

Ultra-Low Interest Rates: A Threat and a Catalyst for Structural Changes in European Banking



Scope
Ratings

The current interest rate environment across Europe creates major challenges for banks. Policy rates are at zero or lower in the euro area (EA), much of Scandinavia and Switzerland. In our view, the low interest rates have had both positive and negative effects. The positives – namely better asset quality, capital gains and lower funding costs – have so far outweighed the negatives – mostly, lower asset yields. However, we expect the negative impacts to start dominating, which will pose a material challenge to the business models of banks.

Overall, we believe the direct and measureable impact of low interest rates on EA banks is not as negative as banks say. We calculate that the direct hit from excess liquidity charges (excess reserves and deposit-facility balances) is partly offset by the implicit subsidy from targeted longer-term refinancing operation (TLTRO) drawings, and is not very material when the aggregate profitability of European banks is considered.

The indirect impact is more difficult to quantify. Up until now, we believe the EA banking system has benefited overall from the declines in interest rates through improvements in asset quality, capital gains on securities portfolios and the lower cost of funding – which have more than offset the negative impact on asset yields.

Going forward, however, we expect the negative effects to outweigh the positive ones, given the flattened yield curve, and the limited room for further gains on securities portfolios and further declines in funding costs. This will force banks to adapt to a more challenging revenue environment.

We note that the current interest rate environment not only threatens banks' earnings, but challenges the quintessential nature of banking. Specifically, a flattened yield curve implies a low-term premium – i.e. banks remuneration for performing the maturity transformation function in the economy.

We believe the current operating environment is likely to persist, given the ongoing lack of upward pressure to inflation, and the ensuing need for the ECB to maintain its ultra-accommodative stance.

In this environment, banks are fairly limited in their possible response. Efforts to decrease funding costs further will inevitably face inherent nominal constraints; at the same time, efforts to re-price assets are more timid and require competitive discipline from peers, especially while volume growth remains low.

Shifts in business mix are expected, and banks with strong asset management franchises are well placed to capture savers' increased appetite for yields. We note, however, that asset management margins may also face further downward pressure as available investment returns have shrunk overall and as low-cost, tech-intensive competitors increasingly target this space.

A key area where banks can clearly do more is to reduce costs further. We believe there is significant room for savings on distribution networks and central costs, both organically and through consolidation.

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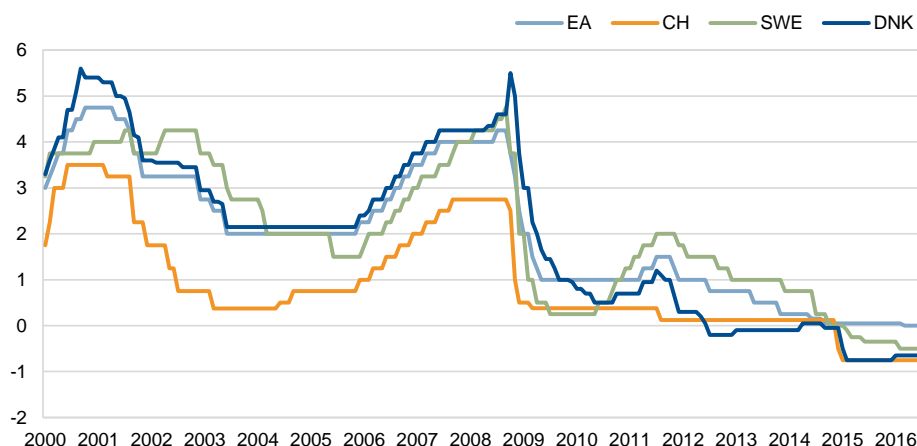


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Negative interest rates: an existential threat

Policy interest rates are currently negative in the EA, Switzerland, Sweden and Denmark. In the UK, interest rates are very low and may decline even further as a result of Brexit.

Figure 1: Key policy rates in the EA, Switzerland, Sweden, Denmark



Source: Central banks, Scope Ratings
Note: for the euro area, main repo rate

Such an environment is highly unusual and confronts banks with new, existential challenges.

