

Challenges ahead for the banking industry

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A unique macro environment, stricter regulation and technology-related disruptive change represent the main actual and forthcoming challenges for the banking industry. Banks' adaptation strategies in response to these challenges will likely forge a new industry structure.

A unique macro environment, characterized by a prolonged period of low interest rates, pressing regulation mainly based on higher capital requirements and technology-related disruptive change are the main actual and forthcoming challenges for the banking industry. Some of these pressures, low interest rates for instance, are especially intense in the case of the Spanish banking sector, given its high degree of reliance on the traditional banking model. Meanwhile, the negative implications arising out of increased capital requirements appear to be more manageable for most Spanish banks. Both global and Spanish banks' adaptation strategies in response to these challenges will likely forge a new industry structure and financial innovation technologies should be an important part of it.

Financial crises are not uncommon. In the event that they occur, they are usually accompanied by restructuring and regulatory reform in the financial sector. However, in their wake, the sector generally returns to a pre-crisis equilibrium. After the latest financial crisis, however, we are looking at a very different future for banks, the banking business model and their industry structure.

Pressure on the banking industry today is increasing considerably due to a combination of three main forces acting across different time dimensions:

- In the short-run, a unique macro environment, characterized by very low interest rates, negatively affecting banks' profitability,
- In the medium-term, new and notably more stringent regulation and supervision, intensifying

profitability challenges, and possibly reducing lending; and finally,

- Over the long-run, technology-related disruption, such as the rise of alternative lending and distributed ledger technology (*i.e. Blockchain*), which is increasingly obligating banks to adapt their business models and allowing for new competitors to enter the traditional banking scene.

All of this is taking place in an environment where banks are rebuilding their reputation following the damage it has suffered during the crisis. Reputation building post-crisis is an area where banks will have to continue to focus if they want to overcome the negative impact the financial crisis has had on their public image, as well as

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capture next generation (Millennial) clients, who are increasingly in favour of by-passing traditional banking.

In this context, the banking industry is devoting significant attention to the profitability pressures arising from the unique macroeconomic environment. However, more consideration should also be given to the potential implications of regulatory and technology related changes, which are equally important and permanent. It is precisely these future challenges that have the potential to be much more disruptive than what we have seen in recent history and could change the structure of the financial industry. This implies that, among other things, to improve its outlook, the banking sector must increase efficiency and new technologies should be an important part of this process.

The remainder of this article will focus on each of the three forces outlined above and on how they will likely affect the banking industry in general, with the final pages paying particular attention to the situation in Spain.

Unique macro conditions are affecting profitability in the short-term

The banking industry's most pressing concern is how to increase profitability in an environment of persistently low (in some cases zero or negative) interest rates observable across the majority of advanced economies.

One factor often blamed for lower profitability levels today relative to before the crisis is the current low interest rate environment under the so-called 'New Normal'. In the wake of the financial crisis, the global economy remains in a period of uncertainty often referred to as the 'New Normal' – initially defined as a time of low, but predictable growth. Economists have many differing views about the 'New Normal'. In general, however, where there is consensus is on the fact that low real interest rates are likely to persist for some time into the future, creating a series of economic policy challenges.

Current low interest rate conditions have a particularly negative impact on the profitability of smaller banks. Smaller banks are typically more reliant on traditional lending, making it harder for them to compensate for lower interest margins through other activities, *i.e.* M&A and trading.

Nevertheless, historical evidence suggests that banks are more sensitive to overall economic conditions than to monetary policy. Improvement in unemployment levels, GDP growth, the housing market and other asset prices in response to monetary easing are determining factors for bank

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profitability and could ultimately compensate decreased margins resulting from a QE style monetary policy approach (Genay and Podjasek, 2014).

At the same time, the low interest rate environment has had other noteworthy implications on the banking industry as banks adopt strategies to offset lower interest margins. Some banks have attempted to increase profits through decreased provisions, higher commissions and trading gains, while other banks have become more selective in their lending. The low growth, low interest rate environment is also fueling a search for yield, inciting financing entities to take on greater risk.

Stricter regulation will likely affect profitability and lending capacity in the medium-term

The adoption of stricter financial regulation, largely in the form of increased capital, leverage,

and liquidity requirements, is expected to place additional strains on profitability and lending as banks struggle to fall in line with new obligations. At the same time, additional pressures will likely arise from new resolution (bail-in) rules at the EU and G20 level. Ultimately, banks' adaptation strategies to comply with new regulation will likely entail significant changes to industry structure.

