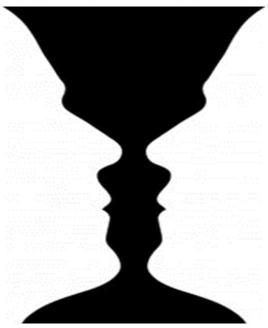
Digital Challenge Looms Larger for European Banks
(an Outlook for 2018 and Especially Beyond)

Moving into 2018, the European banking sector appears to be in a sweet spot (with exceptions), displaying more reassuring prudential, financial and business characteristics, as well as more focused strategies. Scope's ratings on the large European banks reflect this view, being mostly in the single A/low AA range (see Appendix 1). Regulators, banks, and market participants debate resolution outcomes, but no significant institution is about to reach that dreaded cliff edge. Stress tests (the most recent one in the UK) show that capital is at safe levels. Non-performing loan legacies are still lingering, but their perimeter has narrowed down and they impact far fewer banks than in the post-crisis years (also, European regulators now seem more determined to snuff them out). Profitability continues to be subdued – and is likely to remain so for the foreseeable future – but the market now displays more equanimity about it.

To be sure, there are potential events and developments – many in the socio-political sphere – which may shake this relatively benign landscape. But the sky is not falling on the European banking scene, as many have been fearing. "I have known a great many troubles, but most of them have never happened" wrote Mark Twain.

However, like the Rubin's vase made popular a century ago by the Gestalt psychologists (*Figure 1*), a change in focus causes a different picture to emerge, one which is much less reassuring. We see evidence of the growing existential threats brought by the digital era, which are likely to change the banking industry structurally and profoundly. This does not mean that banks will be blown out of existence, far from it. It does mean, however, that the traditional banking business model may be under growing threat, something that banks would ignore at their peril.

Figure 1: Rubin's vase



During the last decade, various service industries have been severely disrupted or displaced, and there is no reason to believe that the financial services industry will survive intact (in fact high regulatory walls, which got even higher after the crisis, are one of the main reasons this has not yet happened). This report aims to address these issues, as well as the links, not always visible to the naked eye, between digitalisation, changing customer behaviour, banks' risk-taking, good governance, and regulatory approaches.

After summarising Scope Ratings' 'sweet spot (with exceptions)' Outlook for 2018, the report focuses on seven major topics which have often arisen in our dialogue with investors. The gist of our views on them is provided below.

Analysts

Sam Theodore (*author*)
s.theodore@scoperatings.com

Pauline Lambert
p.lambert@scoperatings.com

Michaela Seimen Howat
m.seimenhowat@scoperatings.com

Marco Troiano
m.troiano@scoperatings.com

Chiara Romano
c.romano@scoperatings.com

Jennifer Ray
j.ray@scoperatings.com

Associate analyst
Alvaro Dominguez
a.dominguez@scoperatings.com

Scope Ratings AG

Suite 301
2 Angel Square
London EC1V 1NY

Phone +44 203-457 0 4444

Headquarters

Lennéstraße 5
10785 Berlin

Phone +49 30 27891 0
Fax +49 30 27891 100

info@scoperatings.com
www.scoperatings.com

Bloomberg: SCOP

Looking ahead: key themes for investors

1. **Regulations.** Beyond the daily grind of debating the supposedly excessive harshness of prudential regulations hurting banks' performance, our view is that the non-bank specific regulations about to kick in, primarily PSD2, may end up being the more relevant ones for the future of EU banking. In time, these could lower entry barriers for non-bank players and increase transparency and choice for the end-user (the customer) which may well take place at the expense of the middleman (the bank).

   Aside from that, we also think that banks' and investors' fear of output floors may be overblown (even misplaced in the case of credit investors), that the topic of sovereign risk weights may be down but not out, and that the hoped-for European Deposit Insurance Scheme (EDIS) may be just a nice-to-have, not a sine qua non, as long as the other two pillars of the European banking union, the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM) are in place – which is primarily the case with the former.

2. **Business model in the digital era.** European banks' traditional business model – relationship-based, which allowed them to profitably cross-sell retail and wholesale products and services through unique information access to their customers – may be threatened by obsolescence in the digital era. A powerful combination of: i) exponentially increased (and mobile-accessed) internet traffic in the next years; ii) changing customer behaviour (less trust in bank brands and more in tech and social media brands, the overwhelming use of apps rather than branches for banking operations); and iii) new regulations such as PSD2, would suggest that a new business model is likely to emerge. It would have the customer in the driver's seat and her bank, but also other financial services providers (other banks, non-banks, fintechs, and, potentially, GAFA[1] companies if they decide to make inroads), competing for her business on open application programming interfaces (API).

   Banks will have to adapt, painfully so, to the new ecosystem, with measures including the shedding of branches and excess back-office capacity. Like the transition 90 years ago from silent movies to talkies, some actors will not make it in the new era, but others will successfully train their voice and continue to act.

   Bank debt investors, while remaining legitimately concerned about the usual issues – regulations, resolution, prudential metrics, profitability, etc. – should also aim to assess the different scenarios likely to emerge in the digital era and to be able to gauge which banks would be better positioned in them.

3. **Cyber risk.** We view it as being very close to the top of the risk pyramid for financial institutions. It is often less analysed in the context of bank credit, simply because analysts prefer metrics when assessing specific risks. But we anticipate that, in the years to come, the evaluation of cyber risk, using whatever analytical tools may be available, will be unavoidable when assessing bank risk.

   In the fight against cyber threats, cooperation between all parties – banks, regulators, governments, IT vendors and external experts – should be key. When it comes to cyber risk, banks are more effective when they work together. The hypothetical minor upside that may be gained by having the reputation of being more effective on cyber risk than a competitor can be quickly drowned by a successful massive cyberattack on that competitor which could significantly hurt trust in the viability of digital banking.

4. **ESG.** Banks have improved their disclosure of environmental, social and governance (ESG) factors, which has been demanded by socially responsible investors and regulators. This is a clear positive. For banks, extremely relevant in our view is the 'G' (governance), the transparency of which does seem to have improved after the crisis.

Table of contents

[1] GAFA: Google, Amazon, Facebook, Apple.

That said one area where we see the banking industry as being sorely behind is gender and other types of diversity at the level of top management. Workforce diversity policies and practices being implemented through the organisation, not followed up the senior management ladder, suggests that the walking is not yet walked. Besides being the right thing to do, this would mitigate the threat of groupthink. As an example, we note that there are extremely few female CEOs or other top managers in banks across Europe.

5. **Profitability.** European banks' profitability, which has been a sore point for equity and (more surprisingly) credit investors, should remain subdued for the foreseeable future, with the best returns on equity (ROEs) hovering in the low double-digits. However, we do not see this as being a real weakness, provided the bank is not taking excessive risks and that fundamentals continue to be sound -- including strong capital and a remote probability of depletion.

   Whenever rate hikes occur (potentially from late 2019), they may not boost European banks' net interest margins in a first stage, as socio-political pressure will be for savings rates to go up first (something which we would expect in Germany or France). We anticipate earnings growth to come primarily from gradually higher lending volumes and more cost-cutting efforts – although the digital transition will not make it this easy.

6. **Bank mergers.** Our view is that cross-border mergers between large European banks (and even some domestic banks) may be less justified; also bearing in mind some of the disastrous pre-crisis transactions. A forward-looking bank, rather than buying or merging with an old-fashioned distribution capacity (another bank), could choose to invest in digital capacity (existing fintechs) or build its own. (in fact, some banks claim they can do both.) There are several other related risks which our report highlights, but human nature being what it is we cannot rule out future mega-transactions across Europe.

   As for the multitude of smaller banks, we believe that there is no alternative to more sustained in-market consolidation (e.g. in Italy, Germany, or Austria), and ideally not at a snail's pace). Nonetheless, consolidation is not a panacea for reducing systemic excess capacity, the highly consolidated but cost-heavy French banking system being an example. Also, we note that cross-border mergers are in fact not leading to real cross-border banking, not even in the euro area (EA).

7. **Resolution.** There may hardly be a credit sector other than banks for which a key investor concern is how an issuer will be handled in the event of failure. This is the consequence of post-crisis trauma, but excessive focus on funeral scenarios for an individual in good health can only go so far. As for the resolution-vs.-bailout events of spring/summer 2017, we could characterise them as the moment when the regulatory rubber met the political road, and we discuss in our report.

   Compared to the past, European banks' capital structure is decidedly more complex, with the introduction of various categories of seniority. It is, however, not riskier, and it is more transparent than before the new regulations came into effect. This should offer not just more choice to credit investors, but also more reassurance in equal measure.

