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Basel 3++: Buttons, Belts and Braces

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Basel Committee consultation papers released at the end of 2014 show that the trend to increasingly complex capital regulation is continuing, but also imply uncertainty about whether the existing regulatory approach can adequately capture banking risks. One feature is the proposed addition of a "capital floor" requirement to supplement the Advanced Internal Models based calculation of required capital and the leverage requirement introduced as part of Basel 3. This is reminiscent of a man uncertain of whether the buttons will hold his trousers up, and thus adds a belt and, just to be sure, attaches braces! The second feature is the proposed revision of the Standardised Approach, to make it more "risk-sensitive" (and complex) and with risk weights more closely aligned with those of the Advanced Approach. Taken together, the proposals imply: a lack of faith in sophisticated banks not "gaming" the regulations; recognition that the capital concessions for sophisticated banks have adverse competitive effects; reduced reliance on ratings agencies in regulatory settings; and recognition that continually increasing financial sector complexity hampers risk measurement. More generally, it raises the question of whether the hugely costly experiment with relying (at least partially) on internal bank risk assessments for capital requirements, introduced in Basel 2, has been a failure, and whether higher, simpler, capital requirements would have been preferable.

The two Basel Committee consultative papers (BCBS 2014a, BCBS 2014b) released in December 2014 (for comment by end March) imply a busy first quarter of 2015 for bankers – who are also faced with responding to the Financial System (Murray) Inquiry recommendations and providing input to the Tax White Paper process. For large banks, using the Advanced Internal Models approach, they imply (eventually) higher capital requirements, while for smaller banks on the Standardised Approach they imply greater complexity in determining capital requirements. The proposed introduction of the "capital floor" may substantially worsen the cost-benefit calculation for banks of expending large amounts of resources on developing risk management systems which qualify them for the Advanced approach. But improved opportunity to compete on a more level playing field may encourage smaller banks to invest in improved risk assessment and management systems to enable them to be effective competitors (still using the standardised approach)– rather than, as seemed likely, gradually disappearing.

The Capital Floor Proposal

Basel 3 introduced the (yet to be implemented) leverage ratio requirement as a backstop to the risk-weighted assets (RWA) approach for determining minimum bank capital requirements. This (non-risk weighted) requirement, that eligible capital exceed a specified measure of a bank's exposures, was justified as offsetting incentives for concentration in low-risk weight asset portfolios and concerns that losses from such portfolios might substantially exceed those expected due to "model risk" or inappropriate calibration. Notably, and suggesting an abject failure of the risk-weighting approach, BCBS (2014a) states that: "During the recent crisis, market participants placed greater importance on banks' leverage ratios, as RWA ratios were seen to be less transparent, less reliable and less objective." Hardly a resounding endorsement of a regulatory approach built on RWA foundations!

The capital floor proposal in BCBS (2014a) seeks to overcome: inconsistency of RWA calculations across banks using the advanced approach; apparently excessively low estimates of risk and thus RWA from bank models; inequity between capital requirements for banks on the advanced versus standardised approaches. These objectives again raise the question of the merits of the Basel 2 (and 3) philosophy of reliance on internal bank risk models, and capital concessions (and implied competitive advantage) for accredited advanced IRB banks to encourage expenditure on improved risk modelling. It must be asked why competitive advantages from improved risk modelling and better pricing of credit is not, of itself (without regulatory capital concessions), sufficient to achieve that outcome.

To achieve its desired outcomes, the capital floor proposal involves calculating a minimum required capital amount for IRB banks at some percentage (yet to be determined) of the amount calculated using the (proposed revised) standardised approach. Required capital would be the largest of the three minima calculated from the internal models approach, the leverage ratio requirement, and the capital floor calculation.

Some of the complexities involved in calculating a capital floor which the consultation paper seeks views on are:

- Whether the floor should be calculated and applied in determining the regulatory minimum capital for each risk category, or applied at the aggregate level. The former would generally lead to higher minimum capital requirements (if the same percentage of the standardised requirement is used) because there would be no netting out of cases in which the IRB capital estimate was higher than the floor with cases where it was lower.
- Reconciling differences in the definition of capital between the standardised and IRB approaches, due primarily to differences in the treatment of loan loss provisions in the measurement of capital.

In principle, a "capital floor" already exists (based on Basel 1 measures) as part of the transitional arrangements from Basel 1 to Basel 2, but subsequent regulatory changes (including risk-weight and minimum capital ratio changes) have made this requirement largely irrelevant (and forgotten). The current proposals would make a capital floor a permanent part of the Basel framework. Of course, if the percentage used in calculating the floor were 100 per cent of the standardised calculation, that would imply the effective end of the IRB approach. Some commentators would welcome this, while others would prefer doing away with the risk-weighting approach altogether.