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Regulators require more solvency and more capital, while investors seek to maximize profits and policy makers want more credit flowing to the economy. These objectives are not entirely compatible. The new measures do not come free of cost, bringing with them consequences for the financial sector, and depending on banks' responses in terms of credit supply, potential impact on the real economy – although most studies show that at Basel III stipulated capital levels (a minimum of 7% relative to the 2% required under Basel II), benefits outweigh costs.

Such a conclusion is presented in recent studies by the Basel Committee on Banking Supervision (BCBS) and the European Commission, which provide a cost-benefit analysis of the increase in regulatory capital. Complementary studies which identify optimal capital ratios, defined as those which maximize the benefits in relation to costs, point to ratios above those of Basel III (Peña, 2015).

There will likely be unintended consequences of multiple capital, liquidity, leverage requirements, together with other regulatory changes, on bank profitability and the provision of long-term financing as banks either increase capital or reduce activity to comply with new obligations.

Stricter regulation will likely impact banks on three levels: profitability, credit growth and business model/industry structure.

Impact on profitability

Increased capital requirements and high return on equity (ROE) objectives do not appear to be compatible. The principal objective of any bank is to maximize shareholder value and profitability. ROE is a good proxy of return on shareholder investment. Under higher capital requirements, most analysts believe that there will be a reduction in ROE as the cost of capital increases. There are two reasons for the increased cost of capital under the new regulatory regime. Even at constant prices, increased capital requirements would translate to a higher overall cost of capital. At the same time, investor concerns over bank profitability are increasing pressures on banks' funding costs, making capital more expensive. Compliance with liquidity target ratios may also reduce bank profitability, requiring balance sheet changes aimed to increase holdings of higher quality (*i.e.* lower yielding), more liquid assets, as well as longer-term, more stable wholesale and retail deposits.

Impact on credit growth

As noted above, the estimated benefits of Basel III implementation are anticipated to outweigh the costs. However, the additional costs are expected to have an impact on the availability and conditions of credit to the private sector.

Under more stringent capital requirements, many banks may become more selective lenders or even reduce their lending activity in order to comply with regulatory demands. According to preliminary IMF studies, higher capital requirements in response to Basel III would raise the marginal funding costs for banks, leading large banks to increase lending rates and in turn reducing loan growth over the longer term - although results may vary

considerably between countries. (Cosimano and Hakura, 2011). As an example, American banks spent \$70.2 billion (as of the end of 2013) to comply with the new regulation (Peña, 2015). All of this is expected to impact credit recovery.

Impact on business models and industry structure

The new regulatory requirements are changing the business model of banks as they adopt strategies to cope with the impact of the new measures. These include a revision of the types of products and services offered, cost reductions, balance sheet reductions, moving certain activities to the “shadow-banking” sector and divestiture of non-strategic activities.

Other responses include ring-fencing (as in the case of HSBC in the UK, prior to the entry into force of regulatory measures addressing this issue in 2019. At the European level, proposals including some form of ring-fencing are under consideration but have not yet been approved.) Finally, some banks may shift their geographical mix, trying to take advantage of different calendars for Basel III implementation across different regions.

Disruptive technological change will present opportunities and threats in the longer term

In addition to the complexities of operating in a low interest rate environment with increased regulatory burden, today’s banks face an additional

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challenge – how to confront the emergence of new, disruptive technological changes. Digitalization and the penetration of non-bank financial service providers is on the rise globally. New financial

innovation technologies (FinTech) all pose distinct opportunities and threats to the traditional banking sector, as new competitors emerge on the scene. Already significant, in the future, FinTech is expected to have profound transformational impacts on the way banks do business. Banks’ will have to adjust quickly to the digital age or risk finding themselves behind the competition.

Some of the fastest growing financial innovation technologies, presenting both opportunities and challenges, include alternative lending channels, such as P2P lending and DLT. Peer to Peer lending (P2P) connects lenders and borrowers directly at lower costs, presenting both challenges and opportunities for traditional financial intermediation. Distributed Ledger Technologies, or DLTs (*i.e. Blockchain*, the technology behind cryptocurrency *Bitcoin*) allow for decentralized transactions and a reduction of infrastructure costs.