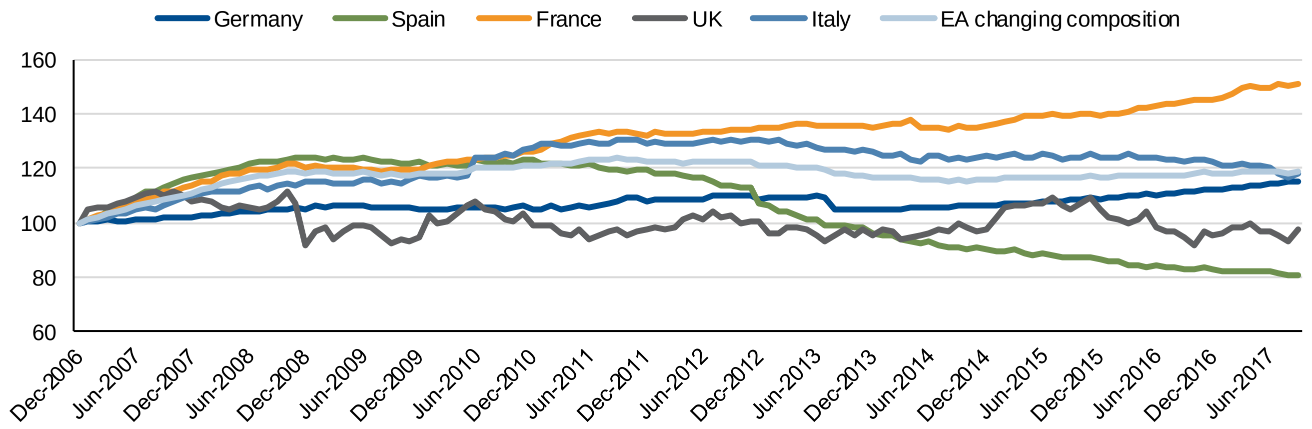
Outlook 2018: a sweet spot (with exceptions)

For the last couple of years or so, the European banking sector has on aggregate displayed a visibly strengthened hand, reflected in stronger prudential and financial fundamentals, more risk-averse business models, and better focused strategies. Most of the large European banks publicly assessed by Scope carry ratings at the single A/low AA levels. This rating range – which based on our methodology does not incorporate external support notches – reflects our forward-looking view on the sector's growingly reassuring credit fundamentals (to a large extent stemming from heightened regulations and supervision), tempered by modest profitability indicators, lingering asset-quality legacies in several cases, and occasional business-model challenges.

For 2018, structural and circumstantial ingredients already in place should position the European banking sector in a relatively sweet spot (with caveats highlighted in the next section). The following five factors support this view:

1. **Improving macroeconomic trends through the euro area (EA): more bank lending.** After several years of sluggish growth, on aggregate the EA has started to move ahead, which should result in a moderately higher volume of new bank lending (*Figure 2*). Among the large EA economies, we expect modest loan growth in Germany, improved demand in Spain, the persistence of a cautious trend in Italy, and a continuing positive trend in France. Overall, bank revenue growth in 2018 should come mostly from lending volumes – in a credit market which will remain highly bank-intermediated – rather than from improving net interest margins (these will continue to remain depressed). Outside of the EA, we caution on further loan growth in the UK, given the heightened Brexit uncertainties.

Figure 2: Loan growth (%, 2007-2017)



Source: ECB, Scope Ratings

2. **Strong likelihood of interest rates remaining at the current historically low level through 2018 (with the exception of the UK).** Even when the ECB starts its cautious tapering off, probably later next year, it is unlikely that rates will move up. Against the grain, we believe that on balance very low rates may not be a negative development for the banking industry, especially in the EA, as they boost business and consumer confidence and mitigate borrower difficulties in repaying credits (public sector, households, and businesses). Also, we highlight further in the report our view that the hoped-for positive effect of rising rates may not be quite so beneficial for banks in the EA – at least not in the first stage of a rate hike (whenever that may be).
3. **The positive effect of heightened regulations and supervision.** Rather than being overly concerned about the negative impact of the new regulations on the banking sector, we consider them a sine qua non for strengthening the sector and restoring market confidence. If not deliberately tampered with (a scenario that cannot be totally excluded for the medium term, given future political dynamics) or if not faultily implemented, the new regulatory architecture should continue to reassure on credit safety for banks. However, we consider that other regulations, which are less bank-specific, would present a different set of challenges for EU banks.
4. **More risk-averse business models and strategies, as well as efforts to disentangle complexity.** On balance, European banks have adopted risk-averse strategies and a reduced tolerance to risk. Equally, steps have been taken to increase the transparency of business models and to reduce frowned-upon complexity. In other

words, a reassuring landscape for investors in bank credit. In the first several years after the crisis, a key task for top management teams had been to steer their banks in the direction of the new regulations and compliance rules, but more recently the need to adapt institutions to the fast-evolving digital ecosystem – to survive and compete – has become paramount (not that the two priorities are mutually exclusive). Banks are also managed more safely, with the 'farmer CEO' replacing the 'hunter CEO'. Groups like Santander, ING, or BNP Paribas, among several others, can be ranked in the top echelon of well-managed banks worldwide.

5. **High non-performing loan (NPL) levels are not a Europe-wide systemic weakness.** As shown in *Figures 3 and 4* (data assembled by the European Banking Authority), while still stubbornly high in some European systems – largely a legacy from the past – we do not consider NPLs to represent a systemic burden that would prevent banks from engaging in new lending. In Italy, despite excessive market fears, the pockets of asset-quality problems are no longer spread across the entire sector, being clustered with fewer banks. We believe that in 2018 there will be more cleaning up – both through gradual economic recovery and an active NPL market (resembling Spain's a few years back). In Central and Eastern Europe, high NPL levels are highly provisioned, also with the mitigating effect of high lending margins. Portuguese and Greek banks remain saddled with asset-quality problems due to sovereign stress and economies which are still in difficulties (especially Greece).

Figure 3: European banking system NPLs and forborne loans to total

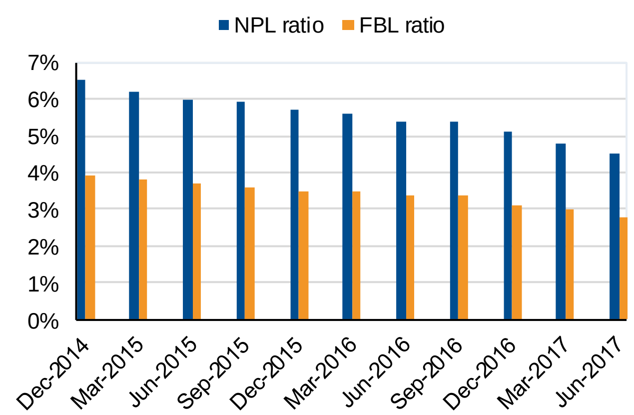
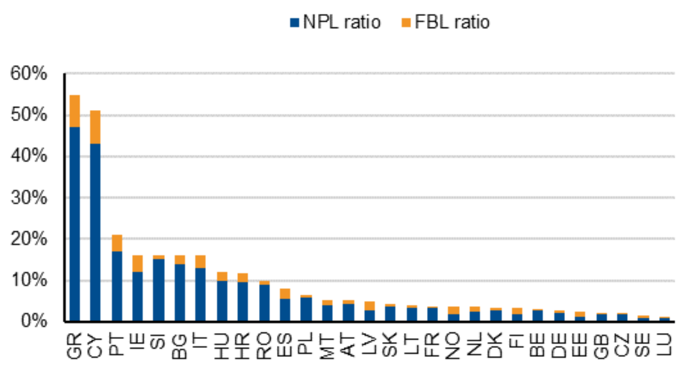


Figure 4: NPLs and forborne loans to total gross loans by country (Q2 2017)



Source: EBA, Scope Ratings

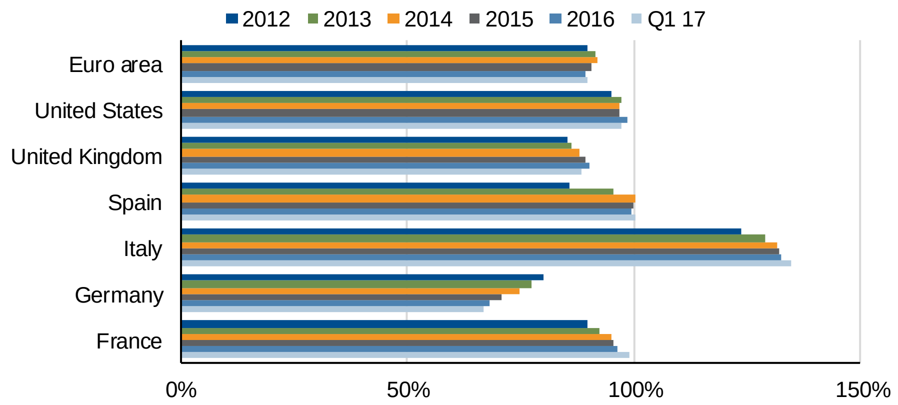
Anchored by the above factors, our 2018 outlook for the European banking sector on balance is that of continuing balance-sheet strength, high liquidity and reassuring levels of capital, gradual improvement in the remaining pockets of asset-quality legacies, and risk-averse business models and strategies. Appendix 2 provides some key financial metrics for a peer group consisting of 115 European banks.

We also anticipate more subdued profitability to continue, for the most part with single digit ROE. Strategically, banks are likely to remain primarily focused on adjusting to the new regulations, but also on cutting costs, reducing excess capacity, and trying to revamp their digital approach. We detail our views on these aspects in the report.

What could throw a monkey wrench in the works?

In the age of all-enveloping social media and alternative realities, the banking industry – especially the large institutions with a high degree of visibility – remains highly vulnerable to headline risk. Negative headlines, whether based on verifiable facts or not, can rapidly translate into adverse market sentiment and the ensuing consequences. Given the safety layers created within the banking industry after the crisis, we do not believe that banks will be the main culprit when it comes to the next financial crisis – as was the case last time around. Indeed, while many continue to cast banks in a gloomy light, the main areas of financial-risk pressure are growing outside the banking sector. We can point to the high indebtedness of non-financial sectors – households, businesses, and the public sector (*Figure 5*). Servicing large debt amounts and embarking on borrowing binges is inherently more sustainable when interest rates are at historically low levels than when rates start going up – which will inevitably happen at some point in the EA (perhaps from late 2019).

Figure 5: Total credit to government sector as a % of GDP (2012 -– Q1 2017)



Source: BIS, Scope Ratings

That said, banks have been in the public eye as agents of financial crisis ever since 2007, so it may be unrealistic to assume that public perceptions (media, politicians, investors, public opinion at large) will whitewash them next time around, even if a future crisis might well emerge from a different source.

