The New Importance of Risk-Weighted Assets across Europe
The new regulatory framework that was introduced after the recent financial crisis will increase the level and quality of capital ratios for the banking system. The goal is to improve the banking sector’s ability to absorb shocks from financial and economic stress. But to achieve that, these capital ratios will need to be based on accurate risk measurement that allows for proper comparison across institutions and geographies. That gives new importance to the consistency of the underlying risk-weighted assets (RWAs).

Until recently, there has been only muted debate on the consistency of RWAs across banks and geographies. Now several factors have elevated the issue to a higher priority.

The expected transition of the U.S. financial system towards Basel II and Basel III has revealed substantial divergences in the ratio of RWAs versus total assets between the U.S. and Europe.

An increase in domestic capital requirements beyond the new minimum required by Basel III is in effect or under consideration in some countries, with reasons ranging from crisis management to reinforcement of solvency for large institutions.

The use of internal-risk based (IRB) models over the last three years has made some global banks aware of significant divergences in the risk treatment of the same banking products and business lines in different countries. Doubts are mounting over the consistency of validation and approval processes of these models across nations.

The financial crisis underscores the need for proper risk valuation. Higher capital surcharges will probably not be enough to avoid financial crises in the future. However, incentives for prudent risk management will play a major role in safeguarding financial stability. A more consistent framework for RWAs, avoiding undue distortions in their assessment, will support this target.
Movement on this issue has been limited up to this time. But empirical evidence now makes it clear that significant divergences exist in RWA density across banks, not only between the U.S. and Europe but also within Europe. Accenture has identified the following key factors behind these differences:

- risk profile (including business model, macro and institutional factors);
- risk management (including all decisions adopted by banks around risk monitoring, recovery practices and modeling choices in the case of financial institutions using IRB models); and
- supervisory practices.

To regain trust in these risk weightings, the banking industry is looking at two different types of approaches, which Barclays’ Research has coined “hard” and “soft” solutions:

### Hard solutions
- Abandon IRB and move to the standardized approach
- Promote use of the leverage ratio

### Soft solutions
- Peer group review
- Global regulator review of risk weightings
- Introduce or increase minimum floors
- Improve disclosure on “through-the-cycle” durations of default calculations

Whatever solution the industry agrees on, it seems advantageous for all banks to implement a new framework that might enable them to put a continued focus on RWAs. That would include:

- better understanding of the dynamics and drivers;
- reporting capabilities both internal (within the bank) and external (regulators and investors);
- full integration into the annual planning process;
- frameworks to monitor and control the evolution of RWAs on an ongoing basis;
- forecasting and simulating processes; and
- support from robust analytical capabilities.

In this paper we explore three points for consideration: 1) The empirical evidence on the evolution and current developments of RWAs; 2) The key determinants of RWAs; and 3) The steps to regain trust in risk weightings. We conclude with summarizing observations and information on how Accenture can help.
Analysis of Empirical Evidence

According to the Basel Committee for Banking Supervision, and a risk management best practice principle, accurate risk valuation requires that all the different business lines and products within a bank be qualified in terms of their level of risk. Broadly considered, the ratio of RWAs over total assets, a standardized measure of the density of RWAs within an institution, will likely evolve over time and across institutions reflecting different risk profiles and mutating macroeconomic conditions. This is especially true under the Basel II agreement. Against this background, RWAs could be analyzed in two dimensions: time and cross-sectional.

Time dimension analysis

RWA density has shown a downward trend over time, barely modified by the unfolding of the financial crisis in 2007. As shown in Figure 1, from the beginning of 2000 to 2010, a weighted average of RWAs for a broad sample of U.S. and European banks fell from 44% to 39%. This trend was throughout all jurisdictions. For European Monetary Union (EMU) banks, RWA density dropped from 40% to 33%. For U.S. banks the reduction was from 74% to 58%; for British banks, from 51% to 36%; for Swiss banks from 25% to 18%. Figure 2 shows a wider sample of banks, including institutions from Canada, Australia, Japan and continental Europe. The evolution is similar in all these geographies.

Changes in business models

The downward trend in RWA density is most likely related to changes in business models, with the redirection of activities from more risk-weighted products and business lines to less risk-weighted activities, regardless of the regulatory framework. In general, loan activity over total assets has been reduced during the last decade, due to greater competition and a search for yield that leads to higher diversification on bank balance sheets. Because credit risk accounts for most of the RWA requirements, the reduction in total density of RWAs over total assets could be partly a result of this reduction in loan activity share. Significantly, the introduction of Basel II in 2008 does not suppose a change in the evolution of RWAs. Even with a three percentage point reduction in RWAs, this change is similar in magnitude to what occurred in 2005. In view of this, there is no clear evidence of a link between the introduction of IRB models and the downward trend in RWA density.

