



# The profitability of EU banks

**Hard work or a lost cause?**

KPMG International

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# Executive summary

The low profitability of many European banks has become a constant feature since the financial crisis.

Low profitability among European banks reflects a range of factors that vary across countries and across banks, including the weak economic environment in Europe, stubbornly low net interest margins, high levels of non-performing loans, high cost to income ratios, the impact of regulatory reform, and – for some banks – a business model that relied too heavily on the good times continuing without serious interruption.

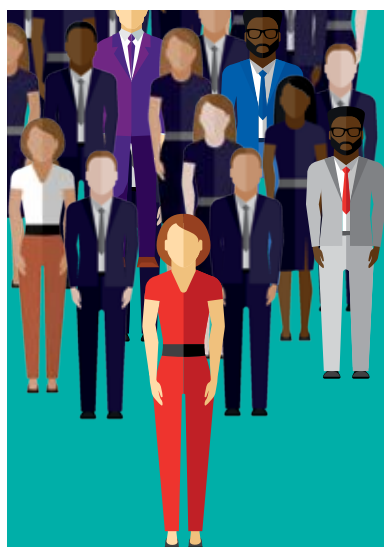
Low profitability is both a consequence and a cause of the weak economic environment, at least in some countries. It weakens the ability and willingness of banks to finance the wider economy, which may in turn weaken further the overall economy.

This paper analyses the key drivers of bank profitability both theoretically and empirically, using the same data set as the **KPMG Peer Bank** metrics.

Our empirical results suggest that, on average across the major European banks, a bank seeking to improve its return on regulatory capital by one percentage point would need to:

- increase its net interest margin by 2.5 basis points; or
- reduce its ratio of non-performing loans to total loans and advances by 2.5 percentage points; or
- reduce its cost to income ratio by 25 percentage points; or
- achieve some combination of these improvements.

These improvements are not easily achievable. Net interest margins are currently under severe downward pressure. A reduction of non-performing loans by 2.5 percent of total loans and advances would be equivalent, on average, to a halving of non-performing loans. And banks in Europe have, in general, made very little progress in reducing their cost to income ratios since the financial crisis.



## KPMG Peer Bank

### A new benchmarking tool for the banking industry

KPMG Peer Bank is a benchmarking tool that offers varying levels of analysis for banks to understand their position among peers. The tool is populated with publicly available information from EBA stress test and transparency exercises. KPMG Peer Bank is an on-line interactive tool on a flexible platform, with a robust set of ratios and personalized settings for thorough analysis across EU, country, and numerous peer group settings. KPMG Peer Bank is designed to offer banks comparative analytics to benchmark against their competition and to prepare for conversations with bank supervisors.

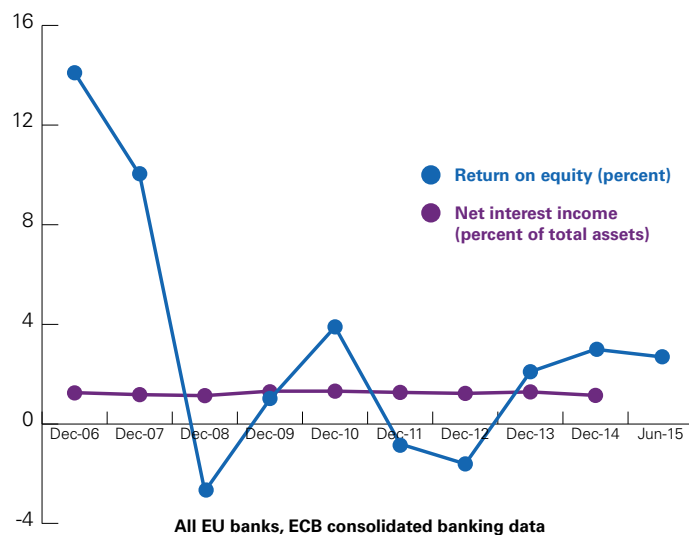
# Low profitability and its consequences

The profitability of many European banks is low, and is expected to remain so. The average return on equity of all banks in the EU stands at around 3 percent, and at around 5 percent for larger banks. This is well below the cost of capital – which is generally reckoned to be in the region of 10-12 percent. Metrics based on equity prices suggest that investors remain wary of the true value of banks' assets and pessimistic about future profitability.

