FINANCIAL SYSTEMS

Digging into the comprehensive assessment data: Profitability

Ana Rubio / Olga Gouveia / José Félix Izquierdo / Irene Roibás Millán / Macarena Ruesta / Jaime Zurita

Poor profitability (or no profitability) in most Eurozone banking sectors in 2013

The large volume of impairments which exceeds pre-provision income in several countries makes half of the banking sectors unprofitable in 2013 (Slovenian, Cypriot, Portuguese, Italian, Greek, Irish and Austrian). Some of these impairments are extraordinary and reflect the need of balance sheet repair ahead of the AQR. After several years since the beginning of the crisis, the high level of impairments continues to be the first drain on profitability. Therefore among the best performers we see banking sectors with low earnings generation capacity but which display low levels of impairments as result of their good asset quality. The most profitable banking sectors in 2013 are those from Luxembourg, France, Germany and the Netherlands (thanks to low impairments) as well as the Spanish, which combines a high level of pre-provision profitability with still high, but manageable, impairments.

Cross-country analysis of the income statement evolution shows that German banks were the least impacted while the French the most

Having in mind (i) that neither the baseline nor the adverse scenario are a forecast for the period 2014-2016 and (ii) the balance sheet static assumption, it follows that the evolution of the income statement allows us to extract some conclusions on the resilience of banks and the severity of the stress applied. From the largest European countries, French banks had the most aggressive reduction in net interest income and pre-provision income, while Italian banks had the mildest at net interest income level and the German at pre-provision income level. In the adverse scenario, the German were also the least impacted. Spanish banks have an intermediate impact both in net interest income and pre-provision income.

At pre-tax level, in the baseline scenario, all banking sectors in Europe improve compared to 2013, with the exception of France and Luxembourg. Some of these improvements are however form loss-making banking sectors to just break-even in 2016. German and Spanish banks are the best performers among those booking profits in 2013. In the adverse scenario there are just 23 banks (out of 100) which are profitable in 2016: 10 in Germany, seven in Spain, three in France, two in the Netherlands and one in Luxembourg.

The comparison of the performance of each bank under the baseline and stress scenario allows us to conclude that the Spanish banking sector is the most resilient to the adverse scenario as it displays the smallest reduction in net income and in pre-provision income compared to the baseline. The drop in net income is very significant in all banking sectors which become unprofitable with the exception in Spain and Luxembourg. The resilience is higher in those banking sectors which were profitable in 2013: in Spain, Luxembourg, Germany, the Netherlands and France.

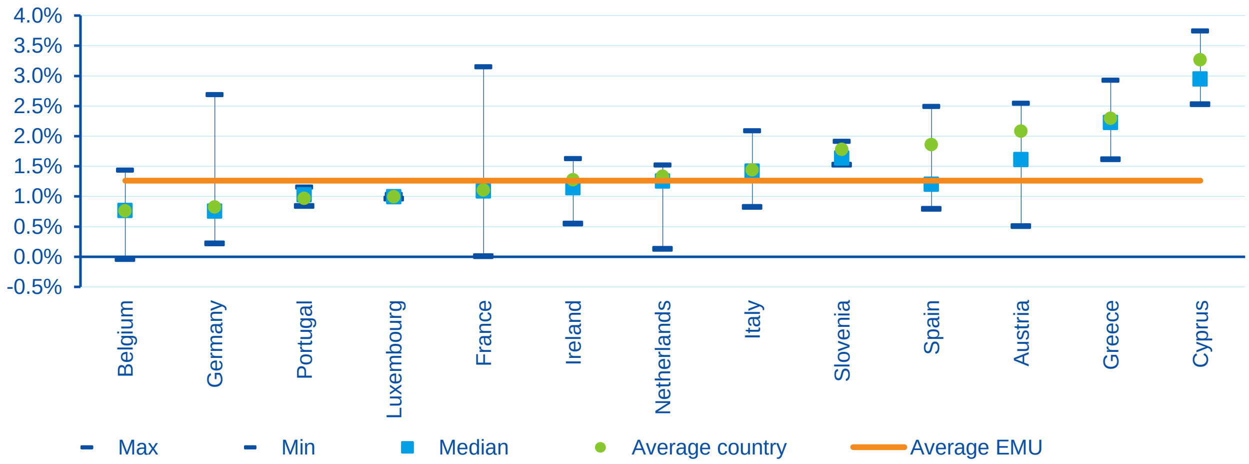
The information (adjusted by the AQR) published by the EBA for the 103[1] Eurozone banking groups that participated in the stress test allows us to make some cross-country and cross-banks comparisons. When we refer to each banking sector, we mean the aggregate results of participating banks in a given country. To be more precise it includes 100 banks: 24 in Germany, 15 each in Italy and Spain, 11 in France, six each in Austria and in the Netherlands, five in Belgium, four in Greece, three each in Cyprus, Ireland, Portugal and Slovenia and two in Luxembourg.

In the first section we compare data as of 2013 and in the second we analyse the income statement projections in 2014-2016 both in the baseline and the adverse scenario.