Lack of pro-cyclicality of RWA

More remarkable than this persistent downward trend in RWAs over total assets is the lack of pro-cyclicality of RWAs during the crisis. This is widespread and puzzling. As is well-known, broad consensus emerged on the additional pro-cyclicality of capital under Basel II some years ago in countries committed to applying the new regulation. Here are some possible explanations for this behavior.

• Most institutions may have undertaken a significant deleveraging process, focused primarily on more risky assets.
• Different business strategies could possibly have been carried out to optimize RWAs.
• Widespread use of different techniques for mitigating cyclical could also have played a role. This may have been an overreaction to concerns over excessive pro-cyclicality that dominated in the period prior to the implementation of Basel II and, by ill-timed coincidence, to the unfolding of the financial crisis.
Source: Financial reports of individual banks.
* Weighted average of the following banks: for Germany (GR), Commerzbank and Deutsche Bank; for the US (USA), Wells Fargo, Bank of America, JP Morgan, Goldman Sachs, Morgan Stanley and Citibank; for Spain (SP), Santander and Banco Bilbao Vizcaya Argentaria; for France (FR), BNP Paribas, Crédit Agricole and Société Générale; for the Netherlands (NETH), ING; for Italy (IT), Intesa Sanpaolo, Banca Monte dei Paschi di Siena and UniCredit; for the United Kingdom (UK), Royal Bank of Scotland, Hong Kong and Shanghai Banking Corporation, Barclays and Lloyds Banking Group; and, finally, for Switzerland (SWIT), Crédit Suisse and UBS.

Source: Financial reports of individual banks.
* Weighted average for each country. Apart from banks considered in chart 1, we include the following banks: for Canada (CA), Bank of Nova Scotia, BMO Financial Group, Canadian Imperial Bank of Commerce, Canadian Western Bank, Royal Bank of Canada and Toronto-Dominion Bank; for Australia (AUS), Australia and New Zealand Banking Group Limited, Commonwealth Bank of Australia Group, National Australia Bank Group and Westpac Banking Corporation; and finally for Japan (JAP), Mitsubishi UFJ Financial Group and Mizuho Financial Group.
• Forbearance of some supervisors in a backdrop of fierce competition for capital might also have been present during this period. In this sense, some changes in IRB models within a single bank from point-in-time default probabilities to through-the-cyle calculations in the middle of the crisis could have been considered as a way to avoid upward pressure on RWAs.

To better understand behavior during the crisis, we have plotted the change in total assets from 2007-2010 against the change in RWAs for the same period. Some differences emerge, as shown in Figure 3, pointing out different patterns of behavior.

• A group of institutions have been in a deleveraging process all through the crisis, getting rid of more risky assets, thereby reducing the density of RWAs over assets. This is particularly so in the case of Swiss banks, most likely encouraged by their domestic authorities.

• Among the banks that have increased in size during the crisis, the evolution is significantly different, with reductions or very limited increase in RWAs in most cases, and with just a small group of banks increasing RWAs above the rise of their total assets. Further insight on whether some institutions reduced their risk profile or some other factors helped reduce RWAs will provide some clues on this puzzling cyclical behavior of RWAs.

Even so, this pattern of behavior should not be considered separately from RWA density in the period before the crisis. Banks in fierce competition for capital most likely had very low RWA density and were more likely to increase this density throughout the crisis.

Still, empirical evidence does not fully support this result. Taking into account the initial level of RWA density, with the exception of U.S. banks (where a significant reduction of RWA density occurred, starting from very high RWAs in terms of GDP), there is no evidence that during the period 2007-2010, there was a greater convergence. In particular, European banks show greater divergence than before, as illustrated in Figure 4.

Cross-sectional dimension analysis

While the evolution of RWA density shows a clear downward trend over the last decade, the differences in the level of RWAs over total assets across different jurisdictions persist during the whole period. As shown in Figure 5, significant divergences occur across different geographies. In fact, divergences among continental European institutions are quite remarkable. German and Swiss banks have lower density of RWA, followed by French and Dutch banks. Conversely, Spanish and Italian banks have higher density of RWAs. Outside Europe, Australian and, to a lesser extent, Japanese banks also display higher RWAs than the average. Several factors account for these differences, as we describe in the next section. Chief among them: risk profiles, risk management and supervisory practices across different geographies.

