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# Global Risk Regulator

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# US steps up criticism of Basel risk weights

### Federal agencies increasingly voice a preference for using the leverage ratio and stress testing as an alternative to Basel risk-weighted capital

*By Philip Alexander*

US Federal Reserve governor Daniel Tarullo intensified the sceptical tone of American regulators toward the Basel bank capital ratio in May, with a speech that questioned the approach to calculating assets. The US authorities have long expressed doubts about allowing banks to use internal models, known as the internal ratings based (IRB) approach, to calculate the risk weighting of their assets. This contributed to the US decision not to introduce Basel II until several years after the EU, and is now shaping the way in which the American authorities seek to implement Basel III.

"Even with the higher capital ratios required by Basel III, the IRB approach is problematic. The combined complexity and opacity of risk

**Daniel Tarullo**

weights generated by each banking organisation for purposes of its regulatory capital requirement create manifold risks of gaming, mistake and monitoring difficulty," Mr Tarullo warned.

He argued that the supervisory stress testing of bank balance sheets – the comprehensive capital analysis and review (CCAR) developed over the past five years by the Fed – provides "a much better risk-sensitive basis for setting minimum capital requirements".

"They do not rely on firms' own loss estimates. They are based on adverse scenarios that would affect the entire economy *to page 4*

# CFTC's O'Malia calls for cross-border data agreement

### CFTC commissioner wants to bring the US and EU together to resolve data quality issues in derivatives reporting standards

*By Charles Piggott*

As regulators struggle with the rising tide of data created by recent rulemakings, the US Commodity Futures Trading Commission's (CFTC) Scott O'Malia has issued a public plea for immediate US/EU talks aimed at harmonising conflicting over-the-counter (OTC) derivatives reporting standards. Furthermore, the commissioner also asked G20 leaders to get "back to the table" to reach international agreement on harmonised data and trading standards.

Speaking on May 21, Mr O'Malia told the CFTC's Global Markets Advisory Committee: "Right now, the US and EU are working separately to resolve data quality issues that should instead be resolved together."

Mr O'Malia told the committee that it was his sincere hope that "negotiations will not only begin immediately, but that our jurisdictions

**Scott O'Malia**

will simultaneously engage in harmonisation".

OTC derivatives remain at the forefront of post-crisis initiatives to bring transparency to financial markets. Both the Dodd-Frank Act in the US and the European Market Infrastructure Regulation (EMIR) provide for international data sharing as part of the G20 mandate on OTC derivative reforms.

Speaking at an industry event in Chicago earlier in the month, Mr O'Malia said: "In keeping with these provisions and the OTC Derivatives Regulators Group agreement, I call on the [European] Commission and the EU to sign an international data sharing agreement, collaborate to harmonise both the *to page 6*

## US steps up criticism of Basel risk weights

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and take correlated asset holdings into account. And, of course, the disclosure of the results helps inform counterparties and investors, thereby increasing market discipline," said Mr Tarullo.

His comments came just a month after Jeremiah Norton, a director of the Federal Deposit Insurance Corporation, told Congress that "the risk-based capital framework negotiated by the Basel Committee on Banking Supervision (BCBS) leaves unchanged measures that were proven deficient during the financial crisis, such as the risk weights on mortgages and government-sponsored enterprises, and also fails to address appropriately foreign sovereign debt risk weights."

### Leverage ratio focus

Both regulators instead advocate a greater emphasis on the leverage ratio, which is based on total rather than risk-weighted assets. To promote financial stability, the US is proposing a 6% leverage ratio for its systemic banks, rather than the 3% level required by the BCBS. In his testimony, Mr Norton cited research papers by the Organisation for Economic Co-operation and Development (OECD), which showed that "the Basel Tier 1 risk-based capital ratio is not a statistically significant indicator of bank default; however, the leverage ratio is very statistically significant".

Adrian Blundell-Wignall, special advisor on financial markets to the OECD secretary-general and one of the authors of the research, points to the constant decline in risk-weighted assets as a proportion of total assets at the global systemically important banks going back over a decade (see chart). This trend took place even while the financial system became riskier. In his eyes, this is evidence that banks are responding to any tighter capital requirements by adjusting models and using other techniques to reduce risk weightings.

"We are not against having some form of risk sensitivity but there should be some control mechanism such as a portfolio benchmark. Banks could face quadratic capital requirements that rise as they deviate further from that benchmark. But the current system that fails to control the ratio of risk-weighted assets to total assets is not really controlling anything. It's as if each bank is running its own Basel system," says Mr Blundell-Wignall.