1. Profitability in 2013

The first measure of profitability we look at is net interest income[2] as percentage of total assets[3]. We can see that Cypriot banks have the best net interest margin, followed by Greek, Austrian and Spanish banks. The average for the Eurozone stood at 1.26% in 2013, with Belgium, Germany, Portugal, Luxembourg and France below average. Greek and Cypriot banks have lost a considerable amount of deposits and are highly reliant on cheap funding from the ECB and Emergency Liquidity Assistance from their national central banks (around 20% of total assets for Greece and 30% for Cyprus), which strongly supports net interest income.

Chart 1
Net interest income as % total assets (NIM), YE2013



Source: BBVA Research based on EBA
The information refers to the consolidated data of the reporting banks and not to the activity performed on a given country. For example, in the Spanish case the information includes the international activity of BBVA and Santander.

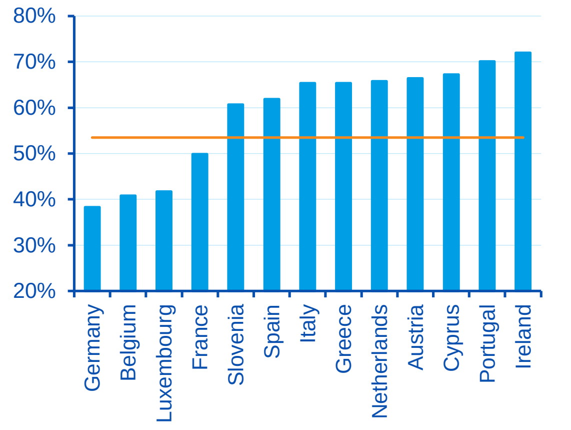
A high ratio can indicate: (i) a high reliance on net interest income compared to other sources of revenue as result of a very loaned-up balance sheet or a higher focus on retail banking than other systems as is the case of Greece and Cyprus (see below); (ii) higher customer spreads, possibly as result of the contribution from geographies with higher interest rates (eg: Latam or Eastern Europe in the case of Spanish and Austrian banks). Higher customer spreads can also result from a low degree of competition or a riskier loan mix which could stem from a high focus on SMEs or consumer lending rather than on corporates or

1: The EBA published results for 123 European banking groups, out of which 20 are non-Eurozone banks. From the sample we have excluded three banks from those countries which had only one bank participating in the exercise: one Finish, one Hungarian and one Maltese.
2: Net interest income corresponds to interest revenues minus interest expenses.
3: To calculate a proper net interest margin we should have used average total assets for 2013 but the ECB/EBA do not disclose total assets at YE2012. In the report we cannot provide information on return on equity because the ECB/EBA data does not incorporate information on shareholders' equity but only on regulatory capital.

mortgage lending; (iii) contribution from high yield government securities or a high yield loan book financed with deposits and/or cheap ECB funds (it is the case in some peripheral countries). More retailed-focused banks tend to have higher net interest margins (NIMs) than banks with an important portion of the balance sheet unrelated to the lending activity.

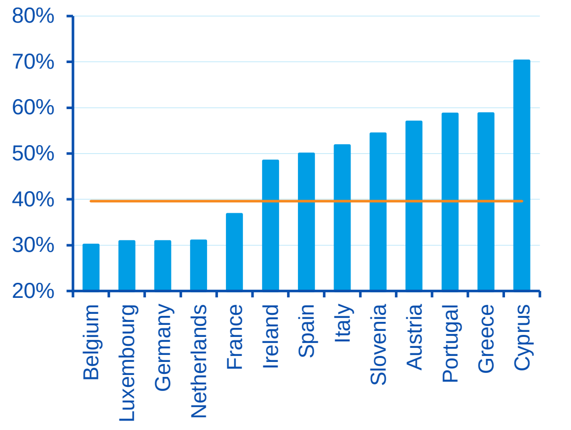
As can be seen in chart 2, Cyprus, Greece Austria and Spain display a high proportion of loans in the balance sheet and this partially explains the high NIM. Irish and Portuguese banks have loan books which represent more than 2/3 of the balance sheet and therefore given their lower than average (or average) NIM, these are candidates for lower than average bottom-line profitability.

Chart 2
Total credit exposures as % total assets, YE2013



Source: BBVA Research based on EBA and ECB

Chart 3
RWA as % total assets



Source: BBVA Research based on EBA and ECB

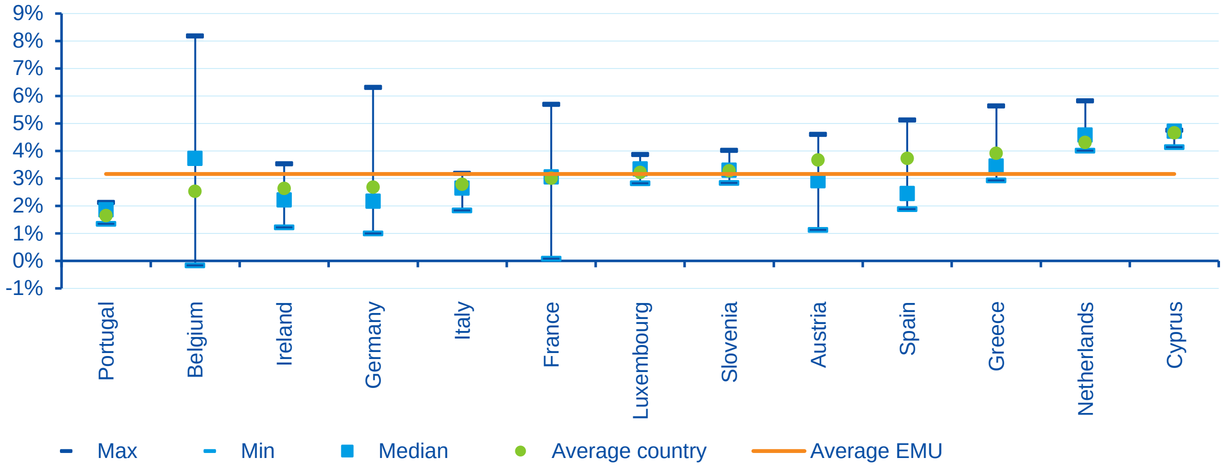
Belgium, Germany, Luxembourg and French banks display below average NIM because they have balance sheets with a smaller proportion of the lending activity when compared to banks in peripheral countries. This lower reliance on the lending activity results in lower risk-weighted assets (RWAs) for these countries (chart 3).