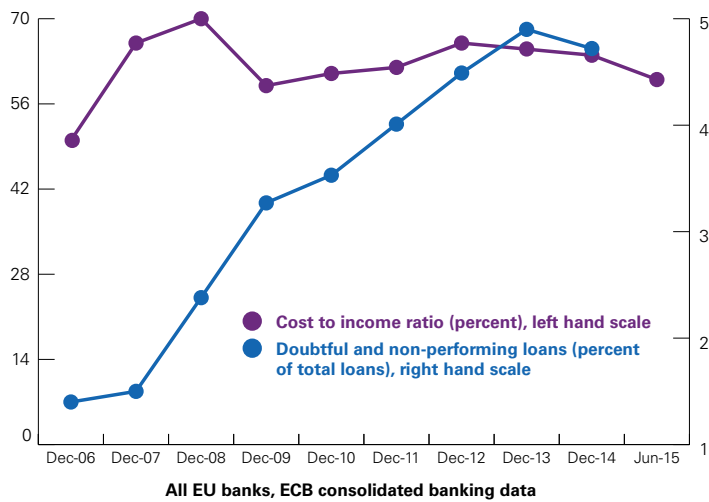
Low profitability has real consequences. It restricts the extent to which banks can fund growth from retained earnings; it makes raising new equity and debt more difficult and more expensive; it accelerates the point at which banks have to use capital rather than earnings to absorb losses; it constrains the options available to banks in implementing their recovery plans; and in the medium term it raises questions about their viability and sustainability.

Most importantly, low profitability weakens the ability and willingness of banks to finance the wider economy, which may in turn weaken the overall economy and place further downward pressure on both profitability and the value of bank assets. Europe has been suffering from such a downward spiral since the financial crisis, as evidenced by subdued bank lending, weak or negative economic growth, and high levels of non-performing loans.