### Risk sensitivity debate

The BCBS is certainly not oblivious to these concerns and has already begun comparing bank balance sheets using benchmark hypothetical portfolios. This is part of the regulatory consistency assessment programme (RCAP) established in 2012 under the aegis of Basel's standards implementation group. The RCAP published reports on risk-weight variations for both banking and trading books during 2013.

Mark Levonian, a former senior official at the US Office of the Comptroller of the Currency (OCC), was on the banking book side of the standards implementation group before he left the OCC in 2013. He says it is unfortunate that the RCAP studies have sometimes been interpreted as evidence of the failure of the risk-based capital ratio.

"The RCAP reports are actually evidence that there is work in progress to try to address variations. There are a lot of discretionary components in the Basel framework, for instance how you treat certain estimates or types of credit. Those things were left fairly open, but if regulators work together, they can begin to bring more global consistency to that over time," says Mr Levonian, who is now a managing director at regulatory consultants Promontory Financial Group.

The common concern in the banking industry is that a high leverage ratio might provoke greater risk taking. That would in turn force supervisors to become very granular in their assessment of bank balance sheet risks – something the US agencies are already doing with their guidance on leveraged loan exposures (see *GRR*, p22).

"If the leverage ratio is set too high and becomes the binding constraint, then it is almost certain that banks will be incentivised to look for assets that are further out on the risk-return spectrum. There will be no capital penalties for that and banks will see a better chance of getting the returns they need to support the cost of that additional capital," says Mr Levonian.

However, Mr Blundell-Wignall strongly disputes this interpretation. He believes that by allowing banks to use internal models to calculate risk weights, the task of risk management has been polluted. Instead of purely measuring the bank's risk, he says managers have the dual objective of "keeping a weather eye" on return on equity, by minimising capital requirements.

"The argument that if we get rid of this system, banks would stop doing risk modelling is nonsensical. What they would be doing is clean risk modelling, instead of getting into the moral hazard of trying to avoid holding more risk-based capital," says Mr Blundell-Wignall.

Harald Benink, professor of banking and finance at Tilburg University and chair of the European Shadow Financial Regulatory Committee, advocates going far beyond even the US leverage ratio, proposing at least 10% for systemic banks. This would be instead of the current Basel global systemically important bank capital buffer that uses the risk-based capital ratio. Mr Benink believes that bank focus on risks could be strengthened by making them hold a significant part of this extra capital in contingent convertible bonds rather than equity.

"Alternative Tier 1 with a high trigger ratio for conversion into equity has an asymmetric risk profile. Unlike equity investors, bondholders do not benefit from outsized short-term returns generated by taking on extra risk, but they do suffer losses if the capital ratio trigger is breached. That creates a powerful incentive to look at bank riskiness and a disincentive, via the funding cost for banks, to game the risk weightings," says Mr Benink.

### National discretion

However, the variation in risk weightings is not purely the fault of banks themselves. As the RCAP reports recognised, national supervisors have significant discretion in setting certain parameters. If anything, the international divergence has increased as regulators have intensified their interrogation of risk weights.

During 2013, Switzerland introduced add-ons for operational risk weightings, in the context of US fines against Swiss banks for helping US citizens to evade tax. In the same year, the UK introduced a more rigid set of five standardised risk weights for commercial real estate exposures, known as 'slotting'. In April 2014, the European Banking Authority approved a request from the National Bank of Belgium to increase risk weight floors on residential mortgages by five percentage points owing to a hike in Belgian house prices. And there are even some regulators pushing weights in the opposite direction.

"The Bank of Spain, for instance, reclassified various SME [small and midsized enterprise] loans last year to get a better risk weight, despite those SME loans showing record deterioration. All these moves definitely raise the question about the future usefulness of risk weights. As a fund manager, I like to try as much as possible to be able to compare apples with apples but it is proving increasingly difficult when regulators keep shifting the goal posts, with rules changed at a whim," says Guy de Blonay, a financial equities fund manager at the UK's £32bn Jupiter Asset Management.

As well as causing confusion, this tinkering by national regulators is focused on achieving an output that feels right, rather than looking to improve the inputs or models used to derive risk weightings. Mr Blundell-Wignall suggests there are some fundamental problems with the original overarching method for converting inputs such as probability of default (PD) and loss given default (LGD) into risk weights. This method was designed by members of the BCBS itself in the early 2000s, led by Fed senior economist Michael Gordy.