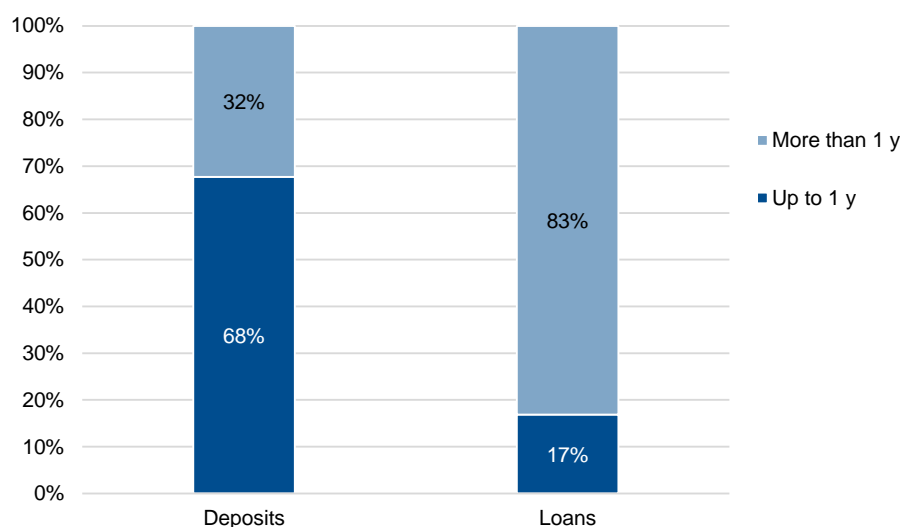
Historically, when central banks have cut rates, banks' share prices have rallied. Yet banks are now blaming low interest rates as a key cause for their low profitability. To make sense of this apparent conundrum, we believe it is important to go back to what the basic economic function of a bank is.

Low interest rates are good for banks

A key economic function of banks is to borrow short term, typically in the form of deposits, and lend long term. Banks enable long-term and often illiquid investment projects to be financed by the short-term savings of agents with a high preference for liquidity, such as households.

A bank's main role is to
transform maturity and liquidity

Figure 2: Loans and deposits of European banking system structurally mismatched



Source: ECB, Scope Ratings

Low interest rates are good for banks: they entail lower funding costs, capital gains on securities portfolios and better asset quality

Because of the asset/liability structure of banks (assets have a larger duration than liabilities), we believe a bank's economic value increases when market interest rates decline (and vice versa).

From an accounting perspective, the full impact for banks does not become immediately evident because most assets and liabilities are not continuously marked to market. Yet the declining interest rates have supported trading gains on securities portfolios, boosting banks' earnings as a result. In fact, we believe falling interest rates have been an important factor supporting banks' capital build-up – especially in peripheral countries.

In addition, banks benefit from lower interest rates as funding becomes cheaper. This has been a key factor supporting European banks' profitability in recent years, where the decline in policy rates has come with a material, widespread decline in the cost of retail and wholesale bank debt in almost every country and bank, and across capital structures, with limited exceptions driven by idiosyncratic risk.

Lower interest rates are also helping borrowers' capacity to service their debts at cheaper rates which supports the asset quality of lenders in turn. The importance of this element cannot be overstated, especially in the context of 'peripheral' banks.

At the zero bound, negative effects prevail

The current situation, however, is exceptional as interest rates are at the nominal zero bound – some bank liabilities cannot reprice much further. Meanwhile, bank assets, such as variable rate loans, are still repricing down. On its own, this evolution would be enough to put pressure on banks' interest margins, but we believe another key headwind to bank's profitability is the more recent flattening of the yield curve.

Banks benefit from an upward sloping yield curve because they profit from the difference between long- and short-term rates, as a reward for transforming short term savings in long term finance. Taken together, rate cuts and quantitative easing (QE) policies have not only shifted the entire yield curve lower in recent years, but have also flattened it.

Policy rates primarily affect short-term rates, with less impact on longer-term rates. Monetary policies that target long-term interest rates, such as forward guidance, TLTRO and QE, may be more damaging to banks' net interest income. These policies tend to

For banks, the slope of the yield curve is more important than the level of interest rates

flatten the yield curve, reducing the term premium that banks earn for performing maturity transformation in the economy.