The 15 Spanish banks which participated in the comprehensive assessment display an average NIM of 1.86%, with a median of 1.2%, a maximum of 2.49% and a minimum of 0.79%. These results are largely impacted by the higher NIM of both BBVA and Santander as result of their international operations. If these two banks were excluded, the average NIM would fall to 1.11%, slightly below the European average which stands at 1.26% (and 1.14% excluding BBVA and Santander).

Chart 4 replicates chart 1, but replacing total assets with risk-weighted assets (RWAs). The ranking order per country is similar although we can observe that banks with low proportion of RWAs improve their result. This is the case of Dutch banks, which display the second best NIM when measured against RWA. Portuguese and Irish banks score even worse when measured against RWA due to their high ratio of RWA/total assets (chart 3).

Spanish banks maintain the fourth highest NIM, despite an above average ratio of RWA/total assets. Belgium, French and German banks display a wide dispersion due to the presence of atypical banks such as Dexia in Belgium which had a negative NII in 2013, Argenta also in Belgium which has a large contribution from the insurance business, Caisse de Refinancement de l'Habitat in France or Dekabank (central asset manager for the Sparkassen-Finanzgruppe) in Germany.

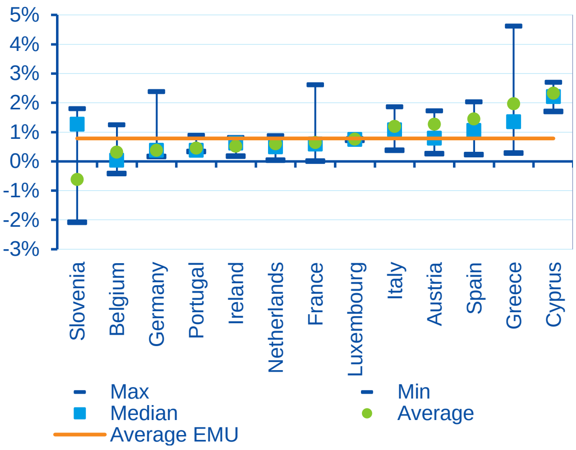
Chart 4
Net interest income (NII) as % risk-weighted assets, YE2013



Source: BBVA Research based on EBA and ECB

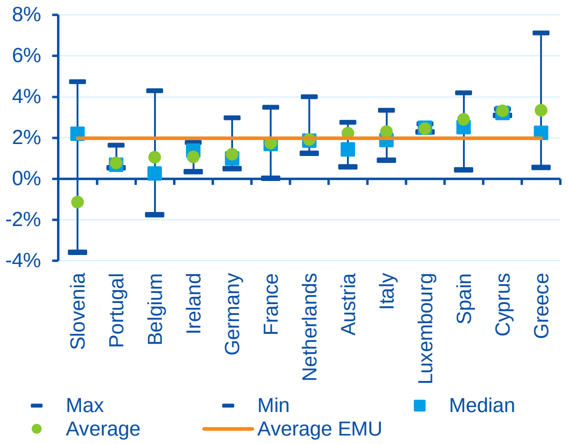
The second measure of profitability we look at is pre-provision income (PPI) both as percentage of total assets (chart 5) and RWAs (chart 6). This metric measures recurrent earnings before impairments. Banks which display negative PPI do not generate sufficient operating revenue to pay personnel and administrative expenses in total.