It is worth pointing out that these new platforms are only examples of the range of emerging FinTech innovation, some of which is already more broadly in use across the financial sector, such as mobile or Internet banking. At present, nobody knows what will be the ultimate impact or speed at which these technologies will be implemented, but competitive pressures are forcing banks to invest in them. Moreover, as the process of bank digitalization accelerates, we may expect a decreased demand for physical and human banking resources, such as branches and/or employees.

Technology-driven industry changes

As the digital age becomes an ever increasing reality for the banking sector, structural changes can be expected as banks try to keep up with non-bank competition. We are already seeing and should continue to see greater cooperation between banks with digital partners, through acquisitions or integration of new technologies; increased investment in digital initiatives, such as mobile or online banking; and, integration of FinTech innovation with traditional business to improve customer services and products.

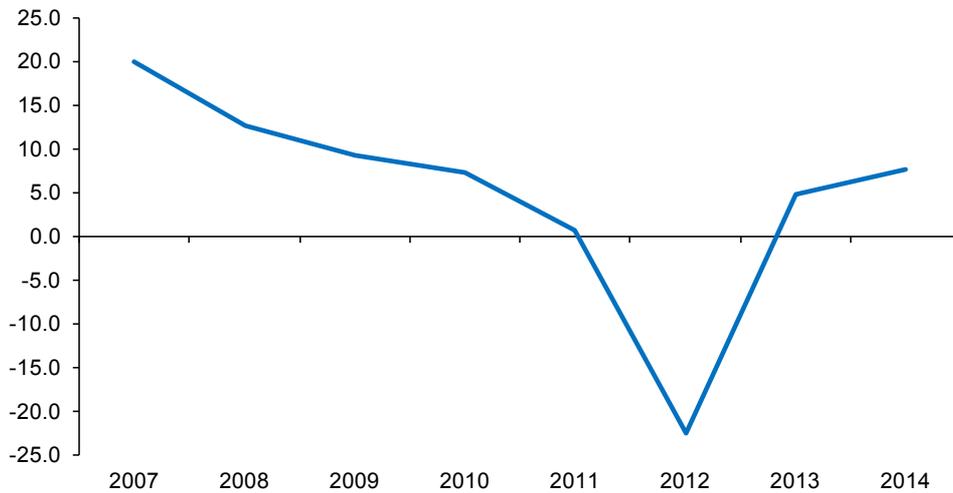
Perspectives on the Spanish banking sector

As expected, the low interest rate environment, stricter regulatory requirements and the rise of

new technologies in the banking industry will have implications on profitability, lending and the future landscape of the Spanish banking sector. Challenging macroeconomic conditions, together with the need to clean up banks' balance sheets

Exhibit 1

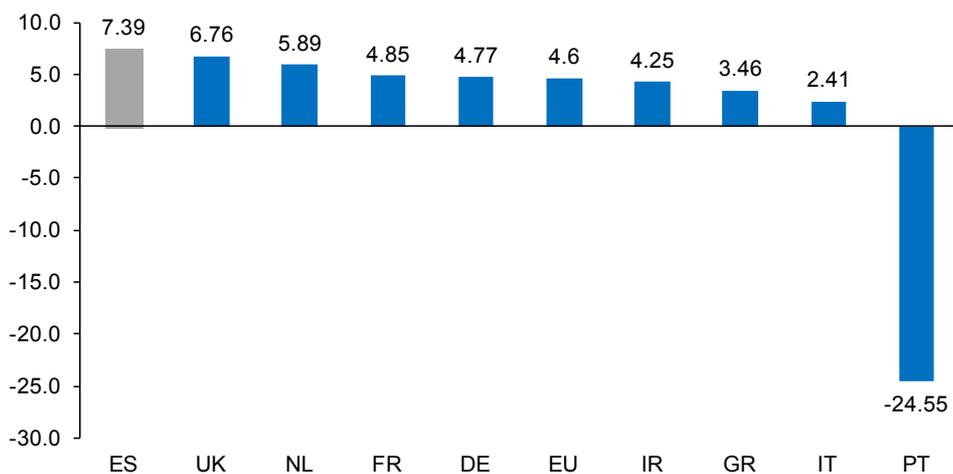
Historical ROE for Spain, Consolidated groups (Percentage)



Source: Bank of Spain.