We flag below some of the potential developments that could occur as early as 2018 and that may throw a monkey wrench in the sweet-spot scenario for European banks outlined above. There is inherent interconnectedness among these potential developments ('If This Then That'), and bank activities and balance sheets remain highly at risk from any of these.

We can attempt to rank these developments, from the least to the most unlikely:

1. A sharply negative asset value adjustment; if this happens, it is likely to occur in the US equity markets.
2. Hard Brexit or increasingly bitter UK-EU negotiations which could lead to 'bad blood' and affect the UK economy. UK banks, as well as London-based financial activities in general, would be impacted.
3. A new bout of populism or regionalism within the EU. While the Catalonian move towards independence may end up being a damp squib, populism and nationalism across Europe still lives to fight another day and may probably be just one crisis away from trying to claim power. One event generating heightened uncertainty in 2018 is the Italian elections of next spring. A populist election success could create some potential complications for the smooth functioning of the EU banking union, in addition to many other uncertainties.
4. Re-emergence of sovereign risk in the EA, potentially stemming from any populist inroads in the future. Market sentiment on banks domiciled in the respective country could turn sour, funding costs and sovereign portfolio values in their balance sheets could suffer again.

5. A high-fuse geopolitical development, such as a hot conflict in the Middle East, a significant terrorist act, threats or hostile acts (including in cyberspace) from North Korea, Russia, etc. A sharp increase in commodity prices, especially oil and gas, could hurt economies and bank balance sheets.
6. A massive and coordinated cyberattack on a large bank or group of banks – by private hackers or a hostile government. If successful, such an act could shatter public confidence in the safety of online banking.
7. US economic protectionism and nationalism moving from President Trump's strident rhetoric to executive orders or, less probable, legislation. A 'trade war' would be bad for the global economy and could hurt bank activities.
8. Bursting of a risk pocket still existing or building across Europe, e.g. housing prices in Sweden, consumer loans in the UK, etc.
9. An unexpected interest-rate hike in the EA.

2018: the year of non-preferred senior debt

Last October, the European Parliament finally adopted the European Commission's proposal, made one year earlier, for the creation of a new category of bank senior unsecured debt – non-preferred senior – which is eligible for MREL and TLAC, thus amending the EU's Bank Resolution and Recovery Directive (BRRD). This long-awaited step opens a wide door to the more frequent issuance of non-preferred senior debt, which we expect will occur on a more sustained scale in 2018. In the near future, we expect regulatory decisions regarding bank-specific MREL requirements, which should provide a clearer picture on issuance levels.

Tier 2 (T2) and to a lesser extent Additional Tier 1 (AT1) issuance should continue as well, but volumes should be lower than in recent years, at least for AT1. The reason is that an increasing number of top-tier European banks are reaching or getting closer to the limits of their regulatory buckets (2% for T2 and 1.5% for AT1).

On the other hand, we expect demand for bank debt to remain at a high pitch, which should continue to challenge spreads, as credit investors have been regaining confidence in the European banking sector and in its underlying regulatory/resolution architecture (at least for the top tier of banks). Further risking up by investors can be expected and, unlike covered bonds, purchases of bank unsecured debt are not being crowded out by the ECB.

Beyond the 2018 outlook: major topics on investors' minds

In the remainder of this report we turn to several major topics which have often arisen in our dialogue with investors. These topics have a time horizon extending well beyond 2018. Our take on some of these issues may come from a different angle to the usual narratives among market participants. We address the following six topics:

- Regulations: are we getting the whole picture?
- Is banks' traditional business model threatened by obsolescence in the digital era?
- Cyber risk: is it being properly addressed?
- ESG: are the banks walking the walk?
- Subdued profitability: are low rates and tough regulations the main culprits?
- Bank consolidation across Europe: will it/should it happen and if so will it reduce excess systemic capacity?
- Resolution and banks' expanded capital structure: too much confusion among investors?

Regulations: are we getting the whole picture?

The post-crisis regulatory architecture for European banks is mostly in place. We do not expect any material reversal of the current regulatory framework, at least not for the foreseeable future. At the same time, the heated debate and controversies on the merits of the heightened bank regulations continue.

Rather than posing a threat to banks, the enhanced regulatory architecture has raised further barriers to entry in the industry in our view. We are convinced that, in a more deregulated environment, too many banks would not have survived, given: i) the risks they had taken in the past which enfeebled them; ii) the competitive pressure stemming from technological advances which may have facilitated entry of other agents into the banking arena; and iii) the negative overall public image the industry has had in the post-crisis years. While many large banks express public frustration with regulations, they nevertheless seem to acknowledge that, on balance, the regulators are their allies. In the United States, the political push for bank deregulation coming from the House Financial Services Committee (the proposal to replace the Dodd-Frank Act with a new and very different Financial CHOICE Act) and from the Trump Administration has been so far met with caution by the large US banks. Smart bankers surely know that you cannot half-open a can of worms.

Figure 6: Regulations are an assorted mix

Regulations		
Bank-specific: raise entry barriers		Non-bank specific: lower entry barriers
Prudential	Conduct	
CRD IV - CRR	KYC	PSD2
BRRD	AML	GDPR
	CTF	Mifid 2

Source: Scope Ratings

Non-bank-specific regulations (PSD2, Mifid2, GDPR): As opposed to bank-specific regulations, these new EC rules – the first two to kick in in January, the third in May 2018 – are likely to exacerbate competitive threats for EU banks by potentially lowering entry barriers for non-bank players. On balance, their aim is to increase transparency and choice for the end-user (the customer) which may well be to the detriment of the intermediary.

Among them, the most consequential for banks will be the EC's revised Payment Service Directive (PSD2), enabling bank customers to use third-party providers to manage their finances. Consequently, firms other than the customer's bank will be able to provide services previously reserved for banks (as long as they have the customer's consent). Banks will also have to provide access to customer data for these third-party suppliers through open APIs. Banks have long argued that the knowledge of their customers' needs gave them a unique competitive advantage. This is especially true in the European market, which has remained significantly more bank-intermediated than the US market. PSD2 introduces two new types of financial services providers – Account Information Service Providers (AISP) and Payment Initiation Service Providers (PISP). Both banks (not necessarily the customer's bank of account) and non-banks like fintechs can become AISPs and/or PISPs. Some experts have estimated that approx. 9% of retail payment revenues (an important earnings stream for banks) could be lost to PISPs by 2020.

The General Data Protection Regulation (GDPR) will impose rigorous requirements for the protection of customer data and stringent penalties for failure to do so. Banks and other financial institutions process large amounts of personal data daily and will therefore be impacted by this new regulation (which was several years in the making). Finally, the revised Markets in Financial Instruments Directive (Mifid2), aims to provide greater protection for end-investors and more market transparency on various asset classes – equity, fixed income, foreign exchange, etc.

Again, we believe that all these new regulatory steps will represent challenges for EU banks which may see lower entry barriers for non-bank competitors, higher compliance and infrastructure costs, and negative pressure on fees and commissions. We also see a symbiotic link between these forthcoming rules and the challenges to banks posed by advances in technology and the consequent changes in customer behaviour (highlighted in the next section).

Risk-weighted asset output floors: There is apprehension regarding the regulators' effort to complete Basel III (a phase nicknamed Basel IV by many in the market), aimed at reducing the inconsistencies in calculating risk-weighted assets (RWA) for regulatory capital. The specific back-and-forth in the Basel Committee – primarily between EA and US supervisors – has been on the introduction of output floors (the threshold below which banks' internal-model calculations of capital requirements are not allowed to fall). European banks (especially French and German banks) have claimed that these would have a negative effect, as they again increase capital requirements, further hurt profitability, and thus affect their lending capacity (a topic on which they know politicians' sensors start buzzing and national supervisors start paying attention). Many investors and analysts in the market have seconded this opinion, in our view creating an unjustified sense of fear.

Without opining on the suitability of one output floor level or another (the agreement appears to be for 72.5%), we are in fact quite positive about creating more consistency regarding risk-weighted asset recognition, thus adding more credibility to the international comparability of capital ratios – a key metric underpinning a bank's credit strength. For years, investors and analysts have complained, and rightly so, about the difficulty of assessing regulatory capital suitability on an international-peer basis. We can, to a certain extent, understand that equity investors may be riled by yet another potential hurdle to banks boosting their returns. However, do find it surprising when credit investors sound the alarm on this topic rather than welcoming it. Besides, the relatively generous timeframe for implementation (2021-2027) should give banks ample time to adjust their internal models – something which needs to be done anyway and which the current Targeted Review of Internal Models (TRIM) is focusing on for EA banks.

Sovereign exposures: While the public discussion centres on the impact of output floors, we note that the critical issue of a few years ago, namely risk-weighing sovereign exposures, is now on the back burner. When rates start rising again, thus potentially placing renewed stress on the repayment capacity of some sovereigns, or should another confidence-busting sovereign event occur, we may see this topic return to centre stage. This is another scenario which investors should perhaps keep at the back of their mind for the medium term. For the time being, a recent position paper produced at the request of the European Parliament proposes a new Sovereign Concentration Charges Regulation (SCCR), which should be binding for EA banks only, and which should impose incremental Pillar 1 RW charges for home sovereign exposures exceeding 33% of Tier 1 capital. We consider that, if a charge existed one day, it could support the further delinking of bank-home sovereign risk. But we are far from there yet.