We measure this flattening by calculating the distance between the five-year and one-day rates on the euro-currency swap curve, which is a good proxy for the steepness of the curve and hence the value (and price) of the maturity-transformation function.

In the past, this distance has fluctuated between -15bps and 250bps. This is now down to around 20bps, nearly at historical lows. Such a low level is typically reached when short-term rates, after several rate hikes, are near the peak of their cycle, as was the case at the end of 2000 and 2007. This time, the flat level of the curve is the result of unconventional monetary policies that are being deployed when short-term rates are already very low. The provision of central-bank liquidity at longer maturities, coupled with the credible promise that this ultra-accommodative stance will persist, has had the desired effect of lowering long term rates and consequently flattening the yield curve.

While this has undoubtedly helped borrowers in both public and private sectors, it has also undermined the economics of the banking business, i.e. getting a return for performing the maturity-transformation function. In a way, the central bank has become a substitute to private banks in providing long-term liquidity to private- and public-sector borrowers, putting pressure on banking returns. From this perspective, the net interest margin weakness among banks is not simply due to low interest rates, but rather to the flattening of the yield curve.

Measurable and non-measurable impact: the cost of excess reserves

So far we have described qualitatively the mechanisms through which the current interest rate environment is affecting banks. However, isolating and quantifying the actual impact is more difficult. Some of the impact can be more directly measured, such as the cost of holding excess liquidity with the ECB. This can be arrived to by applying the current deposit facility rate of -0.4% to the amount of excess liquidity at the central bank (about EUR 1trn as of September 2016). We calculate that, since negative rates were introduced, this has already hit European banking profits by EUR 2.9bn (from June 2014 to September 2016). At the current level of excess liquidity, we estimate this could cost European banks EUR 4bn a year.

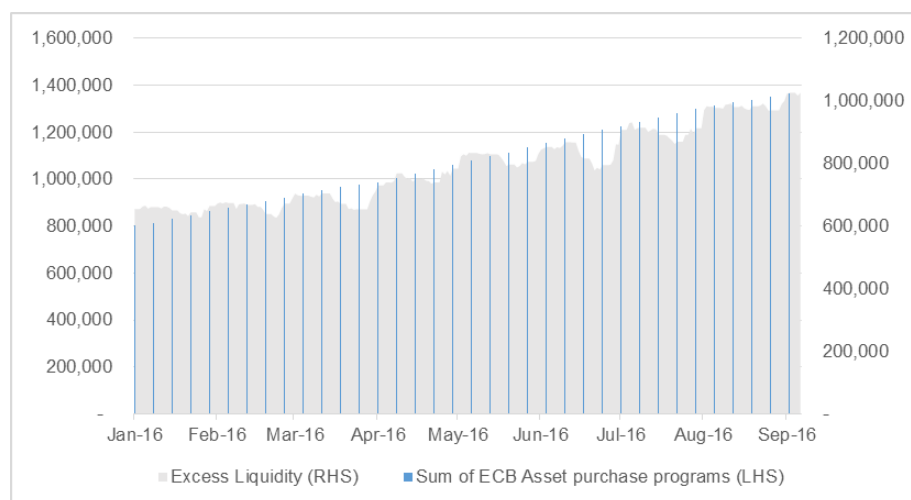
In our view, this direct cost is set to increase. Indeed, there seems to be a correlation between the amount of excess reserves and the ECB's QE programme.

Based on ECB data, we observe that for every euro of new liquidity created by ECB asset purchase programmes in 2016, 66 cents end up as excess liquidity on the ECB balance sheet.

The pressure on banks' returns reflects the pressure on their economic function

Excess liquidity has already cost EA banks EUR 2.9bn – which is set to increase materially...

Figure 3: Excess liquidity now exceeds EUR 1trn, driven by the ECB asset purchases



Source: ECB, Scope Ratings

Note: ECB asset purchase programmes include SMP, PSPP, ABSPP, CBPPs(1,2&3), CSPP

Hence, we expect that as the central bank continues with its asset purchases, the amount of excess reserves will swell, and so will its cost to banks. Assuming asset purchase programmes continue as announced, and maturing instruments are also replaced, we estimate that ECB-purchased assets could plateau at EUR 1.9trn in March 2017. Banks' excess liquidity by then would have risen to EUR 1.4trn, if our pass-through assumptions are correct. At the current rate of -0.40%, this excess liquidity would cost banks EUR 5.6bn a year.