Figure 3. Cumulated change in total assets and RWAs during the period 2007-2010 for a sample of European and U.S. banks*

Source: Financial reports of individual banks.

* Wells Fargo and Lloyds Banking Group are not included in this figure. Both of them doubled their size during this period due to corporate mergers. Banca Monte dei Paschi di Siena also increased its size significantly, but without an increase in RWAs. For Goldman Sachs and Morgan Stanley, the considered change refers to the period between 2008 and 2010.
Figure 4. RWAs over total assets in 2007 and cumulated change during the period 2007-2010 for sample of European and U.S. banks*

Source: Financial reports of individual banks.
* For Goldman Sachs and Morgan Stanley, the change is calculated between 2008 and 2010.

Figure 5. RWAs as a percentage of total assets by countries, 2010

Source: Financial reports of individual banks.
In other words, while over the last few months the focus of RWAs divergences has been on the transatlantic debate, the issue is not limited to these two areas.

Focusing on the U.S. and Europe, it is remarkable that, on average, U.S. banks show higher density of RWAs than their European peers. There are at least two possible explanations for this divergence, though there may be others as well.

Accounting divergence

The first possible explanation is accounting divergence. Whereas European banks use IFRS (International Financial Reporting Standards), U.S. banks release their balance sheets using U.S.-GAAP (Generally Accepted Accounting Principles). Some useful information to assess this factor can be found in the Deutsche Bank summary balance sheet published under both U.S.-GAAP and IFRS. According to this summary, the total assets of Deutsche Bank amounted to €1,906 billion under IFRS in the fourth quarter of 2010. Under U.S.-GAAP, after excluding derivatives netting, existing and pending, and reverse repo netting, the adjusted assets amount to €1,210 billion, achieving a balance sheet reduction of about 37%. RWA density would increase from the observed 18% to close to 29% when the U.S. accounting standards are considered. Conversely, adding netting agreements to total assets in a U.S. bank such as JP Morgan would increase assets from $2,118 billion to $3,567 billion, reducing its RWA density from 55% to 33%.

These examples are only for illustrative purposes, but they could indicate that, due to accounting principles, the total assets of European banks are significantly higher than U.S. banks, leading to significantly lower density of RWAs. Adjusting for this, a significant portion of this divergence would vanish.

Business Model

The second possible explanation for the divergences between U.S. and European banks is their business model. Splitting the activity into wholesale and retail banking, risk weights in the wholesale business are roughly comparable between the U.S. and Europe. However, most analyses have shown that risk weights for retail banking are the main cause of divergences in RWAs, such as those of Citigroup (2011) and Bernstein Research (2011). A loan breakdown reveals a higher share (in terms of contribution to the RWAs) of mortgages and consumer credit among U.S. banks and a lower level of corporate loans than European banks. Regarding mortgages, U.S. banks normally securitize a significant portion of their mortgage portfolios, removing best quality and low-risk loans from the balance sheets. The remaining mortgages on their balance sheets are normally those with a lower rating, and as a result a higher risk weight. With a minor but significant impact, U.S. banks are also involved in the credit card business, with a very high risk weight.

As a result of these two elements, total risk weight in retail banking is normally higher in the U.S. than in Europe.

As U.S. banks are primarily regulated to a nominal balance sheet regime, they are attracted to activities with high return-on-asset (ROA). European banks on the other hand are attracted to low RWAs, reflecting their regulatory regime (based on Basel II). Two different regimes, two different perspectives.

In sum, most of the differences between the U.S. and Europe could be due to accounting divergences and business models. Alternative explanations could also be: the magnitude of banking losses in the U.S., clearly greater during the last crisis due to write-downs in the European banking sector; and the implementation of Basel II and the use of IRB models in Europe, creating more room to maneuver in the assessment of RWAs, (the U.S. has yet to adopt Basel II).
Identification and analysis of the key determinants of RWAs is no easy task. Accenture classifies them according to three different groups of factors: first, bank risk profile, which encompasses business models and all the institutional and macroeconomic factors that determine risk for the entire financial industry within a particular jurisdiction; second, risk management in a broad sense, including all decisions adopted by banks in relation to risk monitoring, recovery practices and modeling choices in the case of those financial institutions using IRB models; and third, a group of factors including supervisory practices in different jurisdictions, which are more crucial for banks using IRB models. The following are brief descriptions of each. We look at whether these factors lead to justifiable divergences in RWAs and to what extent they should be adjusted to avoid distortions in the assessment of risk weights.