Revising the Standardised Approach

The consultation paper BCBS (2014b) outlines planned revisions to the standardised approach with the objective of making it more risk-sensitive and with better alignment of risk weights to those in the IRB approach (and more suitable for calculation of capital floors).

One major feature of the proposals is the removal of reference to credit ratings agency ratings in calculating risk weights, and substituting instead assessments based on "risk drivers". To illustrate, for corporate exposures, the risk weight would be derived from a look-up table provided in which the risk weight is related negatively to corporate size (measured by total revenue) and negatively to leverage (measured as total assets/equity). Attempting to provide a "global one size fits all" approach such as this is clearly problematic when typical corporate size differs across jurisdictions, and typical loss given default (assumed to be 45 per cent of exposure) can vary based on national legal and institutional arrangements affecting recoveries. From the Australian perspective, generally lower business leverage (reflecting dividend imputation) would tend to lead to lower risk weights and capital requirements than elsewhere for business lending.

In the case of residential mortgages, a greater range of risk weights is proposed based on the two risk drivers of loan to valuation ratio (LVR), and debt service coverage ratio (DSC). A minimum risk weight of 25 per cent is proposed for loans with LVR < 40 per cent and DSC < 35 per cent. (Coincidentally, this happens to be the risk weight floor suggested by the FSI Final Report for such loans in the IRB approach for Australian banks). In contrast, a loan where LVR is between 80-90 per cent and the DSC > 35 per cent would involve a risk weight of 70 per cent. This implies a potentially significant decline in the capital requirement for loans as they age over time as the LVR and DSC ratios fall due to principal repayments and growth in borrower incomes. Increased differentiation of pricing for old ("back book") loans and new loans and increased competition for the former (and increased switching behaviour by borrowers) could be one outcome. (Because increases in property values after loan origination are not generally allowed in calculating the LVR for this regulatory purpose, that may also prompt switching behaviour if the new loan triggers a new higher valuation and improved pricing).

These are but two of the many changes foreshadowed to risk weightings in the consultation paper – and arguably among the simplest. As well as applying the "risk-driver" approach to other asset categories, proposals are advanced for new treatment of off-balance sheet exposures and credit risk mitigation techniques.

A Preliminary Assessment

The proposed changes call into question the merits of the IRB approach introduced in Basel 2 which relies on bank internal models of risk evaluation, and also the differential treatment of large internationally active and smaller, primarily domestically oriented, banks explicit in the capital requirements of the Advanced IRB and the Standardised approaches. Significant distortions in competitive ability have occurred, particularly in domestic housing mortgage markets. This is a, paradoxical outcome, given that the IRB approach was premised on levelling the playing field for large banks operating in international markets, but has had the largest impact on risk weights on purely domestic activities and adverse consequences for smaller domestic banks.

The removal of ratings agencies assessments from the Standardised approach makes good on the G20 pronouncement to reduce the influence of ratings agencies in regulatory settings, following their shortcomings exposed in the financial crisis. But since any changes are unlikely to take effect for a few more years, it will be over a decade from the crisis before this is achieved – hardly a rapid response! Moreover, there is bound to be significant debate over the merits (and quantification) of the proposed "risk drivers" to be used in global standards as the replacement for ratings. This could drag the process out substantially, and fuel demands for increased national discretion in contrast to the explicit objective of the consultation paper.

It is only natural that learning from experience should prompt revisions to regulatory standards. It is also the case that financial sector innovation and evolution (partly in response to existing regulatory standards) requires regulatory adaptation – somewhat like a dog chasing its own tail! And rectifying competitive distortions resulting from regulation and their consequences for the evolution of financial sector structure is clearly desirable. But internationally, confidence in internal models and ethical and governance standards of large banks have been badly damaged over the past decade, such that there is concern that the IRB approach is somewhat reminiscent of relying on the poacher to also be the gamekeeper. Hence, the buttons, belt and braces analogy referred to earlier for the next instalment (Basel 3++) in the Basel journey.

Thus while the proposed changes will ameliorate some of the distortions between the IRB and Standardised approaches, there is merit in reviewing whether the IRB approach of Basel 2 and 3 was an experiment which has, arguably, failed.

REFERENCES

BCBS (2014a) "Capital Floors: the design of a framework based on standardised approaches - consultative document" *Basel Committee on Banking Supervision, Consultative Document*. December 2014. http://www.bis.org/bcbs/publ/d306.htm

BCBS (2014b) "Revisions to the standardised approach for credit risk - consultative document" *Basel Committee on Banking Supervision, Consultative Document*. December 2014. http://www.bis.org/bcbs/publ/d307.htm

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