Chart 5
Pre-provision income as % total assets, YE2013



Source: BBVA Research based on EBA and ECB

Chart 6
Pre-provision income as % RWA, YE2013



Source: BBVA Research based on EBA and ECB

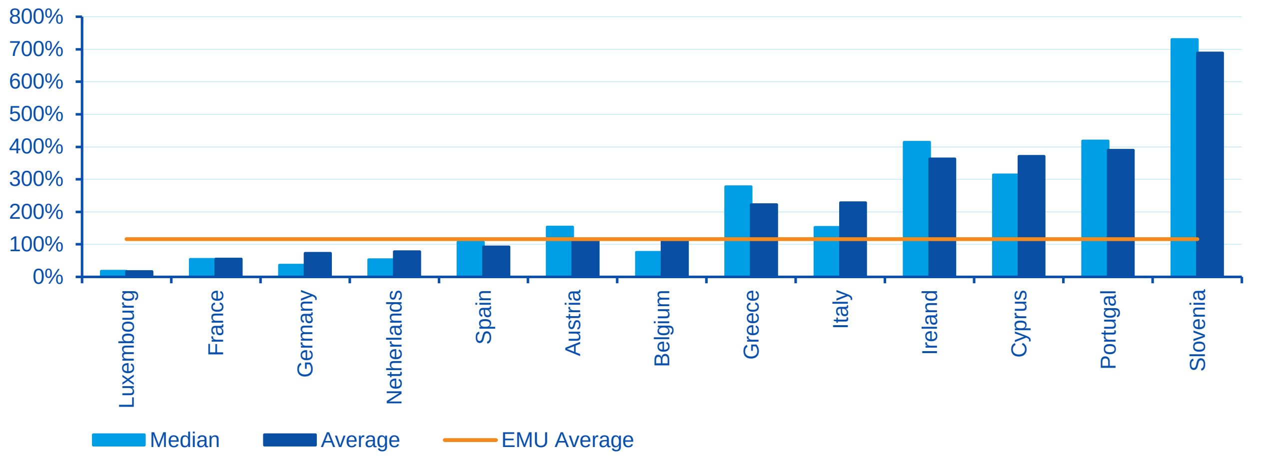
According to this indicator, Greece and Cyprus maintain above-average levels of profitability which in their specific case is a misleading indicator, because the poor asset quality of these banking sectors (with non-performing loans, NPLs, ratios of 40% in Cyprus and 22% in Greece for the reporting banks at year-end 2013) completely erodes the high pre-provision profitability[4]. Slovenia, Portugal, Belgium, Germany, Ireland and France display below average pre-provision earnings with great dispersion for Slovenia, Belgium and Germany. A below average indicator can indicate low profitability and/or poor efficiency indicators, as high costs can eat up a significant portion of revenues.

In both indicators Spain ranks third, indicating above-average recurrent profitability before impairments. When measured against RWA, the median for the 15 Spanish banks which participated in the exercise is 2.5%, the average is 2.9%, with the maximum at 4% and the minimum at 0.4%. The Eurozone average stands at 2%.

Low ratios of pre-provision income indicate low bottom-line profitability levels, but high ratios do not necessarily mean good profitability levels (as is the case of Greece and Cyprus). Therefore it is necessary to complement these ratios with additional information on the cost of risk and other impairments. Chart 7 shows the level of impairments as percentage of PPI. A ratio above 100% indicates a bank is loss-making on its operational activities. This was the case of several banking systems in 2013: Slovenia, Cyprus, Portugal, Ireland, Italy and Greece. The average ratio for Europe is 116%, which indicates that this year European banks performed substantial balance sheet repair (in some banking systems impairments were 4x the level of pre-provision income). Among large banks (+€500bn assets, 13 banks) there were four with impairments above their PPI of which two were Italian, one German and one Dutch.

For Spanish banks impairments represented 93% of PPI, on average, with the median slightly above 100%. The bulk of the clean-up effort for Spanish banks took place in 2012 although the reclassification of refinanced loans that took place in 2013 also resulted in a non-normalised impairment effort this year.

Chart 7
Impairments as percentage of PPI, YE2013



For Slovenia in this particular chart it excludes one of the three banks in order to make pre-provision income positive. The two banks included in the chart reported positive pre-provision income in 2013.

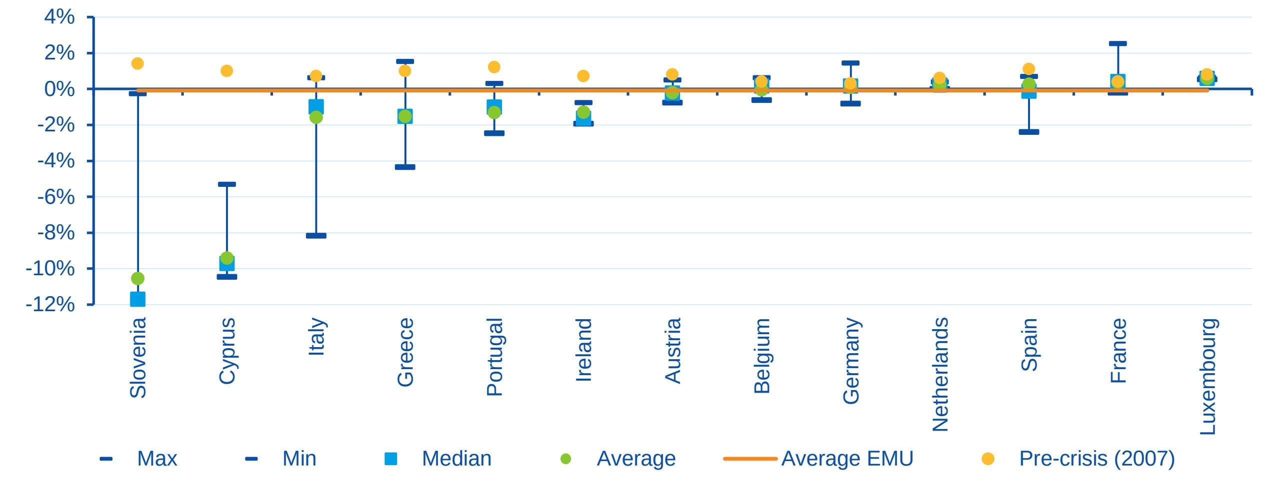
Source: BBVA Research based on EBA and ECB

4: Banks with poor asset quality could also benefit from the recognition of interest revenue on substandard or restructured loans which might not be fully paid in the future

Finally we look at the bottom of the income statement. As expected, given the high level of impairments performed in 2013, all the banking sectors which had impairments exceeding PPI, together with Austria and Belgium booked pre-tax losses in 2013.