...but its impact on aggregate bank profitability is marginal.

While not immaterial, such a cost would be bearable. It equates to about 0.02% of EA banks' total assets (EUR 30.6trn as of June 2016), so its impact on return on assets (and equity) is negligible at the aggregate level.

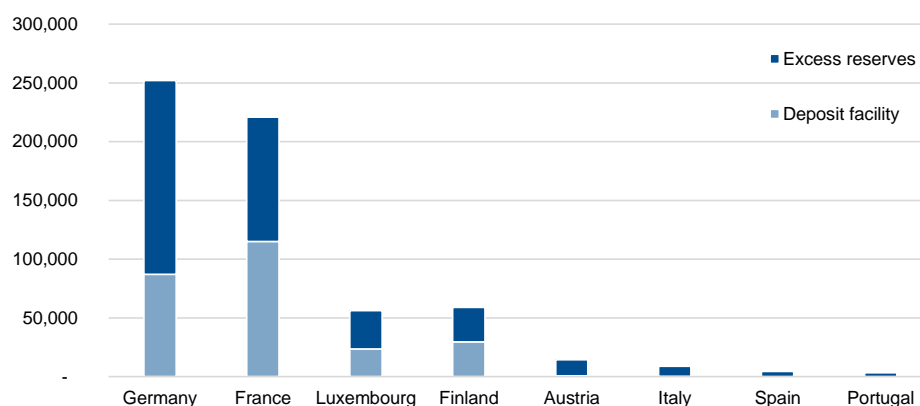
Moreover, it is worth highlighting that several EA banks also benefit directly from borrowing at -0.40% from the ECB's TLTRO program (subject to them meeting their lending benchmark targets). TLTRO auctions are scheduled to continue until March 2017. Amounts borrowed through long-term refinancing option (LTRO) auctions stand at EUR 483.7bn (September 2016).

Banks are unevenly affected: core banks bear the brunt of the cost

Banks in core EA markets have complained the loudest about negative interest rates. That is hardly surprising.

The cost of excess liquidity (including current accounts and excess reserves) is in fact borne primarily by banks in the core EA – as shown the usage of the ECB deposit facility and our calculation of excess reserves by country (Figure 4). The same conclusion applies when looking at the balance sheets of individual banks, as core banks' deposits tend to exceed their loans (Figure 5).

Figure 4: Excess liquidity in the banking system, selected countries (EUR m)

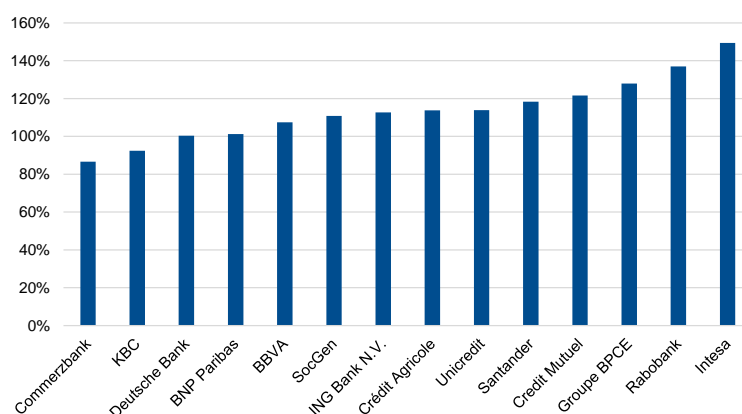


Source: ECB, National Central Banks Data, Scope Ratings estimates

In our view, this picture reflects excess domestic savings in these economies and the absence of a working-surplus recycling mechanism with an attractive risk-reward investment profile.

