules, which have been harmonised at an international level, should only be applied to large institutions with cross-border activities. The upcoming amendment of the CRR must be taken as an opportunity to correct the undifferentiated regulatory policy currently being pursued in the EU, along the lines of the Simple Banking Box. In this way, regulation can be prevented from being a driver for mergers – whereby regulation itself would exacerbate the “too big to fail” issue and threaten “boring banking” business models.

⁷⁶ Cf. in detail Hoskins/Labonte (2015).

⁷⁷ Cf. Schackmann-Fallis et al. (2016).

⁷⁸ Cf. Basel Committee on Banking Supervision (2011) and (2012).

⁷⁹ Cf. Deutsche Bundesbank (2017): Small and medium-sized credit institutions (so-called Group II-institutions) in Germany are nearly completely complied with the new own funds and liquidity regulations according to Basel III.

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