**Risk profile**

Each financial institution has a different risk profile. This results from several interconnected elements ranging from individual choices, such as business models, to macroeconomic and institutional factors that determine the nature of risk taken by the bank. Both micro and macro factors determine the risk profile of a particular institution.

Institutional factors, which differ from one jurisdiction to another, will lead to legitimate differences in RWAs across countries. These divergences are due to legal frameworks including bankruptcy laws, foreclosure practices, market practices such as the existence of specialized lenders in some segments, conventions in underwriting standards and the level of competition within the banking sector. Regulatory elements are also in this category; for example, rules regarding the level of Loan-to-Value (LTV) or accounting policies, play a major role in risk profile. A case in point is the role of loan provisions, with significant divergences across jurisdictions. Other institutional factors will also alter the risk profile, such as the existence of a home loan guarantee agency (such as Crédit Logement, established in France in 1975 and with banks as the main stakeholders).

Macroeconomic factors also have a bearing on risk profile within the financial services industry. Loss rates in different economic sectors, the growth and volatility of GDP, employment and the level and volatility of interest rates are important indicators of the aggregate risk profiles of financial services companies.

Individual company choices are most likely the principal factors affecting the evolution of RWAs. In particular, the portfolio mix and the geographic mix will shape the risk profile of each institution. A significant correlation can be found between loans as a share of total assets and the density of RWAs. Figure 6 shows the breakdown of RWAs over total assets for European banks. As is shown, the RWAs for credit risk (the first two bars of Figure 6), is the most important component of RWAs. Two elements constitute this component:

- the weight of loans in total assets (reflecting the business model);
- the credit risk over loans.

Specifically, the business model accounts on average for slightly more than 50% of the total RWA density, with significant variations across institutions.

† The RWA density was calculated using the following algorithmic formula; \[ \text{RWA/TA} = (\text{RWACR/L})*(L/BB)*(BB/TA) + (\text{RWAMR/TB})*(TB/TA) + (\text{RWAOP/TA}); \] where the business model is represented by \((L/BB)*(BB/TA)\).
Within the credit portfolio, changes in composition also determine significant divergences across banks. Banks with a high portion of corporate loans, especially to small and medium enterprises, should have a higher RWA density.

After reviewing all these factors, we conclude that most of the divergences in risk profiles are unavoidable and justifiable, and they effectively constitute a major determinant of the differences in RWAs. The main issue to be addressed going forward is the extent of these divergences.

Calibrating the impact of institutional, macroeconomic and business model factors on RWAs is a complex task. But a preliminary assessment would suggest that existing divergences in RWAs within the same type of loan portfolio are too large to be explained by these expected factors. Other factors apart from risk profile should be considered in explaining the extent of these differences.

**Risk management**

Decisions made by each bank to manage and calculate risks are important, especially considering that Basel II recommends more appropriate risk measurement. Different policies across banks in terms of credit analysis, monitoring and recovery, and tools for discriminating clients/operations according to risk appetite have an impact on the major risk parameters, and, in particular on probability of default (PD) and loss given default (LGD). This gives a crucial role to the assessment of RWAs.

Recovery practices make a significant difference across financial institutions. Very often when different banks share a loan with the same firm, RWAs are lower for those banks with a higher recovery rate. Therefore banks will benefit from their recovery track record and, in this way, achieve a lower risk weight in these syndicate operations.

Since the implementation of IRB models following Basel II, modeling choices have become another strategic variable in gauging risk management. The quality and quantity of historical portfolio data or the features of some portfolios make methodological choices important in the assessment of risk. In the understanding that these modeling choices are prudent and respect the principles of an accurate risk assessment, they could account for justifiable divergences across banks.

Whereas risk management as a whole is not considered a very important factor in the divergences in RWAs across banks, it does create incentives for innovation in risk technologies and IT systems and for advances in risk monitoring and recovery practices. The benefits gained could compensate for any potential shortcoming. Quantifying these factors requires detailed information of the risk management practices of different institutions.
Supervisory practices

Based on the experiences of global banks, it is possible to identify a comprehensive list of factors that, during the validation and approval processes of IRB models, increase the divergences in the calculation of RWAs. It is preferable to focus on the specific elements that could drive these discrepancies. Chief among them are the following.