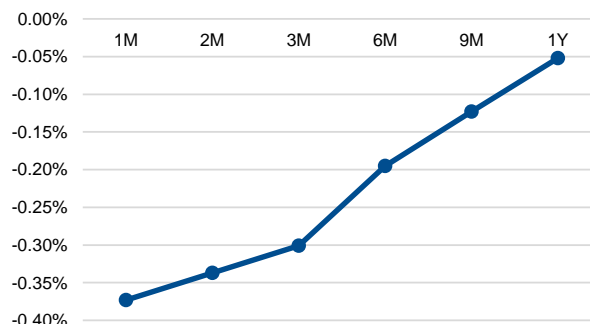
Indeed, when abundant local savings are not matched by local loan demand, banks end up having to hold excess cash reserves with the central bank, or invest their surplus in money markets or sovereign bonds, which currently yield negative returns in euros (Figure 6) and very low returns in all other major currencies. Arguably these also represent a higher risk profile than a deposit at the central bank.

Figure 5: Loan-to-deposit ratios of selected eurozone banks, year-end 2015



Source: SNL, Scope Ratings

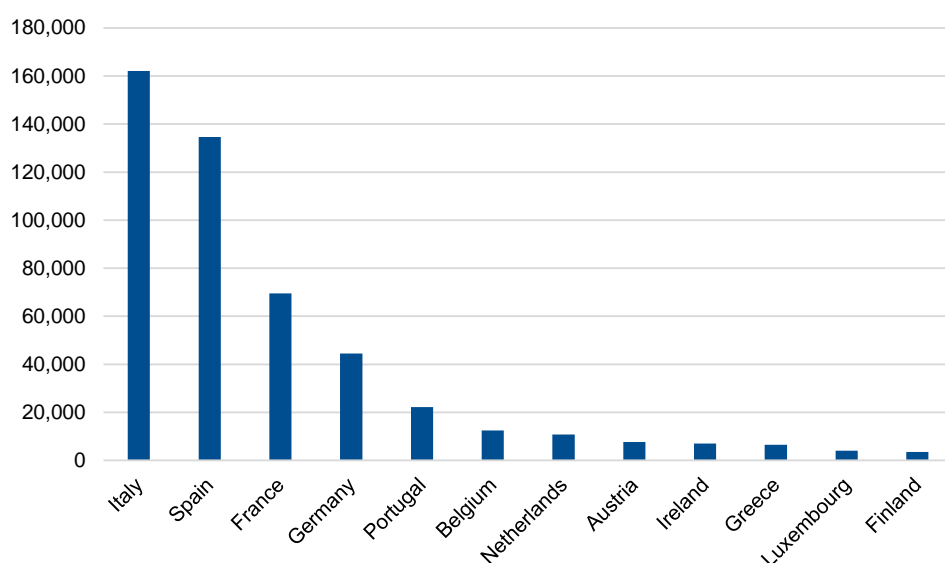
Figure 6: Euribor curve as of 4 October 2016



Source: EBF, Scope Ratings

Conversely, banks in peripheral EA countries have drawn extensively on the ECB's LTRO and TLTRO facilities, hence benefiting the most from these programmes (Figure 7).

Figure 7: Longer-term refinancing operations (LTRO and TLTRO) take-up, selected countries (EUR bn)



Source: ECB
Note: Reference date July 1, 2016

Taking everything into account, the direct and measureable impact of low interest rates on EA banks seems less negative than banks are saying. The cost of the negative charge on excess reserves and on deposit facilities is partly offset by the implicit subsidy related to TLTRO operations, and in any case the impact is limited to a few basis points on the aggregate return on assets.

The indirect impact is inherently more difficult to quantify, but we believe that up until now, the EA banks have on balance benefitted from the declines in interest rates. The improvement in asset quality, capital gains on securities portfolios and lower costs of funding have more than offset the negative impact on asset yields.

Going forward however, given the flattened yield curve and the limited room for further gains on securities portfolios and further declines in funding costs, we expect negative effects to prevail, facing banks with a more challenging revenue environment.

Conditions unlikely to change

The current economic situation makes it unlikely that the interest rate outlook will materially change anytime soon. If anything, we believe other central banks (for example, the Bank of England) may enter a new cycle of accommodative policies if the economic and inflation outlook softens.