EDIS: On the other hand, the contemplated third pillar of the European banking union, namely EDIS, would be far more difficult to push through in our opinion, given that politicians and regulators from economically strong countries like Germany would be on thin ice at home if they assented to it. In fact, while we view EDIS as a nice-to-have pillar, it may not be an absolute must-have for the cohesiveness of the banking union. Firstly, the Single Supervisory Mechanism (SSM) and Single Resolution Mechanism (SRM), if properly implemented on a predictable basis (still an if for the latter), would create a reassuring cushion of safety comprised of multiple layers in front of deposits. Consequently, fear of losses as deep in a bank's capital structure as the level of covered deposits (EUR 100,000 and below) would be highly improbable. Secondly, even if EDIS existed formally, inherent national priorities during a crisis may threaten its pan-EA implementation on a timely basis.

Conduct risk: We anticipate that, going forward, supervisors' focus may shift from the predominance of prudential norms (prevailing during the post-crisis years) to a more balanced approach, in which misconduct risk and cyber risk gain in importance. Know-your-customer (KYC), anti-money laundering (AML) or combatting terrorist finance (CTF) are rules which define the hard edge of misconduct-risk regulations, with clear legal consequences for infringement. Across the European banking union, conduct-related practices and structures in banks are increasingly monitored by the SSM. The European Banking Authority (EBA) has been focused on the topic for some time and the UK's Financial Conduct Authority (FCA) already has a solid track record in the area. Overall, we believe that misconduct events on a material scale, in addition to potentially generating hefty legal or regulatory fines, can easily lead to dents in the respective bank's reputation – as indeed has been the case. A damaged reputation can lead to a loss of clients, the corrosion of new business volumes, or weakened market positions. This should remain a heightened concern for investors.

Cyber risk: This applies even more so to cyber risk. We note a heightened effort by regulators to understand and attempt to address the growing challenges of cyber security for banks. Cyber risk is an area which all parties – banks, regulators and market participants – recognise as having become a top-tier risk for the industry. We believe that only as a joint effort with other agents – government bodies, external experts and other institutions – can a bank equip itself more thoroughly to address the challenge. Overall, there is still a long way to go before this risk can be handled properly, as technological advances and the competitive pressures they engender seem to be moving faster than the capacity of banks and regulators to address cyber risk in its various forms: malware, ransomware, data exfiltration, phishing, etc.

This is a car in which the acceleration remains one step ahead of the brakes. (We discuss cyber risk further in this report.)

Is banks' traditional business model threatened by obsolescence in the digital era?

Banks are focused on increasing their digital offer to customers and business counterparties as well as on technologising their own flows and processes. This is an essential step, as survival in an increasingly digitalised world would otherwise hardly be possible. In this way, banks are trying to keep their established business model viable, by adjusting the delivery (away from the physical) and aiming to meet customer expectations. Time and again, banks refer to their digital strategy as a key competitive advantage in their communications.

A blow to the integrated business model: We consider the new digital landscape to represent more than merely a competitive challenge for the banking industry. It may, in fact, bring truly transformational shifts to the entire ecosystem. It is the very business model of the traditional bank that we believe is threatened by obsolescence. Specifically, over the next few years, we may well start to see the integrated business model of most banks – one institution competing with others by offering as many products and services to its business and individual customers as possible – becoming increasingly disaggregated, with the bank as just one of the actors on that new stage.

This may be transformational, notably for banks in continental Europe, where the financial system and circuits tend to be more bank-intermediated than in the United States – with the UK somewhere in between. By comparison, there is much more atomisation in the US financial sector, with the markets and many non-bank firms active in segments which are mostly in the hands of the banking industry in Europe: business loans and leases, mortgages, consumer loans, credit cards, funds, brokerage, insurance, etc.

Indeed, the large banks which dominate the European financial landscape have managed, over the years, to capture a large majority of financial services demanded by individuals and businesses, and by doing so to keep a firm grip on their customers' financial needs and solutions. In this process, the customer relationship was an overwhelming advantage for them, as they knew their clients' financial situation better than any other outside party and could thus offer the right solutions – usually in the form of the bank's own products or services. Over the last few decades, the large European banking institutions have kept highlighting their unique and privileged relationship with their clients, strategically positioning themselves to boost revenues by cross-selling new products and broadening the customer footprint. The latter was achieved through competitive pricing (e.g. some products being loss leaders to capture new clients), as well as through mergers and acquisitions – at home and abroad. During the pre-crisis decade, many a bank boasted about six products cross-sold to their clients compared to four by a less diversified competitor.

Besides being frowned upon by supervisors (concerned about misselling), this business model is likely to become increasingly threatened. This is, firstly, due to the fast-moving pace of digitisation affecting everything and everyone, and secondly, to the significant behavioural shifts shaped by technology, demographic changes, and not least by the traumatic impact of the financial crisis which shook the public's trust in banks significantly. Thirdly, new regulations across Europe, such as PSD2, should facilitate the new dynamics of openness and transparency, catalysing the erosion of the banking sector's protective walls. We clarify these three developments below.

1. Global internet traffic is forecast by Cisco to reach 3.3 zettabytes (ZB)/year by 2021, from approx. 1.2 ZB in 2016 (a ZB is equivalent to a sextillion bytes, roughly the contents of 250 billion DVDs), moving the world towards a fuller use of the IoE (internet of everything). Also, it is anticipated that 76% of all internet traffic will be mobile by 2021, up from 46% in 2016. Cisco points out that the smartphone is becoming everyone's 'communications hub' for social media, music, video, and accessing the IoE through digitised aps. It is not realistic to assume that these megatrends will not radically change even further the way financial products, transactions and information circulate and are used, as well as the nature of customers' relationship with financial services providers.

2. Millennials (born 1980-1996 and thus digital natives) have become the largest generation in the United States (surpassing baby boomers), although they still trail boomers in Europe. Added to them are large and growing segments of digital adopters from earlier generations. Overall, millennials display more detachment and even aversion towards bank brands. A recent Harris Poll revealed that in the United States eight out of ten millennials would easily switch banks, or avoid banks altogether, if they found better terms elsewhere. The same poll showed that 71% of them would rather visit a dentist than a bank branch. A 2017 Accenture survey showed that a large proportion of millennials – 50% in the US, 40% globally – would switch their bank accounts to a GAFA brand (Google, Amazon, Facebook, or Apple) if the offer existed. Interestingly, the same willingness to switch would not be the same if the alternatives

to the respective bank were just fintechs. This may in fact suggest some of the trust shifting away from the banking industry (especially the large, global banks) towards technology and social media companies which are widely used and trusted (indeed, 'credit' comes from Latin in which it means 'trust').

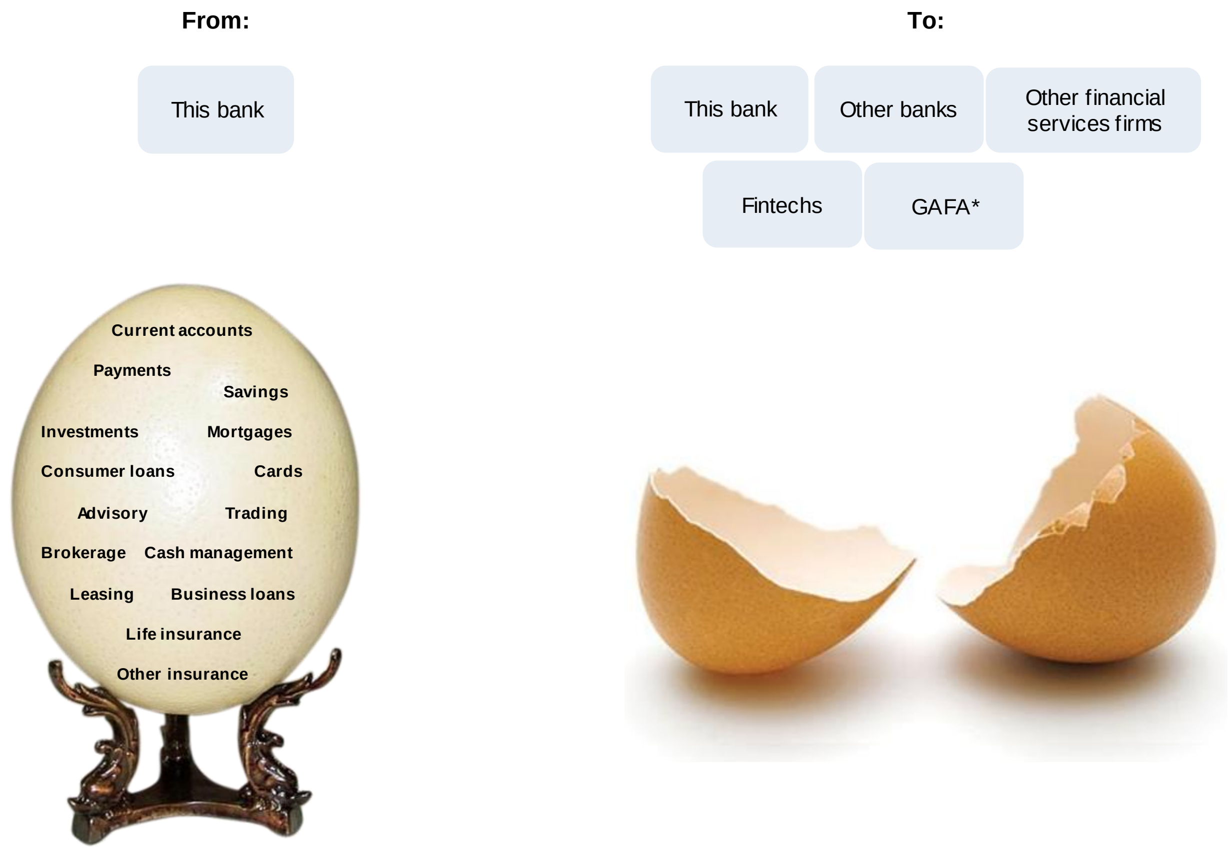
Dwindling trust in banks has been primarily the direct consequence of the traumatic years of the financial crisis, with the banking industry at the epicentre of the turmoil. On aggregate, banks have considerably strengthened their prudential soundness after the crisis but the reputation of the industry remains damaged. A recent Pew Research report concludes that the younger generations – those who trust tech brands more than banks – think of banking mostly through the digital visualisation of financial data. This is one area in which not too many banks have a very attractive offer.