Exhibit 2

Comparative ROE data for EU and Spain, June 2014 (Percentage)



Source: ECB.

in the wake of the crisis, catalyzed an intense adjustment process with the objective of improving the financial health and efficiency of Spanish financial entities. The results of this process include: a series of mergers and acquisitions within the sector; divestiture or reduction in assets and/or activities deemed non-profitable, in particular, a reduction in installed capacity most acute in the area of retail branches; a largescale provisioning effort (according to the Bank of Spain, since the beginning of the crisis, in 2008, the Spanish banking sector allocated more than 200 billion euros in provision, that, if combined with other resources assigned to provisions, add up to 330 billion, equivalent to slightly above one third of Spain's GDP); and, recapitalizations, in some instances through reliance on private investors, while in others (as in the case of nationalized institutions) through reliance on public funds.

The question that remains is – how far along is the Spanish financial sector in the adjustment process and what remains to be done. The following sections provide some insights on the state of play.

Profitability improving but bumpy road ahead

After suffering notable declines during the crisis years, as shown in Exhibit 1, Spanish banks' profitability indicators through the end of 2014 confirm a modest recovery. Profitability returned in 2013, after suffering losses in 2011 and 2012, and has since remained in positive territory.

On a comparative basis, Exhibit 2, based on the latest available data from the ECB through June 2014, shows Spain's ROE is currently above most large EU banking sectors, as well as the EU average.

This relatively high profitability may seem surprising, given that the sector was one of the more severely affected by the crisis. Moreover, repeated claims by the Bank of Spain and the ECB highlighting profitability concerns also point to the

contrary. However, this apparent paradox can be explained by a number of factors. For instance, in addition to benefitting from better domestic economic conditions, the improvement in Spanish banks' profitability is largely attributable to the decline in provisions, together with cost savings through lower funding costs and efficiency gains.

Asset disposals and improvement in NPL ratios have resulted in a significant decrease in provisions. According to several analysts, including Standard

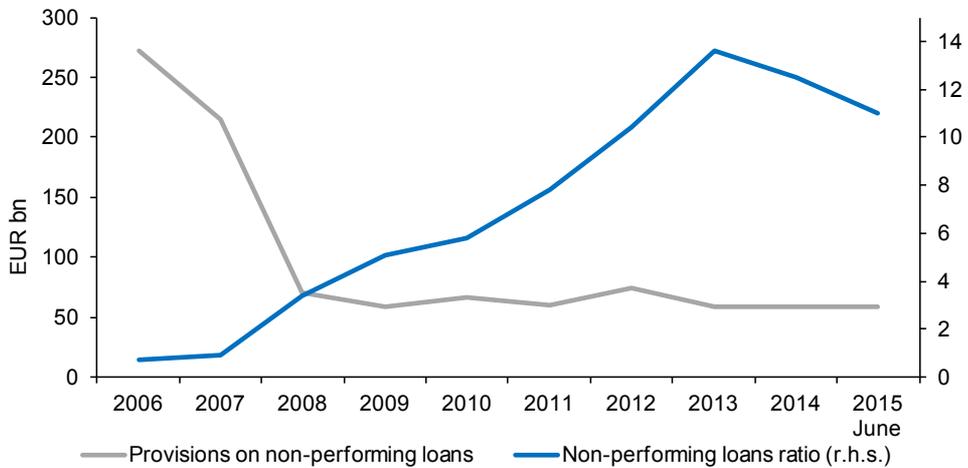
The relatively high profitability of the Spanish banking sector as a whole may seem surprising, given that it was among the more severely affected by the crisis. Moreover, repeated claims by the Bank of Spain and the ECB highlighting profitability concerns also point to the contrary.

and Poor's, unlike some other EU banking sectors, Spanish banks frontloaded their provisioning effort as a means of restoring confidence to the Spanish financial system at the height of the crisis, allowing them to reap the benefits of this strategy in the following years until today (See Exhibit 3). This, in turn, has reduced the cost of risk, and helped to somewhat ease profitability pressures. Additionally, banks' funding has also become less expensive, more stable and more diversified than at the peak of the crisis, in part due to deposit and wholesale costs having come down and access to both types of funding having improved.