"The whole basis of the Basel system model is portfolio invariance, which assumes the risk is idiosyncratic, for instance on each individual mortgage. This is needed to be able to add assets to the risk weighting calculation in a linear fashion, but it does not penalise concentration," says Mr Blundell-Wignall.

At least one banking industry veteran has some sympathy with this view. John Perry, a financial consultant who was the global head of independent model risk review at HSBC until 2013, says the variations in risk weight outputs are not surprising once the underlying model is understood.

The major challenge is in the process of scaling up the bank's expected loss calculation from PD and LGD inputs, to form a risk weight that is designed to be enough to cover unexpected losses as well. The risk weight on an individual credit does not reflect the amount of capital needed to cover potential losses from that particular name, but is rather part of an entire portfolio calculation based on factors such as each bank's individual loss experience on that type of asset.

"PDs are typically classified on a master scale from one to 20. Most credits will fall within the first six subscales of that, which means each subscale encompasses a difference in PDs of as little as 100th of a basis point from minimum to maximum. That means it is relatively easy for the marginal risk weight contribution on a single name to differ by as much as 50% purely due to different default histories at the two banks," says Mr Perry.

However, he does not see this as an argument to scrap risk-based capital ratios altogether. Mr Perry warns that while a high leverage ratio reduces the risk of bank collapses or bail-outs, it could exacerbate other systemic risks. Each bank would have less flexibility to manage its capital due to rigid leverage ratios. At the first sign of losses, he believes banks would be forced to deleverage sharply, accentuating the cyclical impact of the financial sector on the real economy.

Nor is Mr Perry averse to the idea of national discretion in risk weights. In his eyes, this makes more sense than using the Gordy formula that was essentially based on the experience of US and Western European bank balance sheet performance in the 1990s. He suggests that countries should be able to calibrate their own risk weights alongside a global Basel standard, examining their own economic cycles and market trends including portfolio performances during the most recent financial crisis. This would also provide a genuine risk-based macroprudential tool with a stronger analytical basis than simply hiking risk weight floors.

"Regulators fear losing global uniformity, but at the heart of improving risk models is the concept of benchmarking. It is impossible to compare the efficacy of Basel models if there is only one of them," says Mr Perry.

## Stress and strain

The one part of Mr Tarullo's speech on which there seems to be a consensus is around the idea of stress testing as an alternative to risk-based capital ratios. Both supporters and sceptics of IRB question whether this approach is practical. Stress testing is "incredibly labour-intensive to do properly", says Mr Levonian. This challenge has to be taken seriously by the BCBS. There are 27 jurisdictions represented on the BCBS – many of them emerging markets – and another 16 jurisdictions in its consultative group aspire to adopt Basel requirements. Few of them would have the resources to replicate the US CCAR in their own countries.

And while stress tests are risk-sensitive, they do not necessarily meet the Basel criteria for simplicity or comparability. The basic concept and macroeconomic assumptions are easy enough to understand, but the methodology is still complex.

"The CCAR calculations use similar models to the process of calculating risk-weighted assets, so any problems with IRB will tend to be ported into the stress test. In fact, the test has an added layer of complexity because of the difficulties of working out how the stressed macro assumptions will feed into the variables," says Mr Levonian.

The Fed can double-check the banks' models because it collects the data inputs and runs them on its own systems as well. But the acid test of Mr Tarullo's claim that the CCAR is more reliable than the Basel ratio will be the next period of financial stress, since the US stress testing was only introduced after the 2008 crisis. GRR

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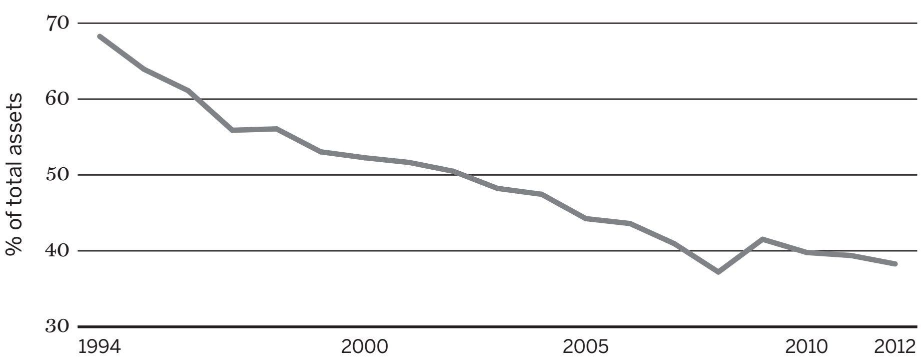


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