

Box 4

EVALUATING DIFFERENCES IN BANKS' CREDIT RISK WEIGHTS

A growing chorus of analysts, investors and regulators have expressed concern about the murkiness of banks' internal models, including the complexity and opacity of risk-weighting formulas.¹ This has led to some loss of confidence in disclosures of banks' risk-weighted assets (RWAs). This box discusses how changes in risk weights affect key reporting such as solvency ratios and illustrates variations in risk weights across euro area LCBGs by utilising publicly available Pillar 3 disclosures.

The observed high variation in the level of risk weights applied by banks, in principle, should reflect genuine differences in underlying risk. Specifically, it should reflect differences in risk profiles across institutions (e.g. due to different business models, asset mixes or macroeconomic conditions). In practice, differences may arise also for less fundamental reasons – such as differences across countries in regulatory practices with regard to the implementation of Basel II rules or different modelling choices made by banks. Such practices could lead to unjustified differences between the capital positions of banks with loan portfolios of similar levels of risk. Indeed, variations and changes in risk weights – the multiplier applied to an underlying position to calculate RWAs – can have a significant impact on banks' capital ratios. For instance, a 25% change in risk weights for a bank with a 10% capital ratio changes the ratio by two percentage points. Such changes are particularly relevant for risk weights used for calculating RWAs for credit risk since they account for almost 85% of total risk-based capital requirements for euro area LCBGs.

An accurate comparison of overall risk weights across countries and banks needs to be drawn following a detailed granular approach with due care taken to account for specificities of business models and portfolio mixes. In addition, there can be sound reasons why banking book risk weights for a bank vary over time or why they vary across banks even for portfolios with similar risk profiles. For example, fluctuations in collateral values and differences within rating buckets (one bank might have exposures at the better end of a rating bucket) can explain differences in risk weights. Nevertheless, banks are meant to be calculating risk weightings using a probability of default over time which should smooth out the impact of credit trends in a single year.

While acknowledging the merits of such a granular approach, insights can also be gleaned from comparing more specific risk weightings across banks and especially changes over time.² In particular, detailed information can be found in euro area LCBGs' Pillar 3 reports on the risk weights for credit risk that they use as an input under their advanced IRB approach. These data suggest that risk weights for both corporate and retail exposures differ substantially across LCBGs even within similar rating categories (see Chart A). This is especially the case for risk weights applied to lower-rated exposures. While, as already mentioned, there might be valid reasons why levels of risk weights vary across the LCBGs even within the same rating buckets – such as higher concentration of exposures at the lower or higher end of each rating category or differences in collateral – differences appear to be too wide to be fully explained by these factors.

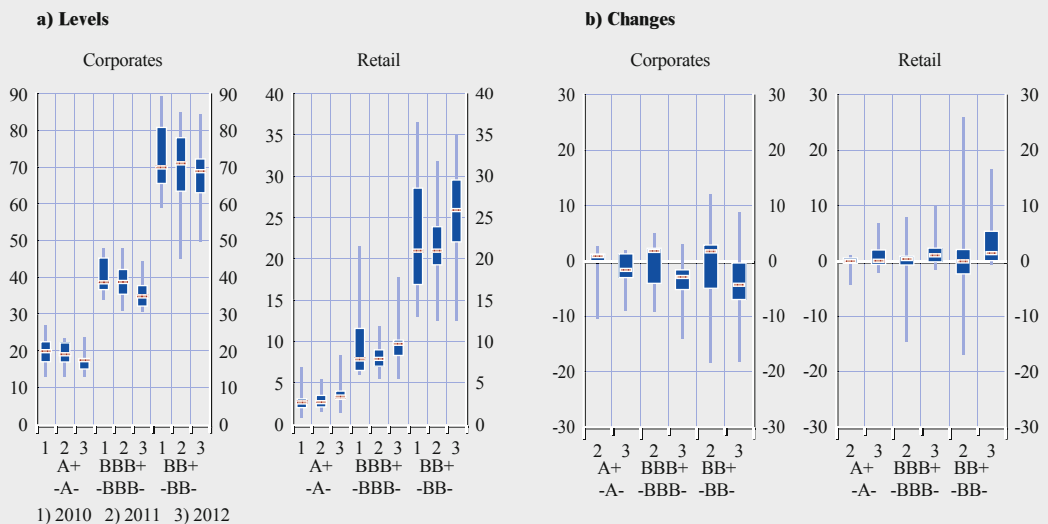
1 See, for example, Barclays Capital, "Bye Bye Basel? Making Basel more relevant", May 2012, and A. Haldane and V. Madouros, "The Dog and the Frisbee", speech at the Federal Reserve Bank of Kansas City's 366th Economic Policy Symposium, August 2012.

2 Barclays Capital, "The Dog That Dug: (Yet) more digging into RWAs", September 2012.

Euro area large and complex banking groups' risk weights for corporate and retail credit exposures

(2010 – 2012; percentages; maximum, minimum, interquartile distribution and median)

(annual percentage point changes; maximum, minimum, interquartile distribution and median)



Sources: Individual institutions' Pillar 3 reports and ECB calculations.

Such reasons might also help to explain why a bank changes its risk weights from one year to the next, although some similarity in changes in risk weights across banks could be expected for this group of large cross-border banks and very large changes should not be common since banks should use a probability of default over time in their calculations. The differences in changes in risk weights from 2010 to 2012 across LCBGs for various exposures are therefore a cause for concern (see chart) and explain why several analysts have voiced strong concerns regarding RWA calculations.

Such variation in risk weights across LCBGs and over time clearly highlights a need for regulatory initiatives to further analyse and assess the consistency of RWA calculations. Two such initiatives are already under way. First, the Basel Committee on Banking Supervision (BCBS) – following a similar exercise for trading book exposures³ – is carrying out an in-depth review of banks' calculation of banking book RWAs. The review uses a top-down approach by sending questionnaires to banks to gather information on their methodologies, as well as a bottom-up approach where banks were asked to calculate RWA numbers generated by identical test portfolios. Banks provided their input to the review in late 2012 and the results from the exercise are expected to be published later this year. Second, the EBA is currently conducting a similar review and some interim results based on a top-down analysis have already been published.⁴ The preliminary findings suggest that *half* the variation in banks' risk-weighted assets cannot be explained by factors such as portfolio and regulatory differences and that such variation appears mainly in corporate and retail portfolios.

3 Basel Committee on Banking Supervision, "Regulatory consistency assessment programme (RCAP) – Analysis of risk-weighted assets for market risk", January 2013.

4 European Banking Authority, "Interim results of the EBA review of the consistency of risk-weighted assets – top-down assessment of the banking book", February 2013.

All in all, these findings suggest that currently used risk-weight calculations might not in all cases be an accurate gauge of the true riskiness of the portfolios of financial institutions. Recent initiatives by the BCBS and the EBA to analyse the issue should help to enhance transparency and contribute to regulatory convergence. Furthermore, the new Basel III regulation on the leverage ratio, which is not risk-based, will also help to improve comparability across banks and to promote transparency. But another equally potent means of reducing the doubt about banks' RWA calculations would include more harmonised – and in some cases more detailed – Pillar 3 disclosures. As a complementary measure, systematic publication of capital requirements given by standardised models as well as internal models would be one means of validating internal models. Such measures would help to not only improve confidence in regulatory disclosures, but also more generally reduce ambiguity about the true health of banks.