- Different criteria for cycle adjustment are applied in different jurisdictions. Some jurisdictions use through-the-cycle models in their assessment of PD, while others choose point-in-time methodologies. Others implement hybrid approaches. However, the use of common criteria for cycle adjustment can increase consistency.

- Establishing minimum criteria for the acceptance of IRB models for some activities, for greater harmonization across countries.

- The definition of downturn. The calculation of downturn LGD and exposure at default (EAD) poses a challenge for most financial institutions and supervisors. Several approaches have been put in place using different cyclical indicators as reference, e.g., GDP growth and output gap. After the experience of recent years, a review of current methodologies should be considered, assessing whether these calculations make sense or not across the different jurisdictions.

- Differences between expected losses and provisions across countries create differences between local and consolidated ratios for global banks. The treatment of non-performance loans has been extremely diverse across countries, giving rise to possible significant divergences in total RWAs.

- The segmentation of portfolios included in IRB models, as there is a trade-off between data availability and richness versus data homogeneity. For this reason, some supervisors prefer a broader sample of data in each segment, thereby splitting the portfolio into a limited number of segments. Others choose a greater number of segments.

- Global banks located in different countries benefit from the use of common criteria for the methodology and approval of models for their global portfolios (e.g., sovereign debt, financial institutions, global corporations). Supervisory bodies are expected to play a major role in this process, limiting room for discretion at the domestic level.
Steps to Regain Trust in Risk Weightings

Divergences in RWAs are to some extent justifiable due to different risk profiles and risk management. But that is hardly the end of the matter. Gauging the appropriate magnitude of these divergences at an international level will take time and require a more complex analytical framework. Institutional and macroeconomic factors should play a significant role in explaining divergences in RWAs across countries. And quantifying these factors will require detailed and comparable information from different financial institutions and jurisdictions.

Complex and demanding as the work ahead is, it is critical. Finding a satisfactory approach to defining RWAs is perhaps the most important issue for key stakeholders. If confidence is not restored among investors, rating agencies, regulators and analysts, the implications for the European bank sector could be profound and serious. That is why banks are envisioning a series of soft and more radical hard solutions to address the issue. We first explore the hard solutions and then discuss the soft options.

**Hard solutions**

**Abandon the IRB approach**

To restore credibility in the RWA calculation, banks might consider a return to the standardized approach. Banks would have to place their exposure into one of 18 risk buckets depending on the external credit rating. (See Figure 7).

There are several advantages to adopting the standardized approach.

- It provides a transparent audit trail for investors and analysts, strengthening their confidence in the resulting RWAs.
- It helps banks retain a degree of risk sensitivity for corporate lending (excluding mortgages). Instruments with lower credit need more capital and vice versa.
- A return to the standardized approach would involve a loss of credibility for the Basel Committee, and would be contrary to the goal it set to allow banks full self-regulation using complex models with no standardized approach.

The Pillar 3 disclosures allow banks to estimate the impact of a return to the standardized approach on capital ratios. Figure 8 summarizes the impact on a sample of European banks.
**Figure 7. Risk weighting buckets under the Basel II Standardized Approach**

<table>
<thead>
<tr>
<th>S&amp;P Credit Rating</th>
<th>Sovereigns</th>
<th>Financial Institutions*</th>
<th>Corporates</th>
</tr>
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<tbody>
<tr>
<td>AAA</td>
<td>0%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>AAA-</td>
<td>0%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>AA+</td>
<td>0%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>AA</td>
<td>0%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>A+</td>
<td>20%</td>
<td>50%</td>
<td>50%</td>
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<tr>
<td>A</td>
<td>20%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>A-</td>
<td>20%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>BBB+</td>
<td>50%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>BBB</td>
<td>50%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>BBB-</td>
<td>50%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>BB+</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>BB</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>BB-</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>B+</td>
<td>100%</td>
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<td>150%</td>
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<tr>
<td>B</td>
<td>100%</td>
<td>100%</td>
<td>150%</td>
</tr>
<tr>
<td>B-</td>
<td>100%</td>
<td>100%</td>
<td>150%</td>
</tr>
<tr>
<td>Below</td>
<td>150%</td>
<td>150%</td>
<td>150%</td>
</tr>
</tbody>
</table>

* Option 1 – Use sovereign rating minus one RW category
AAA to AA-: 20%, A+ to A-: 50%, BBB+ to B+: 100%, Below B-: 150%, Unrated: 100%
Source: Basel Committee on Banking Supervision