Profitability is an issue in Europe (at least in 2013) and therefore the starting point to perform a stress test is quite a critical one. We can see in chart 8 that in 2007 all these banking sectors were profitable.

Chart 8
Pre-tax income as % of total assets (ROA), YE2013



Source: BBVA Research based EBA, ECB and IMF

The average ratio of pre-tax income as percentage of total assets for the Eurozone is slightly below 0% (-0.07%), indicating that, on average, European banks in 2013 were unable to generate capital internally. The most profitable banking sectors turn out to be those with a low level of impairments (Luxembourg, France, Germany and Netherlands) or those with higher earnings generation capacity but with affordable impairments. Spain falls in the latter category: it ranks third reflecting higher earnings generation capacity (at net interest income and pre-provision income level) despite a still high level of impairments in 2013.

All in all, bottom line profitability is very low in Europe. After several years since the beginning of the crisis, the high level of impairments continues to be the first drain on profitability. Therefore among the best performers we see banking sectors with low earnings generation capacity but which display low levels of impairments as result of good asset quality.

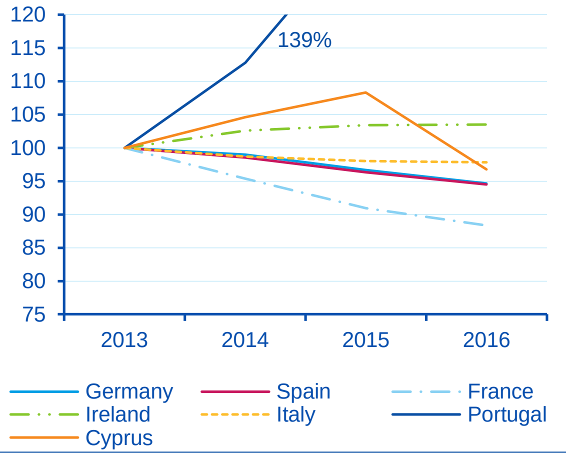
2. Evolution of the income statement in 2014-2016

In this section we present the evolution of net interest income, pre-provision income and net income for the major financial systems in the baseline and in the adverse scenario in 2014, 2015 and 2016.

Several banking systems improve their profitability in the **baseline scenario** (comparing to the actual figures for 2013, which in the charts are presented at 100% level to make banking sectors comparable).

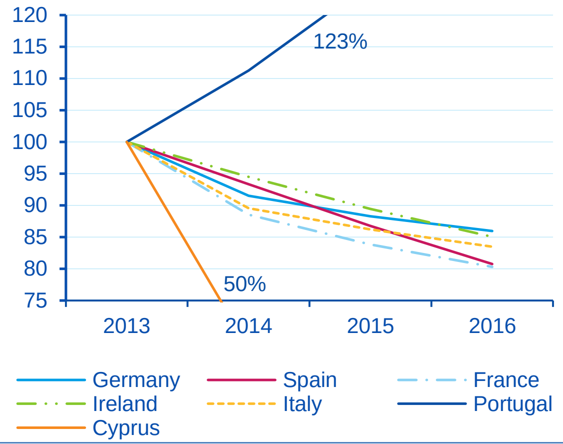
In the **upper part of the income statement** (i.e. at net interest income level), this is the case of Portugal, Ireland and Cyprus (in this country only in 2014-2015) whose banks improve their net interest income and their pre-provision income. Several banks from these countries have restructuring plans approved by the European Commission and therefore they were not constrained by the static balance sheet assumption, which could among other actions allow the replacement of expensive capital or funding sources (eg: CoCos subscribed by the government) with cheaper alternative funds[5]. This explains the evolution of Portuguese banks, as the two banks with a dynamic balance sheet are the ones improving markedly their NII. However, Greek banks despite having dynamic balance sheets, do not improve their net interest income or their pre-provision income. A few banks from other banking sectors (mainly Germany, Spain and Italy) were also allowed to use dynamic balance sheets and in some cases this led to a higher NII in 2016 than that in 2013.

Chart 9
Evolution of NII in baseline scenario



Source: BBVA Research based on the EBA and ECB

Chart 10
Evolution of NII in adverse scenario



Source: BBVA Research based on EBA and ECB

A lower net interest income should generally be the expected outcome as the level of non-performing loans grows and this leads to smaller interest revenues. However, the evolution of net interest income is quite complex and it is difficult to isolate different and, in some cases, opposing effects: higher NPLs will translate in lower interest revenues but at the same time higher interest rates (implicit in the European macro scenario) might lead to a higher interest income (depending on the exposure of each bank to interest rate risk).

From the largest European banking sectors (France, Germany, Italy and Spain) we can observe that French banks had the most aggressive reduction in net interest income while Italian banks, the mildest. The evolution in Germany and Spain is very similar in the baseline scenario while in the adverse scenario Spanish banks are more stressed (reaching the stress of the French banks in 2016) than the German. Conversely, German banks in the adverse scenario have the smallest reduction in net interest income (even smaller than that of Italian banks).