All this suggests that the traditional institutional trust in the banking industry has been eroded, as public trust migrates to tech and social media brands which an increasing number of people feel have a more positive impact on their lives.

3. We have already highlighted the fact that bank-specific regulations, while providing tough love to banks, also keep entry barriers relatively high, thus sheltering the incumbents. On the other hand, more general financial regulations, primarily PSD2 across the EU, as well as the UK Open Banking Standard, would end up lowering entry barriers. The Trojan Horse for this may be secure open APIs, which will have to be mandatorily shared by banks so that customers can more effectively manage their finances via their bank but also via other providers of financial services, depending on the attractiveness of the offer (again, assuming the customer allows the sharing of her data).

The future bank business model: Consequently, we believe that banks' integrated business models, which have worked quite well with respect to revenue streams and market positions, especially during the decade preceding the crisis, will be gradually replaced by the digital ecosystem's new business model with the customer at the centre and her bank, as well as other financial service providers, competing for her business on the open API. *Figure 7* depicts this development.

Figure 7: From the old to the new business model



*Google, Amazon, Facebook, Apple
Source: Scope Ratings

In this new and more challenging world, we clearly do not expect the banking industry to become extinct, far from it. We believe that those institutions which adapt rapidly to the new landscape will be in a pole position to compete. For example, by becoming AISPs and PISPs early on, and bringing open APIs to their platforms, they can not only provide transparency and value to their own clients but also attract new clients. We understand that DNB and other Nordic banks aim to do exactly that and we assume that there are other institutions across Europe preparing themselves to move in the same direction.

We would not subscribe to the bank-vs.-fintech rivalry model. We believe that the smart banks will find synergies with some fintechs and go down a symbiotic route, possibly acquiring their business, in addition to funding start-ups themselves. The world of fintechs is becoming bigger and more diversified, spanning payments, savings, credits, investments, processes and compliance. Banks are looking to adopt the new technologies and avenues for business in the digital world, including blockchain, big data and artificial intelligence.

These scenarios do not augur well for those banks still relying heavily on large branch networks (*Figures 8 and 9*). This, in fact, appears to remain the case for too many retail and commercial banks across Europe. On balance, we believe that banks are facing the massive task of further reducing their non-digital distribution capacity and back offices. Whilst most banks accept this, the biggest challenge is adjusting down employee payrolls. We do not believe that sweeping staff reductions will be made quickly or with great public visibility, as this would not earn banks any brownie points with regard to public opinion. But they will nevertheless need to be implemented eventually in order to capture the evolving demographic dynamics, because there appears to be little alternative. Bank branches are not likely to disappear completely even when generational changes become more advanced. We could envision branches carrying the bank's logo in commercial areas tending to serve marketing purposes rather than representing a mainstream product distribution channel.

Figure 8: Number of branches for 100,000 individuals (2007 vs 2016)

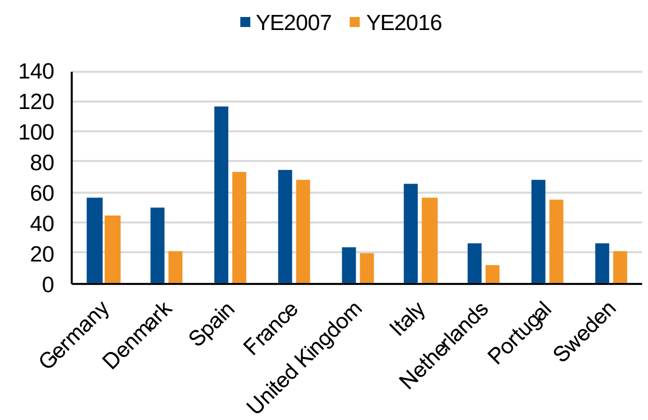
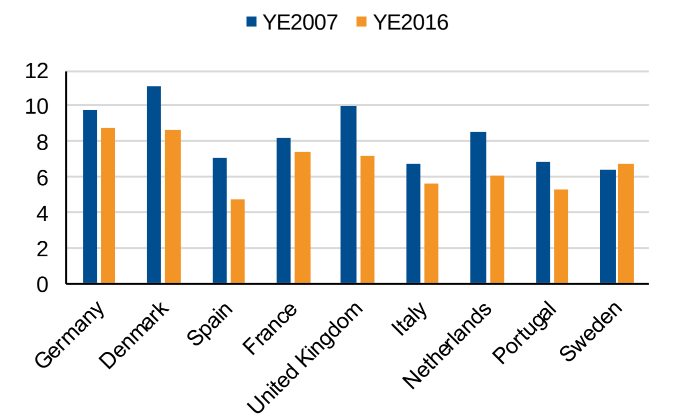


Figure 9: Credit institutions employees per 1,000individuals (2007 vs 2016)



Note: UK is 2014 (not 2016)
Source: ECB, Eurostat, Scope Ratings

Banking still not as disrupted as other service sectors: We note that many service sectors are already disrupted and that traditional business models have been displaced by new online entrants: retail (Amazon), travel (Expedia, Booking.com. etc.), lodging (Airbnb), food delivery (Deliveroo, Uber eats) and transportation (Uber). People can video-access lawyers or doctors via apps, or pursue university degrees on line. It would be highly unrealistic to expect banks' business models and structures not to be significantly altered and disrupted, especially with new regulations like PSD2 encouraging the introduction of an open API structure.

Concerns for credit investors: An investor buying a new 10-year bond or perhaps even a 5-year bond issued by a European bank, and planning to hold it to maturity, should realise that, by the time the bond matures, the issuing entity could be a very different institution, even if it still carries the same name. This need not, however, be a negative investor consideration in our view, quite the opposite. Nevertheless, we consider that bank debt investors, while remaining legitimately concerned about current issues – risk management, regulations, resolution scenarios, prudential metrics, asset quality, profitability, etc. – should also aim to consider the different scenarios likely to emerge in the digital era, and be able to assess which banks would be better positioned in them.

This is not about the likelihood of bank defaults as much as about some banks missing new opportunities while others take full advantage of them.

We would, however, be concerned about banks which, unable to adjust in an effective and competitive way to the new digital world, might try to compensate by taking unduly high 'non-digital' risks to preserve a certain revenue base and business case. We remember that, at the end of the silent movie era some actors did not make it to the talkies, while others retrained their voice and did well.

Cyber risk: is it being properly addressed?

As they advance into the digital world, banks would have to address new sets of risk. We view cyber risk as close to the top of the risk pyramid for financial institutions (and not only for them). The challenge for investors and analysts, as well as for supervisors, is that a cyber threat cannot be properly quantified and measured: it may be a minor sideshow without relevance (other than some embarrassment for the bank's IT department), or it may have a truly devastating impact on the institution and its ecosystem. It all depends on the sophistication and determination of the hackers – cybercriminals or a hostile government – matched against the strength, depth and agility of the bank's cyber defences.

Investors and analysts generally feel reassured if they have a good degree of visibility on a bank's risks – be those in asset quality, funding, trading, or operations. In the case of cyber risks this is not possible. It is understandable that banks would deliberately avoid providing too much transparency on their cyber defences. Consequently, we believe that, on balance, investors and customers are simply left to assume the best about a bank's cyber defence effectiveness (otherwise the colourful bank apps on people's smartphones would be rapidly deleted and many accounts closed) and consider successful cyberattacks as freak cases, from which the bank will hopefully have learnt to improve its protection the next time around. In general, we are all aware that banks have cyber protection plans, engage in self-hacking, sandboxing, simulations, emergency tests and, importantly, provide employee training regarding cyber risk and the protective measures which everybody needs to take.

We also know that bank regulators are upping their own game in understanding and acting on cyber risk issues. In fact, we have, in recent years, seen an unprecedented cooperative effort among regulators across jurisdictions to build up cyber protection effectiveness in the supervisory process and bank regulations. We expect this effort to continue and grow further for years to come. This process is aimed at more effective bank supervision, making sure depositors are protected and systemic stability is being safeguarded, but investors are also more reassured when they sense that regulators are focussing on bank cyber risk in a coordinated fashion.

Cooperation against cyber threats is key: In our opinion, the key to credibility in the fight against cyber threats is cooperation between all parties with a vested interest in making sure that the banking industry is not going to 'go to hell in a handbasket'. To be successful, there needs to be a sustained effort, on a joint basis, on the part of the banking industry, regulators, governments, IT vendors, and external experts.

We also consider that on the specific challenge of cyber risk, banks are more effective when they cooperate. The hypothetical minor upside that may be gained by having the reputation of being more effective on cyber risk than a competitor can be quickly drowned by a successful, massive cyberattack on that competitor which could significantly hurt trust in the viability of digital banking. This also suggests that top managers and boards in banks would need to shed the competitive approach when dealing with the cyberworld and embrace constructive cooperation. A tall order, but not an impossible one, and certainly a necessary step.

ESG: are the banks walking the walk?