Officially the ECB's QE should end in March 2017. Unless the programme is extended, the yield curve may steepen again. On the other end, there is still no sign of a pick-up in inflation, which may push the ECB to continue pursuing unconventional measures – despite the increasingly negative effects on banks.

Indirect impact of monetary policy is less quantifiable

We expect the current environment to persist

What can banks do?

Faced with such a challenge, banks have several options to try to offset the pressure on profitability. The method they are more likely to choose depends on several factors, including the market structure, their own balance sheets and the behaviour of their customers. In practice, we expect most banks to implement a combination of the steps highlighted below.

A. Offset falling margins with higher volumes

For some banks, volume growth can be a way of protecting the nominal level of net interest income, even while the net interest margin is falling. This is generally the case for banks exposed to emerging markets and that have no immediate solvency constraint on balance sheet growth. This is also the case for banks operating in developed markets that still have high demand for credit (e.g. Sweden) or actively pursue market share growth in otherwise stagnant markets.

While this strategy may support nominal revenues and profits in the short run, it also requires additional capital resources. Hence it is not adequate for offsetting profitability pressures in the long run. Moreover, pursuing aggressive volume growth strategies may lead to less stringent credit standards and the underpricing of credit risk.

B. Charge customers for deposits

One possibility is to charge customers for deposits through account fees or negative remuneration on deposit balances. In Sweden and Denmark, where interest rates have been negative for several quarters, banks have generally been able to impose negative rates on corporate deposits. This is possible, as corporate treasurers can be convinced to take a comprehensive view of their banking relationship. For corporate deposits, remuneration can be a second-order consideration compared to the safety of a deposit or convenience.

In August 2016, a small co-operative bank in Bavaria, Raiffeisenbank Gmund am Tegernsee, announced it would start charging a negative interest rate (-0.40%) to individuals with deposits of over EUR 100,000. Despite anecdotes like this, we believe it may be more difficult to charge individual customers for deposits than to convince corporate treasurers to accept this as a cost of liquidity management. Indeed, in some countries there could be contractual or even legal limits to charging negative interest on depositors.¹

The reputational damage linked to charging individuals for holding money is also material and something banks would want to avoid – especially if they expect a more normal environment in the future, and as they value the customer relationship above short-term profitability.

Moreover, depositors may decide to withdraw their deposits and instead hold physical cash as its zero yield is preferable to a negative-yielding product. Arguably, given the inconvenience and cost of holding cash, such a switch is unlikely in practice, unless deposit rates move deeper into negative territory.

An emerging body of academic research is trying to pinpoint where the effective nominal lower bound is – i.e. at which point customers will choose physical cash over bank deposits. But the evidence so far is that – aside from anecdotes – the effective lower bound has not been reached yet.

¹ For example, in Belgium, there is a legal floor of 11bps on the remuneration of deposits as highlighted by both KBC and ING in their Q2 result commentaries.

C. Shifting asset or funding mix

Banks can strategically shift their asset mix towards higher-margin business (for example, by moving from mortgages to SMEs or credit cards) to maintain their net interest margins. While such a strategy may be sensible for some individual banks with a clear strategic rationale to review their business mix, it cannot be a universal remedy. We also highlight that it would be expensive in terms of capital and potentially add to banks' credit risk, as higher margin risk also entails higher credit risk and losses through the cycle. This is especially the case when credit demand is more modest (as it is now) and thus supply may exceed demand.

Alternatively, banks may choose to take advantage of the abundant available liquidity and replace relatively expensive funding with cheaper forms, including LTRO, or replace unsecured finance with a collateralised type. However, we see two limits to such a strategy. First and foremost, banks will still need to issue long-dated, often subordinated debt to comply with prudential regulations (AT1/T2 buckets) and resolution requirements (MREL/TLAC). Second, building up excessive reliance on central bank funding would expose banks to refinancing risk when central bank facilities expire.

D. Rethink the pricing of loans

Banks may decide to offset the pressure from lower base rates by earning a higher spread on their loans. This can be achieved in several ways.

The most straightforward is to raise spreads on their new loan production. Its effectiveness in defending spreads in the short term largely depends on the speed at which the back book amortises and is replaced by new, more profitable lending. It also requires a high level of competitive discipline by peers in also repricing their offerings².