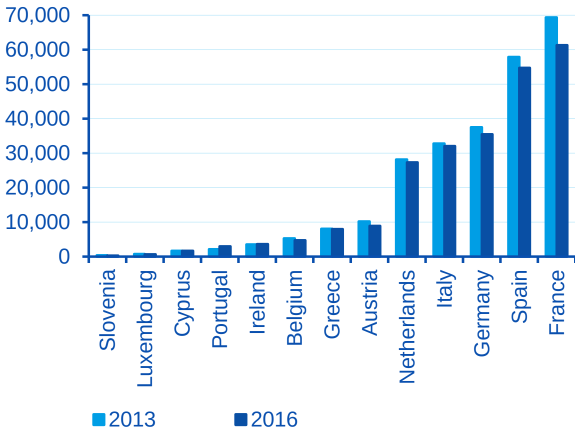
One reason for the resilience of Spanish banks' NII could be related to the fact that most loans are at variable interest rates and therefore the re-pricing of the loan book has a positive impact on net interest income. Conversely, in countries such as Germany and France where the proportion of loans at variable interest rates is smaller, the impact of an increase in interest rates should be smaller or even negative due to the increase in funding costs.

For French banks, the higher than average fall in net interest income is possibly related to an aggressive stress in the cost of funding and not so much due to an aggressive increase in problematic loans as French banks have a comfortable NPL ratio in 2013 (4%). The higher cost of funding is probably related to the higher reliance on market funds that French banks still experience despite the reduction since the onset of the financial crisis.

5: Per se a dynamic balance sheet should not lead to higher interest revenues as the dynamic balance sheet is designed for those banks under a restructuring plan which ceteris paribus should lead to a smaller balance sheet, smaller loan book and concurrently smaller interest revenue.

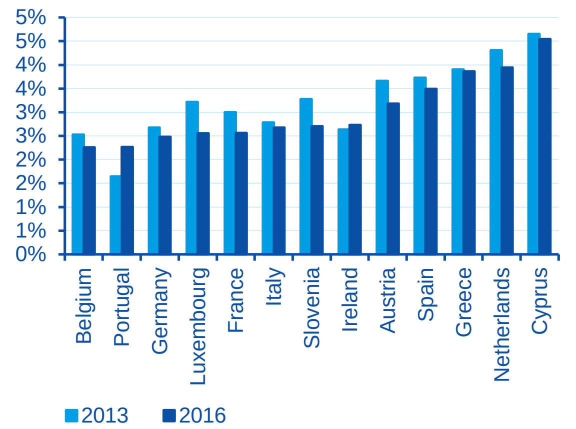
Charts 11 & 12 put in perspective chart 9, as the starting point for each country is quite different. We can observe that despite a spectacular increase in net interest income in Portugal (possibly due to the dynamic balance sheet assumption), Portuguese banks remain the second least profitable in terms of net interest income as percentage of RWA. The relative ranking in terms of banking sectors does not change considerably in the baseline scenario compared to the starting point in 2013. With the exception of Ireland and Portugal all ratios fall in the baseline scenario.

Chart 11
Evolution of NII in € in the baseline scenario



Source: BBVA Research based on the EBA and ECB

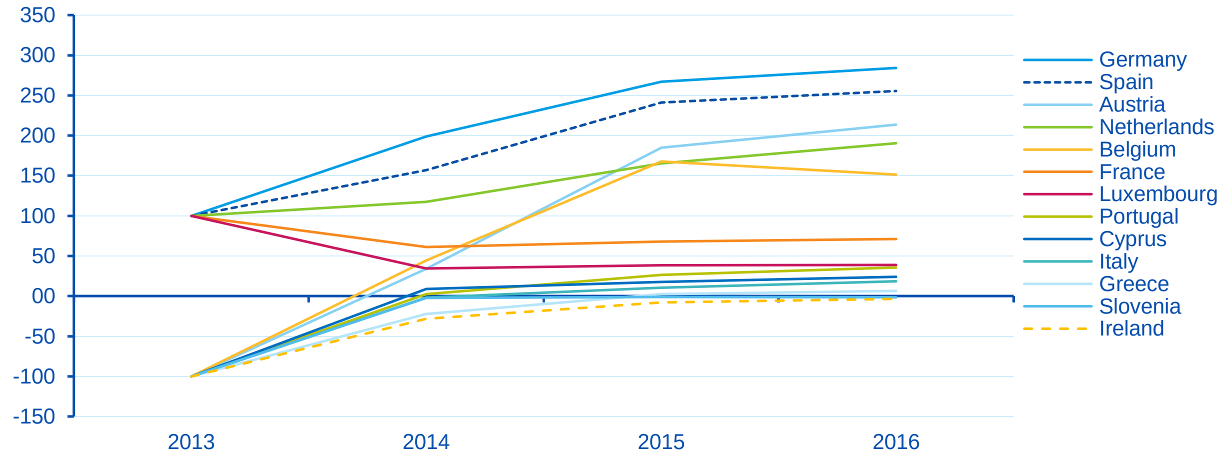
Chart 12
NII as % RWA in the baseline scenario



Source: BBVA Research based on EBA and ECB

Looking at the **bottom of the income statement** (pre-tax profit and net income) improvements occur in the **baseline scenario** in all banking sectors with the exception of France and Luxembourg (chart 11). In these two countries pre-tax profit decreases in 2014 and does not recover in the following years. All loss-making banking systems in 2013 get to profitability or virtually break-even in 2016.