Credit investors have become increasingly focused on environmental, social and governance (ESG) factors across the investable universe. Unsurprisingly, the banking sector is very much part of this approach. In this acronym, we find that it is primarily the 'G' (governance) which may be the most relevant for banks.

Spurred by investors, customers (millennials expect high business ethics and social responsibility norms to be adhered to by their bank) and, more recently, regulators – but also acting on their own convictions – large banks are becoming more public about their ESG approach. This ranges from details on sustainable lending policies (e.g. less oil and gas, more renewable energy), across disclosure related to climate change and carbon footprint, to clarifications on their adherence to the Equator Principles (social and environmental principles underpinning project finance and related transactions), and the issuing of green or social bonds (aiming to fund projects with environmental or social benefits). These are important aspects which are increasingly focused on by investors and analysts, and rightly so.

Governance: With respect to governance banks have made significant progress in the years following the crisis (not all banks, however). One market narrative is that it is regulations that are keeping banks on a safe track. While this is true, elements of ESG awareness are also changing banks' culture for the better. A modified bank culture is leading to more responsible risk-taking, greater social, gender and ethnic awareness in employment policies and labour relations as well as higher health and safety standards. We noted earlier that the 'hunter' bank CEO has increasingly been displaced by the 'farmer' CEO.

In our view, the right approach to governance encompasses risk management, business ethics, responsible finance, product governance, and of course the organisation's human capital. Avoiding unnecessary complexity (which may aim to obfuscate customers, investors and supervisors); staying away from fuzzier areas not solely because of fear of non-compliance but also due to the conviction that it would not be doing the right thing; or taking the high road even when a close competitor chooses the low road -- are all signs of good governance and a good culture.

Lack of top management diversity (gender and otherwise): One weakness that we continue to see in bank governance across the sector is the lack of diversity in top management teams – primarily (but not only) gender diversity. We believe that, even with a proper governance structure in place, the lack of gender and other diversity within a bank's decision-making ranks creates the danger of groupthink, which was one of the culprits behind the last crisis and which has clearly not waned away. Showing diversity awareness and adequate employment policies and practices at the level of the entire organisation, but not implementing them in the executive suite, is a flawed approach in our opinion. It suggests that, at least in this area, banks are not yet walking the walk. As an example, precious few female CEOs or other top managers are working at European banks.

In our view, this is one area in which the banking industry remains a significant laggard in governance.

Subdued profitability: are low rates and tough regulations the main culprits?

The consensus view is that European banks continue to display low profitability because of: i) low-for-long interest rates which depress investment yields and net interest margins; and ii) tough prudential regulations, with materially higher capital requirements and more constraints on balance sheet structures and the range of business activities. We do not disagree with this assessment. It is indeed more difficult to boost ROEs when the equity base is a multiple and the profits a fraction of pre-crisis levels.

But this is also the reason why credit investors should be less uncomfortable with banks' profitability levels: not an ideal but an understandable reality. A high single-digit ROE is not a major weakness for a bank, especially when its risk profile is sound and its business model is viable and sustainable. It seems that this message is gradually becoming more palatable to investors – even to equity investors as bank equity valuations have increased in recent years. The quasi-universal belief is that, if only they reduced their costs further, cleaned out their NPL portfolios more thoroughly, increased lending volumes, and went for more consolidation, banks could somehow boost their profitability and thus become stronger.

Subdued profitability is here to stay: Our view is that we should not expect the European banking sector to turn substantially more profitable. High single-digit ROEs may in some instance move up to low double-digit ROEs (some banks are there already), but higher levels would be exceptions, and some might be suspect (indicating that the bank is taking excessive risks to maximise profits). If the truth be told, credit investors could safely live with high single-digit ROEs for banks, provided the fundamentals remain sound, including strong capital levels with only a remote probability of depletion. In fact, this is currently the case for many banks across Europe. The discomfort should appear only when soft profitability indicators are combined with weak asset quality (requiring large provisions), below-average capital levels, risky business models, unconvincing strategies, or the loss of steam in a competitive market.

Low net interest margins: It is assumed that higher rates would help banks' bottom lines by hiking net interest margins. The assumption is based on the positive effect of higher rates on margins: boosting loan and other asset yields and thus widening the gap with liability costs. This would be especially true for assets comprised mostly of variable or resettable-rate loans.

We are however not convinced that it would be easily to achieve in the current European economic and socio-political environment, at least not the first stage. Firstly, in several markets – such as France or Germany – a substantial segment of residential mortgages (usually a very large block of assets on a bank's balance sheet) are at fixed rates. Secondly, we anticipate that the first move a bank would make, when higher market rates justify it, would be to offer better terms to savers, who for many years after the crisis have been the unwilling victims of the low-rate environment (there to make things easier for borrowers and the banks). Repricing loans could come only at a later stage, and even then, more modestly. Therefore, it is probable that many banks' net interest margins will not visibly improve soon after a rate hike (perhaps from 2019 or later).

Conversely, if a rate rise were to trigger credit repricing on a larger scale (as banks hope), many borrowers could run into repayment problems, thus heightening asset-quality problems and loan-loss provisioning needs for banks (especially as IFRS 9 will start being gradually implemented from next year). An incrementally higher net interest margin may not completely offset this potential growing cost.

Pressure on fees: On balance, banks' fees and commissions – which in recent years, especially after the crisis, have represented a higher share of revenues – will continue to remain under growing pressure. Demand for financial services, especially the high-margin, high-risk end of them, has been in decline in the post-crisis years (there are also fewer high-margin products on offer and investor preference is more for low-fee passive investments like ETFs). On aggregate, millennials seem to be more financially conservative and less inclined or able than the previous generations in the nineties and noughties to take financial risks. And as they approach the later stage in their lives, baby boomers (while generally sitting on more substantial savings and investment pools) are also leaning towards risk-averse asset allocations. In addition, the adoption of new technologies is creating more transparency and efficiency and leading to product commoditisation – another blow to high fees and commissions (a process also facilitated by some of the market regulation steps highlighted above, like PSD2 or Mifid2).

Figure 10: Net interest income / revenues (%)

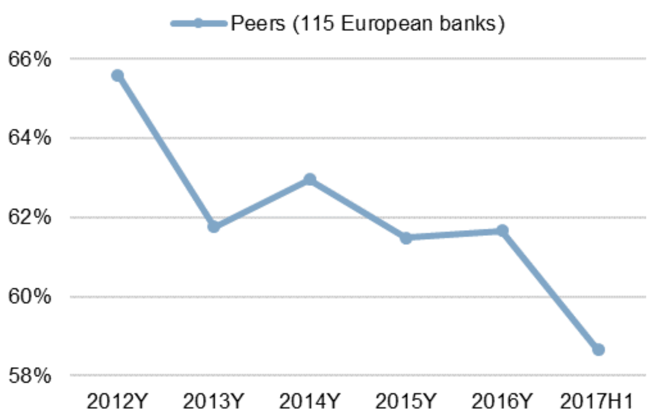
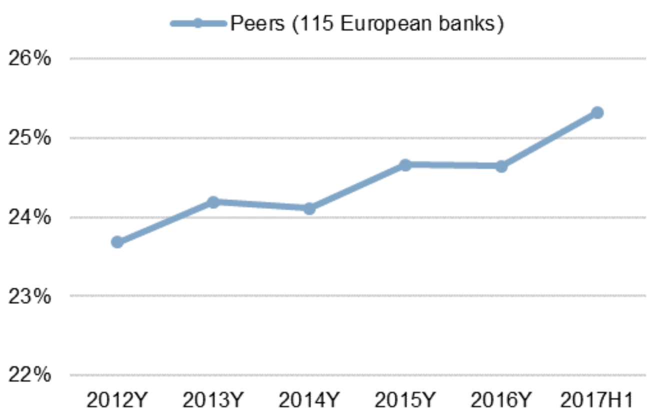


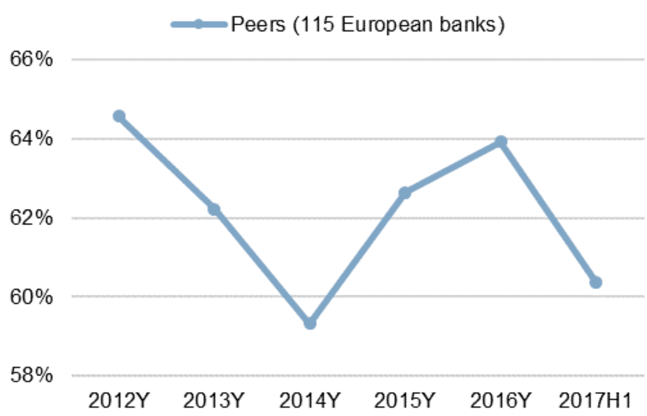
Figure 11: Fees & commissions / revenues (%)



Source: Scope Ratings

Cost cutting is becoming more difficult: As for banks being able to reduce costs further, this remains a central management strategy goal. But in many instances the easy part of cost reductions has already been achieved. Cutting the meat closer to the bone is inherently more painful than cutting the outer layer of fat. Adopting a digital strategy leads to higher levels of investment and other expenditures – added to high compliance costs. The drastic reduction of the branch network and historically oversized back offices is also a difficult process, as massive employee reductions are rather difficult and costly to achieve. It is one thing to halve the headcount on the London trading floor, it is another thing to do it for the domestic retail network.

Figure 12: Cost-to-income ratio (%)



Source: Scope Ratings

Again, all these aspects suggest that the banking industry will remain more modestly profitable for the foreseeable future and that high investor expectations may be unrealistic, and even dangerous if they lead the banks into taking higher risks.

Bank consolidation across Europe: will it/should it happen and if so will it reduce excess systemic capacity?