As shown in Exhibit 4, efficiency gains throughout the consolidation process, the reduction of employees and branches, for example, have also helped to secure further cost cuts to compensate for compression of interest margins. According to the Bank of Spain, since the start of the crisis, there has been a reduction in branches, employees, and banking groups of 30%, 25%, and 40%, respectively (Bank of Spain, 2015b). As

Exhibit 3

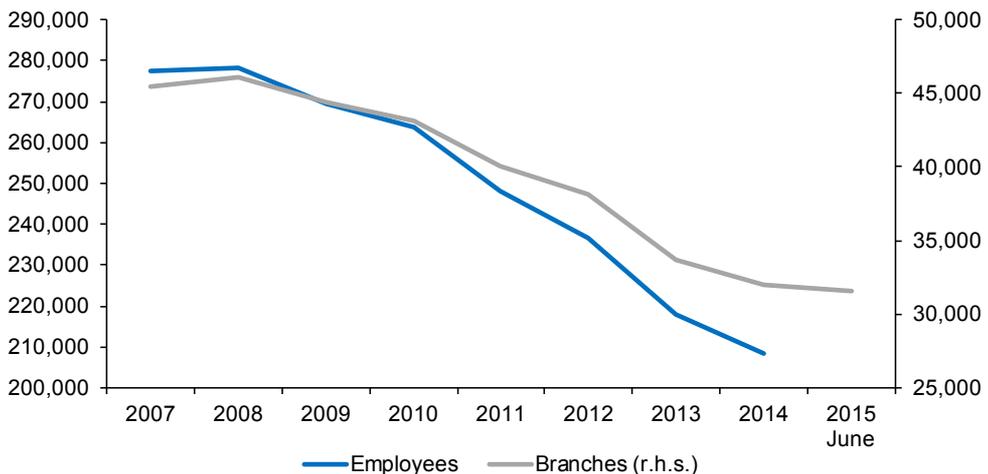
Provisions in the banking system



Source: Bank of Spain.

Exhibit 4

Employee and branch reductions



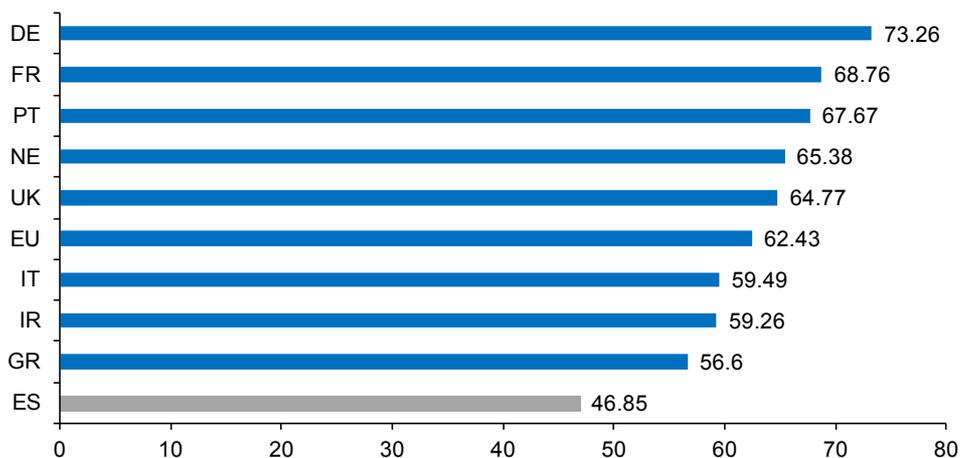
Source: Bank of Spain.

a result of a combination of these factors, as we see in Exhibit 5, Spanish banks' cost to income ratios today are among the lowest in Europe (Maudos, 2015).

Despite the improvements mentioned above, Spanish bank profitability remains below levels needed to secure long-term sustainability and should continue to improve over the medium-term.

Exhibit 5

**EU comparative cost to income ratio, June 2014
(Percentage)**



Source: ECB.

Under improved prospects for the sector, Spanish banks are well-positioned to benefit from euro depreciation and the economic cycle. However, future profitability of the Spanish banking system faces major challenges and risks.

Low interest rates, weak credit demand and concerns over the quality of Spanish banks’ loan portfolios constitute some of the key challenges for profitability over the coming years.