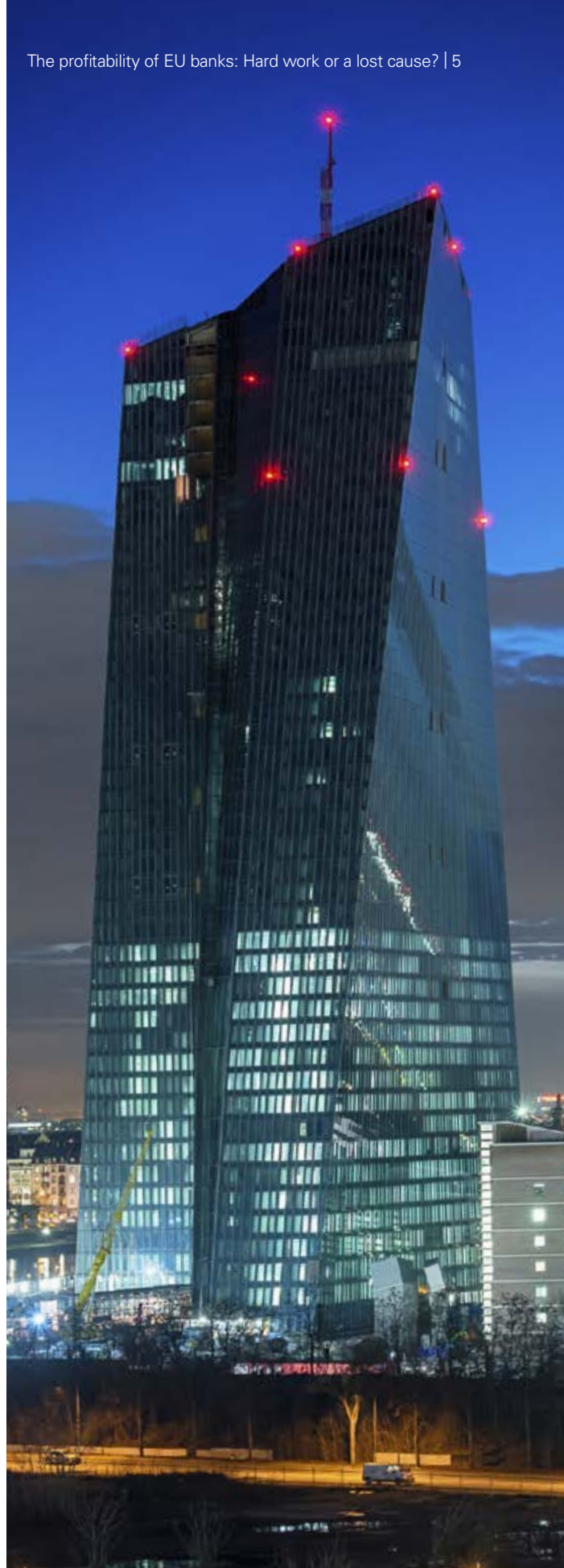
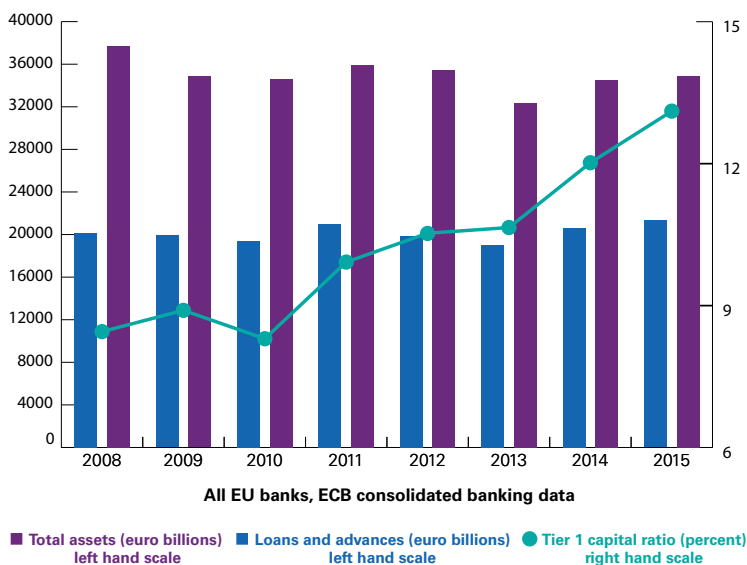
## Weak return on equity and net interest income in Europe



## High costs and high level of non-performing loans in Europe



## Stronger capital ratios but subdued lending in Europe



# Drivers of bank profitability

We focus here on five key drivers of bank profitability, and the difficulties facing banks in attempting to turn these around into positive drivers of profitability.

Weak or negative economic growth is not discussed as a separate driver, but clearly this feeds into some of the other drivers, in particular the level of non-performing loans and net interest margins. In addition, the profitability of some banks has been severely constrained by the

finances and remediation relating to retail and wholesale misconduct – for example, remediation costs accounted for 72 percent of the profits of the five largest UK banks (Barclays, HSBC, Lloyds, Royal Bank of Scotland and Standard Chartered) between 2011 and 2015.



## Net interest margins

Net interest margins are typically lower in the EU (averaging around 1.2 percent of total assets) than elsewhere, for example in comparison with net interest margins of around 3 percent in the United States and 2 percent in Canada. This may reflect a more competitive banking sector in Europe.