Ever since the establishment of the European banking union, the market expectation has been that at some point large-scale cross-border consolidation in the banking industry will resume. But this time around, unlike the wild-eyed pre-crisis years, with their share of disastrous transactions (the 2007 acquisition of the old ABN-AMRO being the most painful), bank mergers would be carried out in a more transparent and effective way, under the umbrella of the new EU regulatory framework and on the SSM's level playing field. Or so the narrative goes.

Another, more recent belief held by some market observers has been that, with Brexit in mind, some UK banks will want to acquire capacity and footprint in the EU past 2019, leading to the possibility of some large transactions.

Doubts about rationales for large bank mergers: We are sceptical about the value of large-scale, cross-border bank mergers, even within the EA, which is why we believe that, in a rational world, such transactions would occur rarely, if at all, in the short- to medium-term. We do not however exclude them altogether, human nature being what it is. Nevertheless, we do think that even within domestic markets large banks should perhaps think twice several times over before engaging in pre-crisis-style mega-transactions, for several reasons.

Firstly, as mentioned above, banks will have to aim for increased efficiencies and staving off competitors. These days, competition comes mostly from new digital structures and business models. A bank may feel the competitive pinch from another bank, but the chances are that both are actually being impacted by pressure from the new digital ecosystem and the consequent changes in customer behaviour. For this reason, today's wisely managed bank, rather than buying or merging with an old-fashioned distribution capacity (e.g. another bank), could prefer to invest in digital capacity – existing fintechs or building their own. In the era of digital speed and transparency, a wisely managed bank will think twice before taking someone else's bricks-and-mortar on board – even if the plan is to subsequently trim down the branch network (not that easy).

Secondly, financial products are becoming increasingly commoditised, and customers seem to be accepting this reality (the demand for customised high-touch products has been reduced in the post-crisis years). Consequently, products and services can be more easily replicated through technology, without 'buying the factory'. With PSD2, the wisely managed banks may be able to gain access to a broader range of customers via AISPs and PISPs in the future.

Thirdly, a significant factor in the past has been the trust customers place in a specific bank brand. This may still be the case to a certain extent – especially with some groups which are perceived to be more customer-friendly, such as savings banks in Germany or Norway – but as we have highlighted in this report there is also an appreciable dose of scepticism about bank brands in the post-crisis decade. Considering boosting market position through acquiring another well-branded bank may not be that attractive any longer.

Fourthly, despite the positive evolution toward a supervisory level playing field across the SSM, banks rightly remain concerned about the regulatory and political treatment of cross-border mergers. We can mention uncertainties about resolution structures or the possibility of capital or liquidity ring-fencing across jurisdictions, within or outside the EA. After all, the banking union and the SSM are still viewed with a certain suspicion by many politicians and even governments across Europe. By and large, national politicians and policymakers seem to have bought into the SSM-SRM concepts and structures, but, again, when the fear factor is back they may fall back on circling the home wagons first and displaying the European spirit later. This would hold especially true if populism came back and gained ground.

Fifthly, we have seen from past transactions that cross-border mergers do not usually result in cross-border banking. In an overwhelming proportion, even within the EA, retail and SME banking remains a national affair. Several years ago, an EC study revealed that only 3% of retail-bank products across the EU are being purchased from a non-domestic bank.

Need for consolidation among smaller banks: Having said that, we firmly believe that there is need for more systemic consolidation, primarily at the domestic level, among smaller banks. We see no alternative to this, given the increased difficulty of smaller and inherently less diversified banks to generate profits at or above survival levels. Low-for-long interest rates and the digital advances will not make their life any easier, even if they will benefit from a lighter supervisory regime. This is true especially in Germany, Austria, or Italy, which are still burdened with too many institutions. We expect more gradual consolidation within the cooperative and savings-bank sectors in Germany (but not cross-sector). Again, the trend towards product commoditisation and the digital route suggest that many institutions will not be able to remain viable by following yesterday's business models and approaches.

Consolidation not a panacea for reducing excess capacity: We also caution that consolidating a banking system is not tantamount to reducing the system's excess capacity. France, a very large market, is dominated by five banking and financial services groups, thus fitting the definition of a highly consolidated market. And yet, significant excess capacity continues to exist in the large French banks (in some more than others) which at some point will have to be reduced more substantially. Like in the late 90s to early 00s, cost-heavy French banks rely on the positive effect of the 'age pyramid' – the natural selection of fewer people joining compared to the number of people retiring. However, we believe that this 'natural' capacity reduction route may prove to be too slow for the new digital era, and more drastic steps will need to be contemplated.

Resolution and banks' expanded capital structure; too much confusion in the market?

There may hardly be a credit sector other than banks for which a top investor concern is how an issuer will be handled in the event of failure. This is the direct effect of the market trauma resulting from the crisis. To be sure, the difference between a large bank: i) collapsing; ii) being bailed out with taxpayer funds; or iii) being state-aided or placed into resolution is of high importance for regulators and policymakers, as it should be, since their aim is to safeguard financial-system stability and protect depositors. But, by now, unsecured credit investors will have realised that the safety of their investment depends first and foremost on the issuing bank's financial health. If they doubt the viability of a banking group, investing in a debt instrument on the expectation of potentially preferential treatment in a failure scenario would be the wrong approach. Conversely, if the investment is in a bank with sound fundamentals, a resolution occurring for another institution should not unnecessarily cloud the decision. Excessive focus on funeral scenarios for an individual in good health can only go so far. "First and foremost be comfortable with the name" is the inherent message from the fundamental credit analyst (although not necessarily from the trader or hedge fund manager).

There will undoubtedly be cases when a large failed bank, after being placed into resolution, ends up being supported so that depositors (especially preferred depositors) do not suffer, but unsecured creditors – even those holding preferred senior debt – should not assume that they will be spared from losses. Again, the resolution framework is in place to safeguard financial stability and protect depositors, secured creditors, taxpayers and employees, not to shelter unsecured institutional investors from losses.

The mixed signals of 2017: From the resolution angle, 2017 proved to be a relevant year. The events occurring at mid-year, namely the resolution of Banco Popular, the bailout of Banca Popolare di Vicenza and Veneto Banca, and the approval of precautionary recapitalisation for Monte dei Paschi di Siena showed that, while the BRRD may have been relatively clear, the socio-political dynamics and the national priorities across Europe over time are anything but. Consequently, we do not believe that the above-mentioned events in any way represent a template for future resolution (or non-resolution) scenarios. It is what we could call the regulatory rubber meeting the political road.

It is specifically the resolution of Banco Popular which we believe should not be considered a working framework for the future. It was the first time the Single Resolution Board was involved in a bank resolution, and ever since it has been raising questions and doubts. Popular was placed into resolution and immediately after that was sold for EUR1 to Banco Santander. Firstly, we would view the Santander acquisition of Popular as a private-sector measure. Secondly, there was no early supervisory intervention to convert or write down Popular's capital securities (that came about as part of the resolution itself). The BRRD's Article 32, titled 'Conditions for resolution', states that "resolution authorities shall take a resolution action /…/ only if it considers that all of the following conditions are met". Among the conditions are the following (1b): "there is no reasonable prospect that any alternative private sector measures /…/ or supervisory action, including early intervention measures or the write down or conversion of relevant capital instruments /…/ would prevent the failure of the institution within a reasonable timeframe."

Complex capital structures: Compared to the past, European banks' capital structure is decidedly more complex, with the introduction of various categories of seniority. But it is not riskier, and it is more transparent than before the new regulations came into effect. This should offer not just more choice to credit investors, but also more reassurance in equal measure.

Below we highlight our view on regulatory-action scenarios for a deeply stressed bank:

1. Early intervention by the supervisors
2. State aid
3. Resolution
4. Liquidation.

These scenarios should not be assessed in isolation. They may be overlapping (e.g. state aid accompanying other regulatory actions), sequential (e.g. resolution or liquidation following early intervention), or mutually exclusive (either resolution or liquidation). Junior securities are in the front row of vulnerability in all scenarios – first AT1, then T2, and afterwards other junior securities. Non-preferred senior debt should be vulnerable only in resolution and liquidation – and only after all junior securities have been written down or converted into equity. As all these debt classes were created in the post-crisis years to perform a primarily regulatory role (via CRD IV, BRRD, and subsequent amendments), we would not see them as being subject to political forbearance – unless they are sold to retail clients.

The situation changes in the case of preferred senior debt (for which, depending on the geography, some political protection can be envisioned, but less convincingly than for deposits) and deposits – non-preferred and especially preferred. We expect the latter categories to be reassuringly sheltered in resolution or liquidation.

The table below provides a tentative vulnerability ranking of the various classes of a European bank's capital structure in the event of regulatory actions on failing banks.