The low interest rate environment poses a particularly relevant threat to Spanish banks’ profitability given their high exposure to retail lending and to floating rate mortgages. Under the falling interest rate scenario, the latter are being reset at lower rates simultaneously with the elimination on interest rate “floors clauses” on some mortgage loans (IMF, 2014). Moreover, as recently pointed out by the Bank of Spain, despite improvement, low interest rates are reducing Spanish banks’ profitability as they result in ROE below estimated cost of capital. Furthermore, the sustainability of margins depends on sufficient banking activity to compensate for the reduction in prices. While activity is increasing, it

remains today at reduced levels. Finally, although the economic recovery has helped bring about a reduction in NPLs, NPL ratios and the volume of foreclosed and impaired assets on banks’ balance sheets remain high (Bank of Spain, 2015b). The European Commission (EC) raises further attention to this issue in its ex-post evaluation of Spain’s financial assistance program. According to the EC, despite the significant reduction in the absolute value of NPLs, the quality of banks’ loan portfolios remains weak as reflected in NPL ratios above 10% of total loans (EC, 2016).

The recent profitability improvement also masks remaining weaknesses in some of the banks and there is wide variation across entities. Recent data show several banks recorded ROE close to 3%, while others, among them the larger, more internationally diversified banks, recorded levels significantly above the sector average. As highlighted by the Bank of Spain in its latest Financial Stability Report, profitability for the sector as a whole has also been supported by the international activity of some of the larger banking groups (Bank of Spain, 2015a). At the same time, as the IMF points out, the deteriorating

outlook for EM may cause some instability for banks' with significant exposure to these markets, in particular in Latin America, although exposures elsewhere should provide some diversification against these risks (IMF, 2014).

Finally, banks were also able to record capital gains from earnings obtained from the carry trade, where lower interest rate ECB funds were used to finance public debt purchases – a strategy that will be difficult to repeat in the context of expected sovereign spread compression.

Regulatory burden appears manageable

The level of capitalization of the Spanish banking system has significantly improved. Nevertheless, solvency levels remain below the majority of European peers and some banks may tap capital markets in the near-term to compensate for the anticipated phasing out of certain instruments currently still qualifying as regulatory capital.

Capital injections and loan-loss provisions (in 2012 and 2013 in the case of the former and since

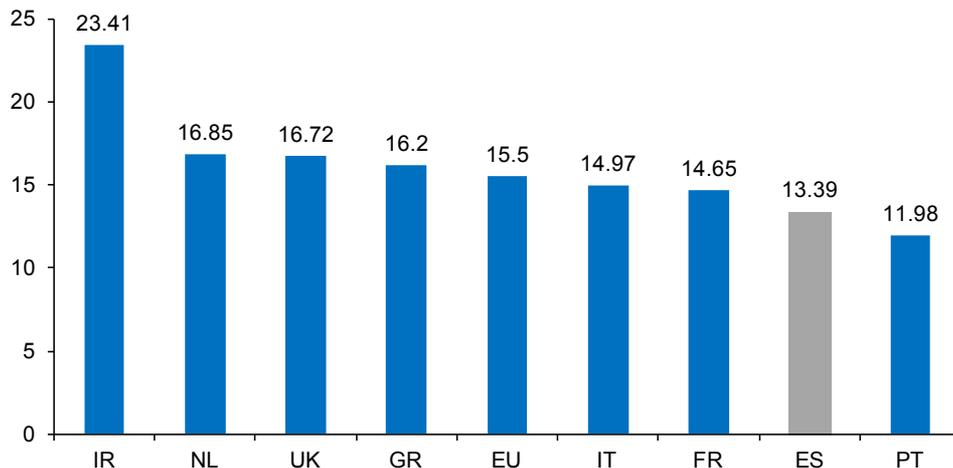
2008 in the case of the latter), together with other balance sheet adjustments, allowed the Spanish banks to pass the 2014 stress tests conducted by the ECB and EBA.

As of June 2015, latest available data confirm that the Spanish banking sector's solvency levels are above the minimum regulatory levels required. At June 2015, the common equity tier 1 (CET1) of Spanish deposit institutions stood at 12.4%, over 80 basis points above the June 2014 level, above the minimum regulatory requirement of 4.5%. The total capital ratio stood at 14.3% at June 2015, increasing similarly to the CET1 ratio from June 2014 and also above the 8% required level (Bank of Spain, 2015a). As regards the ECB's solvency requirements for the coming year, most banks that have published their results appear to be in line with stipulated ratios.