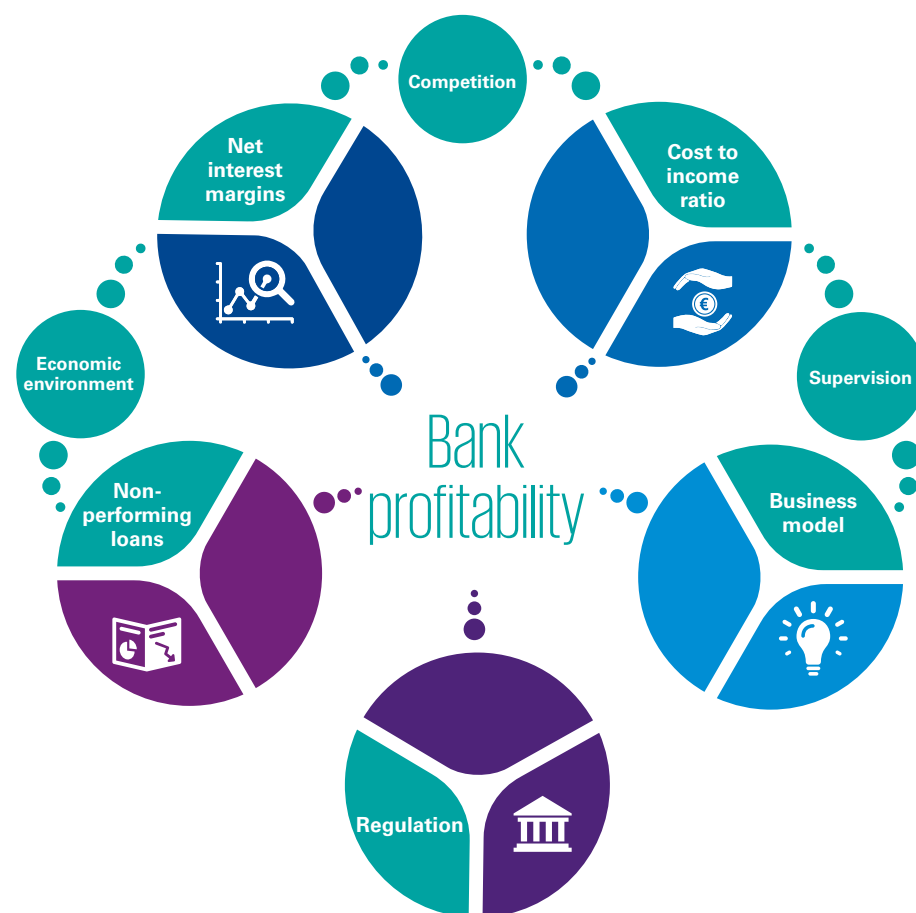
Three factors are exerting further downward pressure on net interest margins – low interest rates, central bank actions, and competition from outside the mainstream banking sector.

Near-zero interest rates limit the extent to which banks can drive down deposit rates, because if banks offer negative deposit rates (or negative returns through a combination of zero or very low interest rates and fees for operating an account) depositors may withdraw funds from banks and hold them literally as cash or in alternative instruments such as money market funds. Banks may also have already exhausted the scope to replace expensive funding raised during the financial crisis with cheaper funding.

Meanwhile, it may not be possible for banks to maintain their lending rates if these are linked to the official central bank policy rate, or are constrained by competition among banks or by the ability of at least some borrowers to access alternative sources of finance (for example the bond market for larger corporates). The old 3:6:3 maxim that a bank manager could borrow at 3 percent, lend at 6 percent and go home (or play golf) at 3pm no longer holds.

A combination of expectations that interest rates will remain low, or even decline further, and of central bank purchases of bonds, has flattened (or even inverted) the yield curve. This has removed the 'carry trade' advantage that banks used to enjoy when raising short-term funding at low rates and lending longer-term at higher rates.

## Drivers of bank profitability



Finally, margins are under pressure from financial innovation, in particular where new bank or non-bank entrants increase the competitive pressures on mainstream banks in the provision of core banking products such as lending and payment services.

This downward pressure on interest margins has a particularly marked impact on banks that rely relatively heavily on interest rather than non-interest income.