Figure 13: Relative vulnerability of an EU bank's capital structure to the four regulatory-action scenarios

Class	Early supervisory intervention (CRD IV)	State aid (EC state aid rules)	Resolution (BRRD)	Liquidation (national insolvency laws)
AT1	Very high	Very high	Very high	Very high
Tier 2	High	High	High	High
Non-Tier 2 subordinated	No	Relatively high	Relatively high	Relatively high
Non-preferred senior	No	No (most likely)	Material	Material
Preferred senior	No	No	Moderately low	Moderately low
Non-preferred deposits	No	No	Very low	Very low
Preferred deposits	No	No	Negligible	Negligible

Source: Scope Ratings

I. Appendix: Bank ratings table

Bank ratings as of 30 November 2017								
Bank	Issuer Rating	Outlook	Senior unsecured		Short-Term Rating	Short-Term Rating Outlook	Capital securities	
			MREL/ TLAC eligible	Other			AT1	Tier 2
Banco Santander SA	AA-	Stable	A+	AA-	S-1+	Stable	BBB-	A- *(Santander Issuances SA)*
Bankia SA	BBB+	Stable	BBB	BBB+	S-2	Stable		
Barclays Bank PLC	A+	Stable	A	A+	S-1+	Stable	BB+ *(Barclays PLC)*	BBB+ *(Barclays PLC)*
BBVA SA	A+	Stable	A	A+	S-1+	Stable	BB+	
BNP Paribas SA	AA-	Stable	A+	AA-	S-1+	Stable	BBB	A-
BPCE SA	AA-	Stable	A+	AA-	S-1+	Stable		A-
Cassa Depositi e Prestiti Spa	A-	Stable		A-				
Commerzbank AG	A	Stable	A-		S-1	Stable		BBB
Credit Agricole SA	AA-	Stable	A+	AA-	S-1+	Stable	BBB-	A-
Credit Foncier de France SA [1]	AA-	Stable						
Credit Mutuel SA	A+	Stable	A	A+	S-1+	Stable		BBB+
Credit Suisse AG	A+	Stable	A	A+	S-1+	Stable	BBB-, BB+ *(CS Group)*	BBB+, BBB *(CS Group)*
Danske Bank A/S	A+	Stable		A	S-1+	Stable	BBB-	
Deutsche Bank AG	BBB+	Stable	BBB		S-2	Stable	B	BB+
DNB Bank ASA	AA-	Stable		A+	S-1+	Stable	BBB-	A-
HSBC Holdings PLC	AA	Stable	AA-	AA	S-1+	Stable	BBB	A
ING Bank NV	AA-	Stable	A+	AA-	S-1+	Stable	BBB *(ING Group)*	A- *(ING Group)*
Intesa Sanpaolo SPA	A	Stable		A-	S-1	Stable	BB+	
KBC Group NV	A+	Stable	A	A+	S-1+	Stable	BBB-	BBB+
KfW [2]	AAA	Stable		AAA	S-1+	Stable		
Lloyds Bank PLC	A+	Stable	A	A+	S-1+	Stable	BB+ *(Lloyds Banking Group PLC)*	
Nordea Bank AB	AA-	Stable		A+	S-1+	Stable	BBB-	A-
Rabobank Group	AA-	Stable		A+	S-1+	Stable	BBB-	A-
Royal Bank of Scotland PLC [3]	A-	Stable	BBB+	A-	S-1	Stable	B+	
Societe Generale SA	A+	Stable	A	A+	S-1+	Stable	BBB-	BBB+
Svenska Handelsbanken AB	A+	Stable		A	S-1+	Stable	BB+	
Swedbank AB	A	Stable		A-	S-1	Stable	BB	
UBS AG	AA-	Stable	A+	AA-	S-1+	Stable	BBB *(UBS Group)*	A-
Unicredit SPA	A	Stable		A-	S-1	Stable		BBB

[1] Rating based on guarantee and solidarity mechanism within BPCE Group

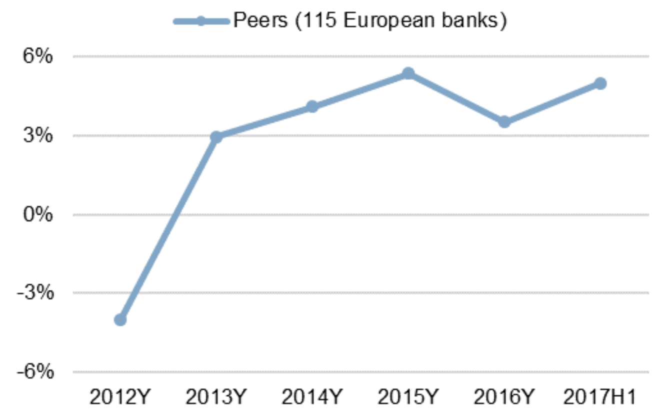
[2] KfW benefits from a guarantee by the Federal Republic of Germany

[3] RBS benefits from a one-notch rating uplift due to the UK government's majority ownership

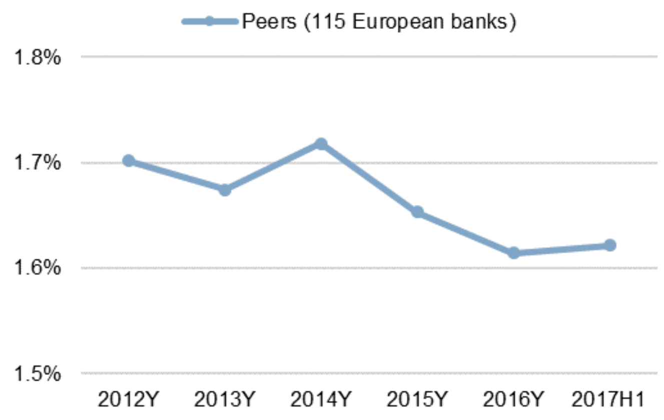
Source: Scope Ratings

II. Appendix: Peer comparison charts

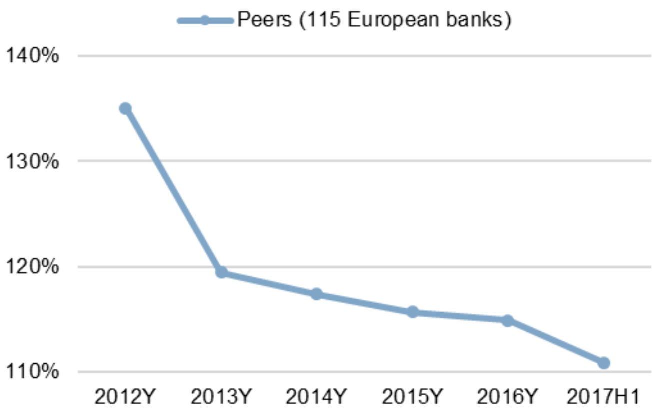
Return on average equity (ROAE) (%)



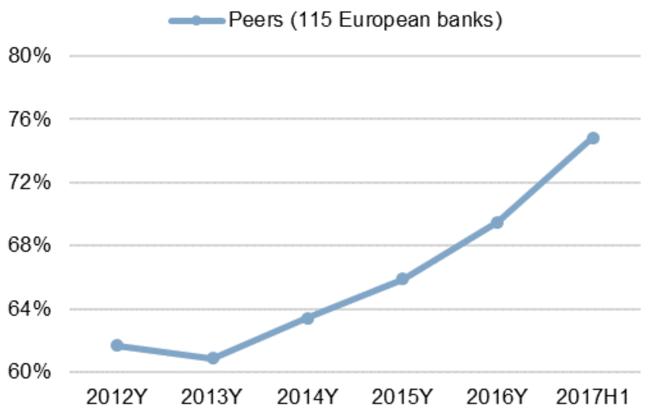
Net interest margin (%)



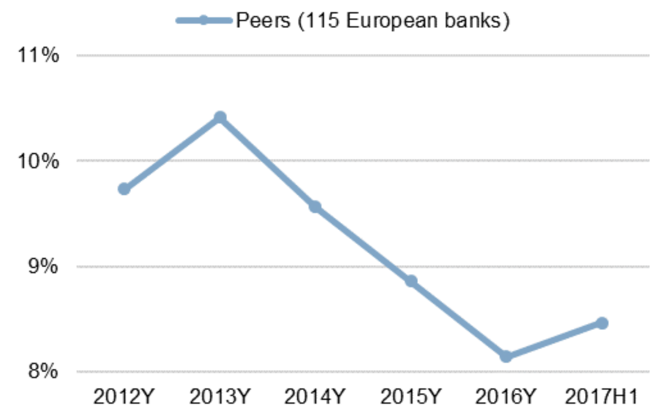
Net loans % deposits



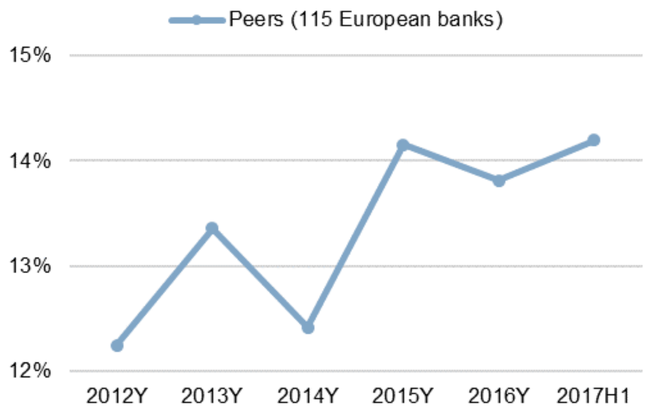
Loan-loss reserves / impaired loans (%)



Impaired & delinquent loans / loans (%)



CET1 ratio (%, fully-loaded)



Source: SNL data, Scope Ratings

Scope Ratings AG

Headquarters Berlin
Lennéstraße 5
D-10785 Berlin

Phone +49 30 27891 0

Frankfurt am Main
Neue Mainzer Straße 66-68
D-60311 Frankfurt am Main

Phone +49 69 66 77 389-0

Paris
33 rue La Fayette
F-75009 Paris

Phone +33 1 82 88 55 57

London
Suite 301
2 Angel Square
London EC1V 1NY

Phone +44 203-457 0 4444

Madrid
Paseo de la Castellana 95
Edificio Torre Europa
E-28046 Madrid

Phone +34 914 186 973

Milan
Via Paleocapa 7
IT-20121 Milan

Phone +39 02 30315 814

Oslo
Haakon VII's gate 6
N-0161 Oslo

Phone +47 21 62 31 42

info@scoperatings.com
www.scoperatings.com