In the long term, this can theoretically offset the money lost from the decline in base rates. Paradoxically, it would also offset the impact of monetary policies by not transferring rate cuts to borrowers and not stimulating credit growth.

Some banks may opt for a hybrid solution: incorporating floor clauses into variable rate loans to protect margins from future rate cuts.

E. Introduce service fees and accept a decline in net interest income

In our view, most banks will have no choice but to accept lower interest margins and to try to offset them by boosting non-interest income. Current account fees, payment-processing fees and cash-withdrawal fees are all potential options, although we notice that these are already under siege from leaner fintech competitors and may end up costing banks customer goodwill. Some banks have been successful at cross-selling their asset management products to customers and increasing related fee income. However, in the current environment of widespread low or negative returns, we believe that even asset management companies may struggle to deliver results that justify their cost to customers. Finally, the pressure to cross-sell to increase fee income may force banks into overly aggressive strategies to sell products, which at the limit can constitute outright misconduct.

F. Cut operating costs/improve efficiency

In our view, the most likely and sustainable avenue to offset shrinking revenues is to manage the cost base. This process started long before negative rates were even a threat, as the 'brick and mortar' distribution model had become seriously challenged (and

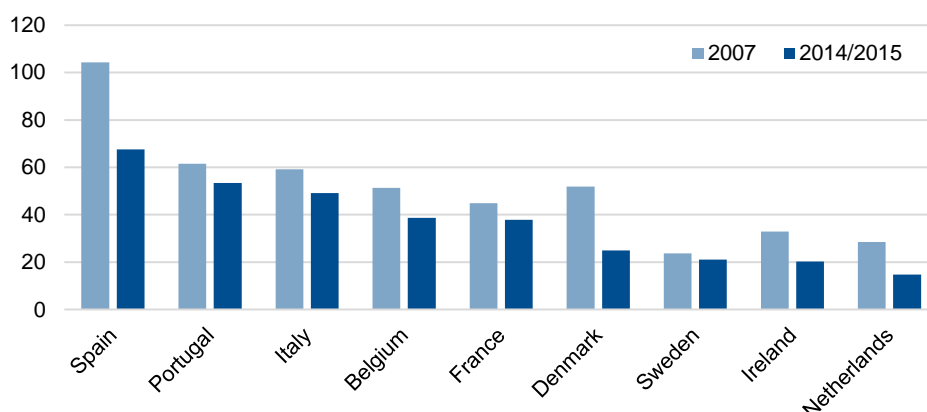
² We note for example that Spanish banks widely report having to increase their production spreads in the SME space. This is a positive development for the banks, but loan production remains too slow for this to offset the pressure from falling rates on the back book. For more details, see our report "[Spanish banks challenges move from BS to P&L](#)", published in August 2016.

largely redundant) in the face of changing customer behaviour and the rising adoption of remote banking channels.

Indeed, almost all banks are already cutting costs, aiming to optimise distribution channels and rethink operations through digital transformation.

The reduction and rationalisation of the branch network are evident from data on 590 EU-based banks: the total number of branch locations reported has dropped from above 44,000 in 2013 to 41,600 in 2015, with the average size of each branch, calculated by number of employees, slightly increasing.

Figure 8: Branch density (branches per 100,000 adults), selected countries



Source: IMF Financial Access Survey Data, Scope Ratings
Note: for Portugal, Sweden and Netherlands latest data available is from 2014

Faced with ongoing revenue pressures, banks will have to push cost-saving efforts further: relative measures on branch density still show significant cross-border disparities and hence room for manoeuvre in a number of countries. The scale-down of physical distribution channels has been often accompanied by a symmetrical investment in digital channels, with solutions that offer a high penetration rate at a lower cost. This kind of investment requires substantial one-off initial costs, with cost savings materialising with some lag.

Aside from the decline in distribution costs, we believe cost efficiencies can also be achieved through further consolidation, particularly in countries, such as Italy and Germany, where the banking sector remains more fragmented. ECB data shows this process is ongoing, with the number of EU-based credit institutions declining by 4% YoY both in 2014 and 2015.



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