### Non-performing loans

Non-performing loans have increased sharply in Europe since 2008, from around 1.5 percent of total loans in 2006 and 2007 to above 5 percent since 2013 (this increase has been unevenly distributed across countries

and across banks). This has a negative impact on profitability through a variety of channels, including unpaid interest on loans, raising provisions against impaired assets, and realising losses when assets are sold or restructured.

Although the level of non-performing exposures may have flattened out, and banking supervisors are putting pressure on banks to reduce their non-performing loans, the €1.2 trillion overhang could take decades rather than years to off-load, especially when banks are seeking to clean up these exposures during a prolonged period of weak economic growth.

### Cost to income ratios

Cost to income ratios have remained stubbornly high across EU banks since the financial crisis, averaging in excess of 60 percent. In addition to the downward pressures on interest margins, weak economic conditions have made it difficult to increase non-interest income (fees and commissions). On the costs side, banks have faced – and continue to face – upward pressures from the need to upgrade data and technology systems; to compete with new entrants in exploiting financial innovation; to restore public trust (which may constrain some cost-saving initiatives); and to meet the demands of more intensive and intrusive supervision.

Financial innovation and technological progress may offer opportunities to reduce costs over the longer term, but for many EU banks this appears to be a distant and uncertain horizon.





### Simple illustration of drivers of profitability

Some of the drivers of profitability can be illustrated using a simple numerical example, based on a bank with assets of 100, equity of 5, and profits of 0.5, so a 10 percent return on equity.

#### Net interest margin

If the bank has net interest income of 1.2, a fall of net interest by 0.1 would reduce profits by the same amount, and therefore reduce the return on equity from 10 percent to 8 percent.

#### Non-performing loans

If the bank has total loans and advances of 80, a 1 percentage point increase in non-performing loans as a percentage of total loans and advances (a 0.8 increase in non-performing loans), with a loss in value of 30 percent, would wipe out almost half (0.24) of one year's profits. An increase in non-performing loans of 5 percent of total loans and advances (an increase of non-performing loans of 4), with a loss in value of 50 percent, would wipe out profits for four years.

#### Cost to income ratio

If the bank has net income of 1.5 and operating costs of 1 (so profit of 0.5), its cost to income ratio would be 67 percent. A reduction in costs of 10 percent (to 0.9) would reduce the cost to income ratio to 60 percent, profits would increase to 0.6, and the return on equity would increase from 10 percent to 12 percent.

### Business models

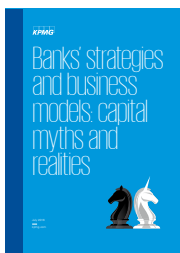
Business models could be an important driver of profitability, especially during a period when there have been major divergences in the performance of different types of banking activity. For example, banks with a higher proportion of non-interest income and smaller trading books may have faced less severe strains on profitability during and after the crisis. Timing is also likely to be a critical factor here – high risk exposures may yield high returns in favourable economic conditions, but this can be sharply reversed in downturns.

### Regulatory reform

Regulatory reform has had a major impact on banks' funding costs through higher capital requirements, with additional cost and income pressures through liquidity requirements (including larger holdings of low-yielding high quality liquid assets, and less reliance on short-term wholesale funding).

This will likely be accentuated by further regulatory reforms that are yet to be finalised and implemented, including the Basel 4 package and RWA inflation (upward pressure on capital requirements through a tougher regime for calculating risk weighted exposures on credit, market and operational risk, and sovereign risk exposures); MREL (additional loss absorbing capacity, including through the issuance of longer term debt); and the increasing use of macro-prudential instruments.

The price of the greater resilience and resolvability achieved through these reforms is a large deadweight impact on banks' return on regulatory capital.