While capital ratios across the Spanish banking sector have improved, they remain below most of their European peers (See Exhibit 6). Also, as in the case of profitability, the sector average covers up lower CET1 ratios recorded by some

Exhibit 6

Comparative EU and Spanish solvency, June 2014



Source: ECB.

entities, which for example have levels near 10%, or notably below the 12.4 average (EC, 2016).

Moreover, the Bank of Spain just set requirements at end-December of a 0% countercyclical buffer and between 0-0.25% for systemically important institutions. In addition, European regulators seem to be more eager for EU banks to increase capital requirements closer in line with the new Basel III ratios than their US counterparts. These considerations, together with anticipation that regulators will continue to phase out from capital

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considerations assets currently still considered high quality capital, could mean that some Spanish banks may choose to boost capital ahead of the end of the Basel III implementation period. This will probably take place this year through some banks tapping Additional Tier 1 (AT1) markets. Further capital increase may also take place should some of the former *Cajas* raise fresh capital in an effort to dilute the controlling stake of the banking foundations that own them (Standard and Poor's, 2016).

On the whole, the impact of Basel III on the Spanish banking system, at least over the near to medium term, is expected to be less burdensome than for some other financial systems due to the typically lower risk profile of most Spanish banks and their reliance on a more traditional banking model. The challenges they will face for profitability and credit growth will be more related to economic conditions and the impact of deleveraging on new credit flows.

Digitalization not far away from most European peers but room for improvement in penetration of alternative finance

Digitalization trends

Over the next few years, the implications of the digital disruption on banks' bottom lines are going to be huge. McKinsey estimates that at present, only 10 percent of the revenues of a typical European bank are subject to digital disruption, defined as a majority of new revenue being derived from either online or mobile channels. As shown in Exhibit 7, by 2018, this figure is expected to rise to above 50% in many major geographic areas, with products such as loans and payment services particularly affected (McKinsey, 2015).

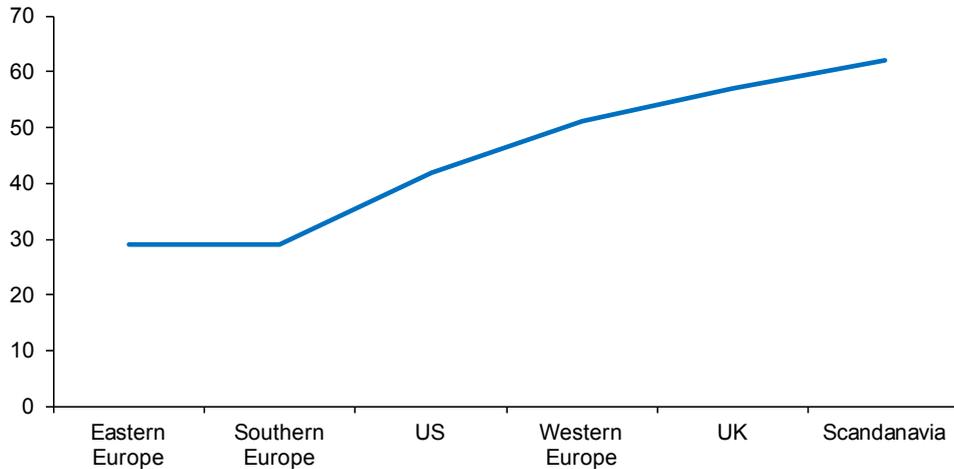
In Europe, however, many retail banks have digitized only 20 to 40 percent of their processes; 90 percent of European banks invest less than 0.5 percent of their total spending on digital (McKinsey, 2014).

Although there is not a great deal of reliable information allowing us to quantify the level of digitalization in Spain, industry experts agree that outside of some of the Nordic countries and the UK, Spanish banks' level of digitalization is in line with most of its European counterparts. Nevertheless, there are obvious differences among the level of digitalization among the smaller Spanish banks relative to larger institutions, who are generally more innovative in this space. Despite the fact that the costs of digitalization are typically scalable and cost-efficient for small institutions, smaller banks appear to be lagging behind their larger competitors, in part due to cultural differences and less flexibility in management of existing resources.