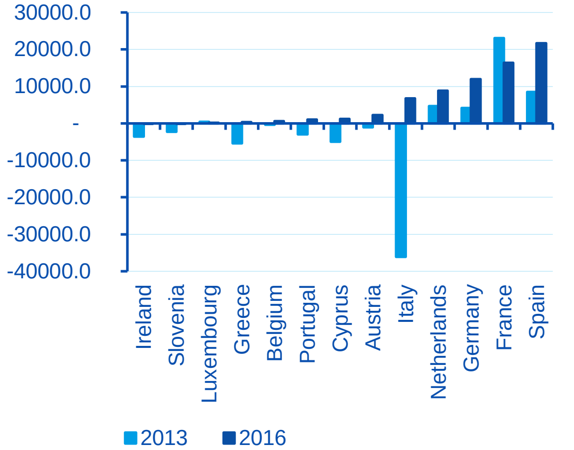
Chart 13
Evolution of pre-tax income in the baseline scenario



Source: BBVA Research based on EBA and ECB

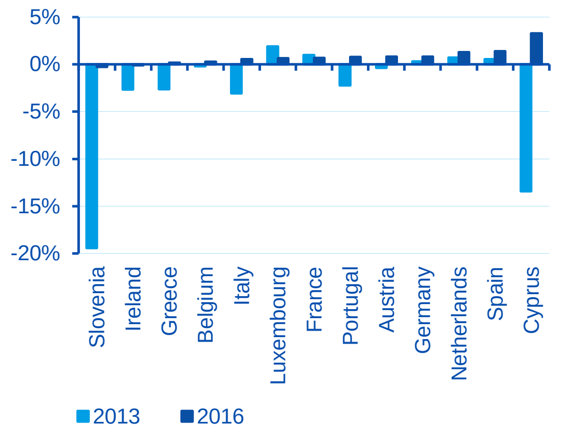
Charts 14 & 15 put in perspective chart 12 with pre-tax income both in euros and as percentage of RWA. We can see again that France and Luxembourg are the most stressed and therefore profitability diminishes both in absolute and relative terms. Cyprus displays a marked improvement in its profitability to above pre-crisis levels which is likely to be unrealistic.

Chart 14
Pre-tax income in € in the baseline scenario



Source: BBVA Research based on the EBA and ECB

Chart 15
Pre-tax income as % RWA in baseline scenario



Source: BBVA Research based on EBA and ECB

In the **adverse scenario**, we have to distinguish between systems that booked losses in 2013 (Cyprus, Greece, Ireland, Slovenia, Portugal, Austria, Italy and Belgium) and the others (Spain, Germany, France, Luxembourg and the Netherlands). The former all get better, with the exception of Austria and Belgium which accumulate even more losses. In the profitable banking sectors all get worse in 2016 and almost all incur in losses, with the exception of Spain and Luxembourg which remain profitable, although less profitable.

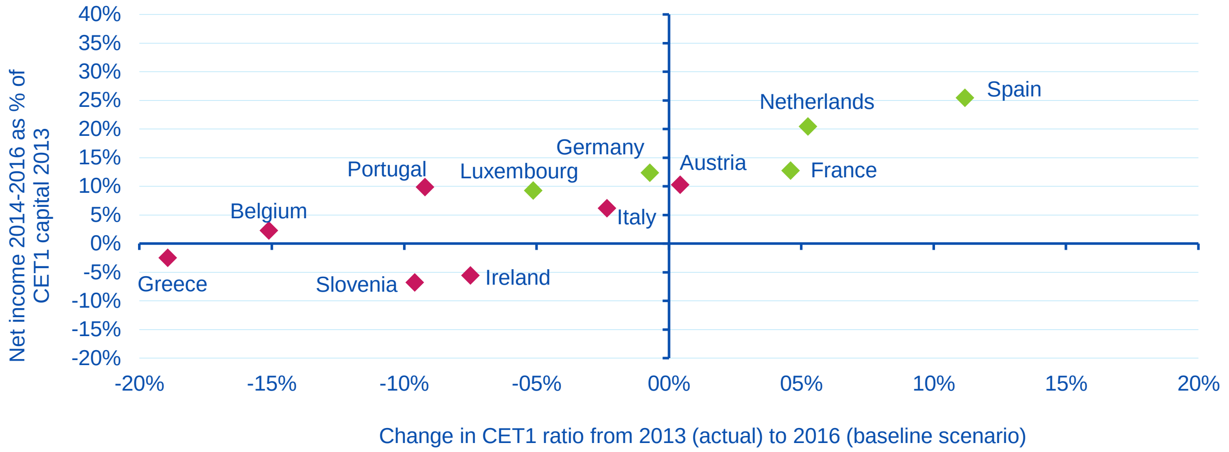
There are 23 banks which make a profit in the adverse scenario in 2016: 10 in Germany, seven in Spain, three in France, two Dutch and one in Luxembourg. From these 23 banks, five are very large banking groups with total assets above €500bn.