<https://home.kpmg.com/xx/en/home/insights/2016/07/banks-strategies-and-business-models-capital-myths-and-realities-fs.html>

## Simple illustration of the impact of regulation on a bank's funding costs

Building on the illustrations in the box on page 9, here is a simple example of how regulatory reforms might increase a bank's overall cost of funding. The main impact of regulatory reform is assumed to be on the bank's liability stack, with increases in tier 1 capital and loss-absorbing debt offset by a corresponding reduction in wholesale funding.

It is possible that the stronger loss absorbing resilience of the bank leads to a reduction in the cost of its wholesale funding (although this in turn may depend on whether this is offset by an increased expectation on the part of the bank's creditors that if the bank ran into

difficulties it would be subject to a resolution "bail-in" rather than a government bail-out). The cost of retail funding is assumed to remain unchanged because these deposits continue to be covered by a deposit guarantee scheme.

In this illustration, the 40-50 basis point increase in overall funding costs would feed through directly to a reduction in profits. In the simple numerical example used on page 9 the impact of these higher funding costs would be to wipe out a large proportion of the initial profits 0.5, and to reduce the return on regulatory capital from 10 percent to 2 percent.

| Liability                     | Basel 2 amount | "Basel 4" amount | Cost (%)                                     | Basel 2 funding cost | "Basel 4" funding cost                                                              |
|-------------------------------|----------------|------------------|----------------------------------------------|----------------------|-------------------------------------------------------------------------------------|
| Tier 1 capital                | 3              | 5                | 12                                           | 0.36                 | 0.60                                                                                |
| Tier 2 capital                | 2              | 2                | 10                                           | 0.20                 | 0.20                                                                                |
| Other loss absorbing capacity | 0              | 6                | 8                                            |                      | 0.48                                                                                |
| Wholesale funding             | 30             | 22               | 3 (possibly reducing to 2.75% under Basel 4) | 0.90                 | 0.66 (at 3% cost)<br>0.61 (at 2.75% cost)                                           |
| Retail funding                | 65             | 65               | 2                                            | 1.30                 | 1.30                                                                                |
| Total                         | 100            | 100              |                                              | 2.76                 | 3.24 (at 3% cost of wholesale funding)<br>3.19 (at 2.75% cost of wholesale funding) |

# Data analysis

We have examined the relationship between profitability and some of the key drivers using June 2015 data from the European Banking Authority's 2015 Transparency Exercise. This provides a cross-section picture for 105 major EU banks from 21 European countries.



The analysis included statistical regression correlations between return on regulatory capital and some key variables, using data for both the whole sample and individual countries represented by at least eight banks in sample.

The results of this analysis are not particularly robust, due to the small sample size and the clustering of returns on regulatory capital in a relatively narrow range.

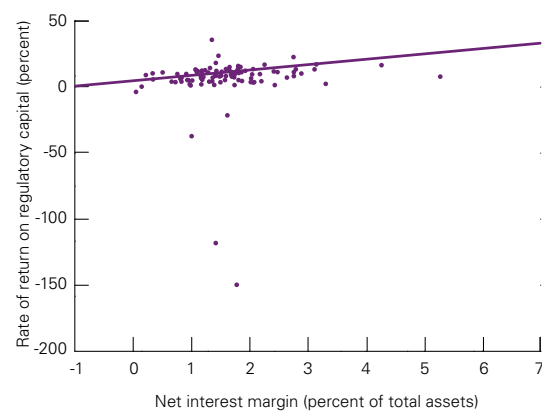
However, the results do show some plausible and critical sensitivities for three of the key drivers discussed earlier in this paper:

- A 5 basis point improvement in a bank's **net interest margin** (for example from 1.20 to 1.25 percent of total assets) would increase the return on regulatory capital by 2 percentage points (for example from 10 percent to 12 percent).
- A 5 percentage point reduction in a bank's **non-performing loans** as a percentage of total loans and advances (for example from 10 percent to 5 percent of total loans) would increase the return on regulatory capital by 2 percentage points.
- A 10 percentage point improvement in a bank's **cost to income ratio** (for example from 60 percent to 50 percent) would increase the return on regulatory capital by 0.4 percentage points (for example from 10 percent to 10.4 percent). This is a surprisingly small impact, perhaps offsetting the somewhat larger than expected impact on profitability of changes in net interest margins.