**Figure 8. Impact of moving from IRB to a Standardized Approach**

![Bar Chart showing Core Tier 1 Ratio, "Fully Loaded", 2013 for various financial institutions.](chart)

*Post Move to Standardized Approach vs Current (under IRB Approach)*

*Not covered, based on company consensus
Source: Barclays Research
According to an analysis conducted by Barclays Research, it is estimated that such a move could reduce Basel III Core Tier 1 ratios by 2.3 percentage points. As shown in Figure 9, for the sector overall, a return to the standardized approach could add €2.14 trillion to RWAs, a 31% increase. This would lower the fully loaded Basel III Core Tier 1 ratio from 9.9% to 7.6%, with corporate lending accounting for 60% of the reduction and where the average risk weighting would increase from 48% to 86%.

### Soft solutions

#### Peer group review

In this possible solution, local regulators would cross check each other’s RWA estimates. This was hinted at by the chairman of the Financial Services Authority, and with the Basel Committee chairman stating that the new Basel III rules leave much national discretion over defining RWAs. However, it is uncertain if such an approach will make investors more comfortable with RWA calculations unless it leads to a harmonization of RWAs.

Unfortunately, most regulators believe they are properly calculating RWAs, so it is highly unlikely to expect any change on their part anytime soon. In addition, there is also significant discretion within Pillar 2 for local regulators to manually override the Basel calculations, an opportunity that may not be apparent during a peer review.

#### Global regulator review of risk weightings

If regulators believe they are properly calculating RWAs, thought should be given to having a recognized global regulator conduct the review process. The Basel Committee for Banking Supervision already has a Standard Implementation Group capable of conducting such a review. The European Banking Authority could be approached to undertake such a task. While their directive would be European, this should not be a major concern since U.S. banks are presently operating under Basel I and in Asia, there is less regulatory focus on these issues. Here too, under this option, local regulators would have to change the way they calculate risk weightings.

### Introduce or increase minimum floors

Another option available to banks is to introduce or increase their minimum floors on RWAs, on capital ratios or within the IRB formula. The effectiveness of each is dependent upon the objectives, however increasing floors on the IRB approach could inspire banks to be more careful and conservative because of the lower RW and capital requirements in comparison to the standardized approach.

- **LGD:** Under this option and in some countries, consideration should be given to the 10 percent LGD floor top up based on experience.
- **M (Maturity):** Consideration should be given to avoiding the catch-all 2.5 year average maturity under F-IRB, as it may not adequately express the duration of most retail bank’s mortgage books.
- **RW:** Banks may want to consider introducing minimum floors (including temporary ones) on asset classes

### Sector €m

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Current Risk Weighting Under IRB</td>
<td>Estimated Risk Weighting under Standardized</td>
<td>Addition to RWAs</td>
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<tr>
<td>Sovereign</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Financial Institutions</td>
<td>18%</td>
<td>45%</td>
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<tr>
<td>Corporates</td>
<td>48%</td>
<td>86%</td>
</tr>
<tr>
<td>Mortgages</td>
<td>19%</td>
<td>35%</td>
</tr>
<tr>
<td>Revolving Credit</td>
<td>46%</td>
<td>75%</td>
</tr>
<tr>
<td>Other</td>
<td>36%</td>
<td>57%</td>
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<td>Change in “Fully Loaded” Basel III Core Tier 1</td>
<td>9,128,284</td>
<td>693,104</td>
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**Source:** Company reports, Barclays Research
<table>
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<tr>
<th>2013</th>
<th>Basel III Core Tier 1</th>
<th>Plus Leverage Ratio*</th>
<th>Equals Aggregate Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Corp</td>
<td>13% + 11%</td>
<td>= 23%</td>
<td></td>
</tr>
<tr>
<td>Comerica</td>
<td>10% + 11%</td>
<td>= 22%</td>
<td></td>
</tr>
<tr>
<td>PNC</td>
<td>11% + 9%</td>
<td>= 20%</td>
<td></td>
</tr>
<tr>
<td>Huntington</td>
<td>11% + 9%</td>
<td>= 20%</td>
<td></td>
</tr>
<tr>
<td>Fifth Third Bancorp</td>
<td>10% + 9%</td>
<td>= 19%</td>
<td></td>
</tr>
<tr>
<td>First Interstate</td>
<td>11% + 7%</td>
<td>= 19%</td>
<td></td>
</tr>
<tr>
<td>HSBC</td>
<td>12% + 6%</td>
<td>= 19%</td>
<td></td>
</tr>
<tr>
<td>UBS</td>
<td>13% + 5%</td>
<td>= 18%</td>
<td></td>
</tr>
<tr>
<td>Banco Popular</td>
<td>10% + 7%</td>
<td>= 18%</td>
<td></td>
</tr>
<tr>
<td>RBS</td>
<td>11% + 7%</td>
<td>= 18%</td>
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<tr>
<td>Suntrust Banks</td>
<td>10% + 8%</td>
<td>= 18%</td>
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<tr>
<td>BB&amp;T</td>
<td>10% + 7%</td>
<td>= 17%</td>
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<tr>
<td>Zions Bancorp</td>
<td>10% + 8%</td>
<td>= 17%</td>
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<tr>
<td>Wells Fargo</td>
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<td>= 17%</td>
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<tr>
<td>Banco Sabadell</td>
<td>10% + 6%</td>
<td>= 16%</td>
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<tr>
<td>JP Morgan</td>
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<td>Standard Chartered</td>
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<td>= 16%</td>
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<td>BBVA</td>
<td>9% + 6%</td>
<td>= 16%</td>
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<tr>
<td>Intesa Sanpaolo</td>
<td>10% + 5%</td>
<td>= 15%</td>
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<tr>
<td>M&amp;T Bank</td>
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<td>= 15%</td>
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<tr>
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<td>= 15%</td>
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<tr>
<td>Monte dei Paschi</td>
<td>9% + 4%</td>
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</tr>
<tr>
<td>Credit Agricole</td>
<td>7% + 2%</td>
<td>= 9%</td>
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</tbody>
</table>