The evolution of pre-tax income for German and Spanish banks is the most favourable among those systems that were profitable in 2013 because, as highlighted before, the reduction in net interest income is the smallest and this is maintained at pre-provision level. The generalised improvement in pre-tax income is also the reflection of lower impairments in 2014-2016 compared to those booked in 2013. The lower impairments are particularly relevant for those systems which performed a significant balance sheet clean-up in 2013: Cyprus, Slovenia, Greece, Portugal, Ireland and Italy (those that in chart 7 had the largest bars) and for those banks with dynamic balance sheets and are allowed to get rid of non-performing portfolios.

It is important to highlight that despite the almost overall improvement there are several banking systems that remain unprofitable or with low levels of profitability throughout 2014-2016: the Irish, Slovenian, Greek, Italian and Portuguese. These systems will find it difficult to cover their cost of capital.

Chart 16 compares the net earnings generation capacity in 2014-2016 with the CET1 capital ratio evolution in the baseline scenario.

Chart 16
Accumulation of profits in 2014-2016 vs change in CET1 capital ratio in the baseline scenario (2016 vs 2013)



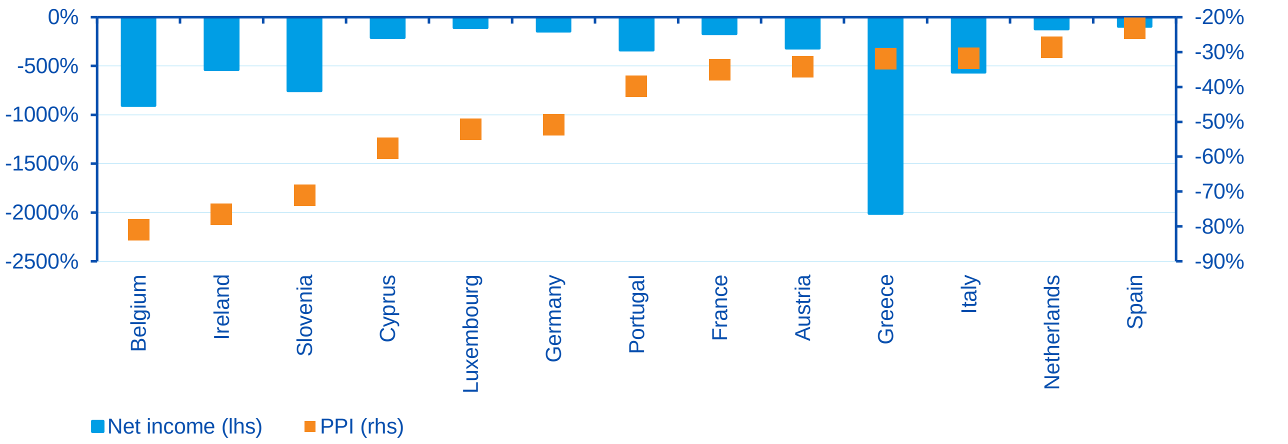
Banking sectors in green indicate that they had positive net income in 2013 while banking sectors in red were loss making in 2013.
Source: BBVA Research based on EBA and ECB

Banking sectors which generate large net income volumes in 2014-2016 (in the chart measured as percentage of initial CET1 capital) are those which are able to improve their CET1 capital ratio in the baseline scenario. The evolution of CET1 capital is also impacted by the evolution of intangibles, deferred tax assets (DTAs), the dividend policy, among others. For example, Spanish banks generate the largest net income in 2014-2016 (measured against departing CET1 capital) and therefore display the largest improvement in the CET1 ratio. On the other extreme, we find the Greek banking sector which faces the largest reduction in the CET1 capital ratio as it is not able to generate retained earnings.

The explanation for having banking systems which generate profits but reduce capital is twofold: one because some banks maintain a high dividend pay-out policy (this is the case for Italy where one of the largest banks has a 98% pay-out ratio in 2016) and the other relates to the adoption of Basel III which progressively reduces phase-in arrangements and therefore some banks experience a reduction in their capital ratio (higher deductions as an example) despite their ability to generate earnings. We can also observe that the banking sectors which booked profits in 2013 (in chart 16 identified in green) are the ones with the best results. One reason could be related to their lower starting impairment rate when compared to that observed in loss making-systems in 2013, which take a long time to come to a normalised cost of risk.

Finally, chart 17 tries to measure the resilience of each banking sector to the adverse scenario, showing the reduction in net income and in pre-provision income each banking sector experiences from the baseline to the adverse scenario.

Chart 17
Change in net income and PPI (2014-2016) from the baseline to the adverse scenario



Banking sector in green indicate that they had positive net income in 2013 while banking sectors in red were loss making in 2013.
Source: BBVA Research based on EBA and ECB

The drop in net income is very significant in all banking sectors which turn unprofitable overall with the exception of Spain and Luxembourg. The fall is particularly significant in vulnerable banking sectors such as the Greek, the Slovenian and the Irish where losses get extremely large. Even in the baseline scenario these banking sectors generate low levels of earnings and therefore under an adverse their resilience to a shock is even smaller.

Spain has the smallest reduction both in net income and in PPI, showing the resilience of its banks to a stressed scenario. At PPI level, the difference across countries is less pronounced (ranging from -20% to -90% and not to almost -2000%) because the adverse scenario is just slightly worse than the baseline. The great difference between scenarios comes at the impairment level where the adverse scenario incorporates larger expected losses.