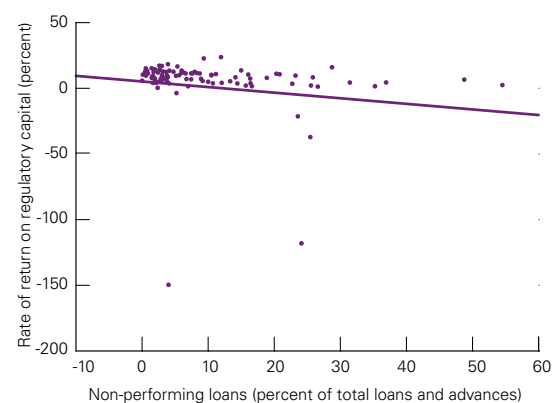


By country, the most significant correlations with the return on regulatory capital are to be found with the net interest margin in Germany, France and Spain; with non-performing loans in Spain; and with the cost to income ratio in Spain.

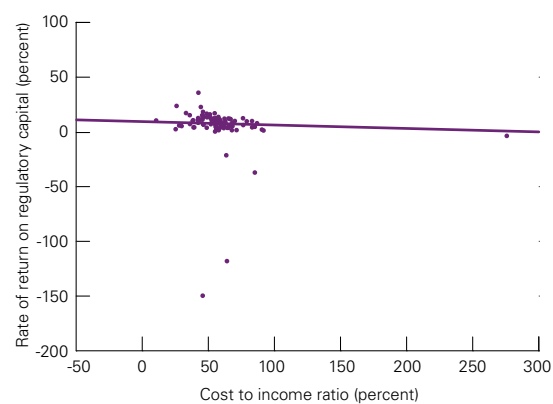
### RoRC vs net interest margin -



### RoRC vs NPLs



### RoRC vs cost to income ratio



Source: KPMG Peer Bank 2016

# Implications for banks

**These results suggest that, on average across the sample, a bank seeking to improve its return on regulatory capital by one percentage point would need to:**

- increase its net interest margin by 2.5 basis points; or
- reduce its ratio of non-performing loans to total loans and advances by 2.5 percentage points; or
- reduce its cost to income ratio by 25 percentage points; or
- achieve some combination of these improvements.

Successful banks will be those which are able to find ways to:

- increase, or at least maintain, their net interest margins – on their existing business and by shifting their balance sheets towards higher yielding assets (although this may in turn lead to an upturn in non-performing loans at some point in the future) and cheaper sources of funding;
- rely on a more balanced mix of interest and non-interest income;
- reduce decisively their non-performing loans, even if this results in a short-term impact on profits;
- reduce their cost-to-income ratios, including through significant reductions in staff costs and through the use of technology to streamline back-office processes and to provide products and services through digital channels; and
- restructure their balance sheets to minimise the impact of new or revised regulatory requirements.



<https://home.kpmg.com/nl/nl/home/insights/2015/07/the-state-of-the-dutch-banks-in-2015.html>



<https://home.kpmg.com/be/en/home/media/press-releases/2016/06/cumulative-impact-regulation-tax-and-low-interest-rate-environment.html>

These results are broadly consistent with assessments of the impact on banks of regulatory changes by KPMG in the Netherlands and KPMG in Belgium. These studies modelled what banks would have to achieve in terms of changes to their balance sheets, interest margins and cost to income ratios in order to maintain a given return on equity.

It will not be easy for banks to achieve these improvements, not least at a time when net interest margins are under increasing downward pressure from lower interest rates; the weak economic environment may lead to a higher rate of non-performing loans; regulatory requirements continue to push up banks' funding costs; and competitive pressures from existing banks, new entrant banks and non-banks remain strong.



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