*Core Tier 1 / Total Assets, excluding derivatives
Source: Barclays Research
affected by excessive growth, or on riskier asset types such as re-securitizations and volatile commercial real estate among others.

- Capital Ratios: The Basel II floor on the amount of capital required (80% of capital required under Basel I) could be prolonged for a longer period as they provide a safeguard against an excessive decline in minimum capital requirements.

Improve disclosure on “through-the-cycle” durations of default calculations

At the moment, there is still a gap in disclosure pertaining to the precise period banks are to use for their through-the-cycle definitions of the Probability of Default (PD), a key data input into the calculation of RWAs. According to a Barclays Research analysis, each 10 basis points change in PDs can add or subtract 20-25% to the risk weighting. And the 2010 Financial Services Authority Hypothetical Portfolio Exercise, which produced an important range in PDs and RWAs for the same exposure, also helped identify differences in "data period" as representing "the cycle" and possible driver of the variation.

Given the situation, Accenture suggests banks wait for the Basel Committee for Banking Supervision's Standard Implementation Group (SIG) to pronounce itself on the current national regulations which allow for the larger discrepancies in RWA calculations across different countries.

The SIG will be proposing the regulatory changes (after a thorough analysis) and the implementation of which should help reduce existing levels of discrepancies. However, banks are encouraged to take the time to explain and justify their own RWA figures in order to account for all possible discrepancies. Banks may want to link their RWAs and calculation factors used (PD, LGD, etc.) to operational levers (e.g., client segmentation, product portfolio, type of collaterals, average maturities, credit quality of counterparties).

This would allow banks to explain their RWAs by providing quantitative information on their operational levers and their impact on RWAs.

Banks will be challenged to find the analytical relationships linking the operational levers to the solvency regulation calculation factors. And given each bank's operational levers and sensitivities, explaining the link will also present challenges.

We believe banks would achieve greater confidence in RWAs by using operational concepts rather than just abstract calculations as it should be easier to justify differences in risk weightings if explained as a consequence of a specific characteristic of the portfolio.

Continued focus on the Management of RWAs

Whatever solution the industry ultimately agrees on, it's important to link this issue, the mistrust in RWAs, with the bigger picture. With the new economic environment that all banks face in the years ahead, re-regulation (new capital rules, etc.), and the new wave of transformation required to achieve a sustainable return on equity (ROE), one of the key elements of this larger picture will be the management of RWAs.

In this environment, Accenture believes banks should consider implementing a new framework which may enable them to have a continued focus on the RWAs.

That would include:
- better understanding of their dynamics and drivers;
- reporting capabilities;

Internal within the banks to enable all key stakeholders to understand, control and manage this metric.

External to regulators, investors and clients which may help banks justify their RWA levels and explain discrepancies with peers.