According to a recent survey report published by IESE Business School and Synpulse management consulting firm, which surveyed 40% of the Spanish banking population in the first quarter of 2015, many banks appear to have planned and begun executing a digital strategy. However, there are some identified gaps between

Exhibit 7

Estimated global digital revenue penetration by 2018 (Percentage)



Source: McKinsey & Co.

Spanish banks' intentions on the one hand and transformation readiness on the other, such as: still heavy reliance on physical branches rather than automated channels to manage customer relationships; complex, outdated IT platforms that lack the required agility for digital IT transformation; and, too great a focus on digitalization of back-end operations, rather than front-end customer operations and services (IESE, Synpulse, 2015). Finally, regulatory uncertainty and lack of regulatory coordination across the EU is further complicating the transition to a digital financial services economy in Spain and in Europe as a whole. In the meanwhile, as regards adoption of new technologies, taking as an example the case of DLT, in the words of a former central banker, *they must be allowed to develop and industry players able to experiment without risk. In a country like Spain, where the administrative burden is high, DLT could be very important.*

Penetration by non-bank financial service providers

In Spain, empirical evidence reveals that penetration of non-financial services players is still

quite low. According to BBVA Research, *whether a factor of the regulatory climate, customer profiles (distrust or lack of awareness over alternative financing sources), or a combination of all of these factors, Spain remains primarily reliant on traditional banking intermediation services to a higher degree than many of its EU peers.*

In sum, the process of bank digitalization in Spain appears in line with most of its EU counterparts, although UK and Nordic countries are perceived to have more highly digitalized banking services. At the same time, non-financial service providers' penetration levels in Spain appear to be below that of other EU peers, mostly as a function of the competitive advantage maintained by Spanish banks, together with customer preferences.

Conclusion

The current pressures on the global and Spanish financial system are intense. At the macro level, the principal challenge for the financial industry remains the unique macro environment, characterized by a prolonged period of low interest rates and the implications for banks' profitability.

At the regulatory level, in the wake of the crisis, the need for stricter financial regulation, largely in the form of higher capital requirements and supervision, is adding pressures to banks' bottom lines, and could restrict lending.

Finally, technological change, such as the rise of alternative finance and distributed ledger technologies are also playing a disruptive role by increasing competition against the traditional banking model, introducing both threats and opportunities.

All of these factors combine with the fact that financial entities today are fighting to reestablish their public image.

For the case of the Spanish banking sector, some of these pressures, such as low interest rates, are particularly intense, given reliance on the retail focused, traditional banking model. At the same time, the traditional model works in favour of the Spanish banking system as regards reducing negative implications on profitability from increased capital requirements.

In the current environment, Spanish banks will have to reassess, rethink, and reshape their business models to further increase profitability and face regulatory challenges, in part by taking advantage of their competitive position to break into new areas, such as alternative lending and other financially innovative technologies.

The strategies adopted by banks should include additional efficiency gains, and changes to their existing business models through, among other things, the divestiture of non-profitable assets/activities and the adoption of new technologies and strategies to counteract some of the pressures to which they are currently being subjected.

Although the recent restructuring process has resulted in a considerable consolidation of the Spanish banking sector, low profitability levels could prompt another round of consolidations – in

line with recommendations from both Spanish and European regulators. Nevertheless, under current circumstances, these changes are unlikely to be imminent nor do we expect their impact on the sector to be particularly transformational.

Moreover, as pointed out by Carbó y Rodríguez (2016), *at the geographical scale at which retail financial services compete, the degree of concentration is not as important as the contestability or competitive intensity between rivals at the provincial or regional level.*

This suggests that banks should contemplate alternatives in addition to consolidation as a means of improving their profitability as well as addressing other outstanding challenges.

Finally, Spanish banks must not fall into complacency. They must maintain their competitive advantage within the Spanish retail banking system, but at the same time move forward on initiated deep structural reform, maximize recovery value from the sale of entities still under control by the FROB, complete the restructuring process and continue with efforts to improve the overall quality of their balance sheets. In parallel, the SAREB should continue to move forward with its objective of management and selling of distressed assets. This should allow for the emergence of a stronger, more efficient and more resilient financial sector for the future.

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