- full integration into the annual planning process at the same level as other financial metrics, income, capital, etc.;
- implementation of a comprehensive framework to monitor and control the evolution of the RWA on an ongoing basis; and
- establish forecasting and simulation (including stress test scenarios) processes.

All the functions and processes listed above should be supported by robust analytical capabilities.
As we move into an environment of more stringent requirements, accurate comparison of capital ratios becomes more important than ever. At the same time, we can expect more aggressive competition for capital. The aim for all concerned, given this backdrop, should be to preserve a fair risk valuation through a consistent framework for RWAs.

Much of the discussion around the consistency of RWAs focuses on the use of IRB models. But at present there is insufficient evidence to support this linkage, so these models should not be cast as the scapegoat for shortcomings in the assessment of RWAs.

One thing the financial crisis has made abundantly clear is the need for proper risk valuation. Higher capital surcharges will probably not be enough to avoid financial crises in the future. But incentives for prudent risk management can play a highly useful role in safeguarding financial stability. A more consistent framework for RWAs, avoiding undue distortions in their assessment, can contribute significantly to that goal.
How Accenture Can Help

Clearly change is on the way, and Accenture has a broad roster of capabilities to help banks manage their RWAs. We offer global experience, specialized professionals and tools and technology that enable our clients to meet the challenges of implementing a new framework for managing RWAs.

From strategy through execution, we offer deep and broad capabilities in:

- Risk Models
- Scenario-Based Modeling
- Risk Architecture and Data Management

Our risk management professionals offer talent and experience in areas including Model Reviews, Impact Studies, Business Strategy Impact, Risk Model Builds, and Risk IT and Design. We also have tools and intellectual capital that allow our clients to accelerate and improve the value they create for their enterprise. Among them:

- Capital Allocation Modeling Tool
- Risk and Finance Process Designs
- Regulatory Impact Assessment Tool
- Stress Test Diagnostic Tool
- Risk Architecture Definition Toolkit

Accenture has an extensive track record of completed projects which have assisted clients in shaping and implementing their business strategy, analyzing their risk-based models and refreshing their risk IT infrastructure.

We provide the capabilities to collect, model and analyze business information for better risk-based decision making, such as:

Scenario-Based Modeling. This improves insight on business plan value contribution, identifies emerging opportunities in a changing economy and covers regulations and risk capital and clients, e.g.:

- regulatory impact on business lines profitability and RWA consumption;
- business impact of stress testing deficiencies; and
- business impact on new product lines.

Risk Models. This enhances the understanding and ability to manage risks affecting performance and return, expands management’s risk-based decision making capabilities, and improves quality of decisions. It addresses:

- capital allocation strategies for RWAs, funding, and more;
- risk allocation, portfolio management.

Risk Architecture and Data Management. To support integrated risk identification, assessment & reporting into decision-making processes and establish Risk IT capabilities. Including:

- Target Operating Model
- Risk Process Optimization
- Risk Architecture Design
- Data Management

From our global work with clients, Accenture has a thorough understanding of how to help financial institutions manage the risks that come with doing business in today’s shifting world economy, including those associated to risk-weighted assets. We can work with you to help you keep up with change –and make better business decisions. Please call on us if we can help.
References


BNP Paribas, Equity Research (June 2011). “RWA to assets: BNP and JPM on a par?”


Barclays Research, Equity Research (July 12, 2011). “Saving Risk Weightings – How can European banks regain trust on risk weightings?”


About the Authors

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Josep Nadal is an executive director – Risk Management, Barcelona. With over 19 years of consulting experience and specialized in Risk Management and Finance for the banking industry, Josep leads large transformation projects around Basel III, and credit risk operating models and guides clients in their efforts to improve their risk capabilities.

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About Accenture Management Consulting

Accenture is a leading provider of management consulting services worldwide. Drawing on the extensive experience of its 16,000 management consultants globally, Accenture Management Consulting works with companies and governments to achieve high performance by combining broad and deep industry knowledge with functional capabilities to provide services in Strategy, Analytics, Customer Relationship Management, Finance & Enterprise Performance, Operations, Risk Management, Sustainability, and Talent and Organization.

About Accenture Risk Management

Accenture Risk Management consulting services works with clients to create and implement integrated risk management capabilities designed to gain higher economic returns, improve shareholder value and increase stakeholder confidence.

About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with more than 246,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US$25.5 billion for the fiscal year ended Aug. 31, 2011. Its home page is www.accenture.com.

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