

Northern exposure

Two of the highlights of ORR's *OpRisk North America* conference were presentations covering effective ways of setting risk appetite and a US regulator's view on the importance of interconnectedness in op risk management. **Mark Sands** reports on these and some of the other issues panels addressed

Rising operational risk losses, setting op risk appetite and bridging the gaps between quant modelling and risk management were just a few of the themes discussed by op risk managers, regulators, consultants and academics at the *OpRisk North America* conference, hosted by *Operational Risk & Regulation* magazine, in New York in late March.

Mitsutoshi Adachi, chair of the Basel Committee on Banking Supervision's standards implementation subgroup on operational risk, gave the keynote address on the first day, outlining rising operational risk losses since the financial crisis. Over 2008 and 2009, he said, losses rose "two or three fold", while op risk capital itself rose "only modestly". Adachi used his speech to warn attendees of this problem, suggesting "all firms are encouraged to conduct rigorous self-assessments", and that these are "particularly important due to the spiking operational risk losses".

Adachi also noted losses in boundary areas have become much more important. "Our own internal study indicates boundary losses represent 30% of the total losses, but in terms of the value of losses, that share rises to 40% in total," he said.

As a result, he emphasised firms should ensure losses are categorised correctly so capital levels can be appropriately set. Underestimating these, he said, can be dangerous, especially in view of the recent past. "Much of the recent losses occurred in the boundary areas between credit risk and operational risk. Operational risk losses that are related to credit risk are treated as credit risk losses for the purposes of capital calibration," he said. "However, it is critical for the purpose of firm-wide risk management that firms identify all material credit and operational risk losses and use this information to improve overall risk management."

Risk appetite – meaning and relevance

"Some of the best-written risk appetite statements out there are almost a vision for the company," said Tom Campanile, partner in Ernst & Young's financial services risk management practice.

Campanile and his colleague, David Kadio-Morokro, a partner in the same practice, provided one of the most popular presentations at the conference, musing on the most effective ways of setting and implementing risk appetite.

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Basel Committee on Banking Supervision

Reflecting on a recent study carried out by the consultancy, Campanile noted that in many institutions there is little belief risk appetite holds much weight within the organisation, something he said must change. "[When] asked about the ability to make it more than a piece of paper, 71% of clients said they were not there yet. They still have disparate systems, the data is not there, the reporting formats are not quite there, and they have got to work on this further," he said.

He argued, though, that setting risk appetite should be fundamental to an organisation's mentality, and provide a clear and unambiguous frame as "the terms of reference for risk management".

He said one of the most important functions of

a risk appetite statement is not what it describes, but that setting it provides a conversation point for boards, senior management and independent risk management staff to come together.

"If the strategy is, we want to get from point A to point B, the risk appetite becomes, do we wear a seatbelt or how fast are we comfortable driving? It provides some checks and balances that really get to the board's philosophy on what type of organisation it wants to be," he said. "To me, personally, it's probably less about what's in the paper – it's more about, has this conversation really taken place and have you really connected those three groups?"

Campanile acknowledged starting such a process can provide immense challenges for organisations, especially where regulators are keen to see documentation and progress. "I think it's a big stretch to expect the board to start with a blank sheet of paper," he said. "That's no affront to the board, you've got to educate them on the capabilities."

He said institutions starting from scratch need to work both from the top down and the bottom up, having discussions about "what kind of company they want to be", while also performing risk assessments. The challenge is, "Can we bring those two things together and get version 1.0 in front of the board as a starting point?" he said.

He suggested institutions ensure their risk appetite strategy examines four central concepts: capital, earnings, liquidity and brand, and asked what the minimal capacity is for all four categories, as well as where the company wants to be. "A balanced risk appetite starts across all four of those criteria," he said.

However, institutions must also be aware of the need to constantly upgrade their level of appetite to make sure circumstances do not outpace policy. "I think some clients get to a risk appetite they're really



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comfortable with, but if you max out all of those limits that exist today, you might run afoul of that appetite, so there’s always a little bit of calibration that needs to happen.”

The supermodels – assessment

Presentations from Evan Sekeris, assistant vice-president of the Richmond Fed, Marcelo Cruz, global head of operational risk measurement and metrics at Morgan Stanley, and David Fletcher, director of capital markets operational risk oversight and head of risk intelligence at BMO Capital Markets, focused in varying degrees on aspects of modelling and the role key risk indicators can play.

Fletcher led the way on the first day, illustrating methods BMO uses to quantify, manage and track operational risks. He said the discipline of op risk management at the bank, and generally, is “not as reactive as it was”, and is now “trying to identify key risks in advance, and mitigate and address them before they impact”.

By maintaining constant assessment, Fletcher said, it is possible to earlier identify emerging risks and act before damage can be caused, but that for this to take place, reporting systems must be able



Tom Campanile (top) and David Kadio-Morokro, both partners in Ernst & Young’s financial services risk management practice, provided one of the most popular presentations at the conference

to carry the weight. “It’s important the messaging clearly indicates what the risks are,” he said.

This process takes place through risk control self-assessments, branch assessments, quarterly business surveys, key stakeholder surveys, integrated trading desk reviews and key control process maps.

Fletcher also added that, as audit forms the third line of defence in many organisations, he ensures operational risk is “copied in on all audit reports”.

BMO takes this data, and uses it to create a ‘composite index’ by business unit, rating risks by probability, financial impact and cost of implementation, and giving each a score out of 10. He admitted: “If some-

thing is a quick win for us, it will get a higher score”.

These scores are also plotted onto graphs to provide trends, allowing Fletcher to display the work of business units in combating important risks. “We want to show from our operational risk work that results are being achieved,” he said. “Our vision is to log in and have access to all the different metrics across each of the different business lines.”

BMO then provides reports not only at senior management and board level, but also to individual trading desks, resulting in an assessment framework that drives “at the more granular level and also at the top level as well”.

The supermodels – KRIs

Marcelo Cruz took the opportunity to drive home the importance of key risk indicators (KRIs) as a part of capital modelling.

“Most KRIs are subjective and are usually only used monthly or quarterly. Quite a few banks used them to adjust their modelling in the end, but few use it as a significant part of the model,” he said.

This is a situation that can and should be improved, Cruz argued, describing reliable key risk indicators as a potential “game changer for operational risk”.

Cruz admitted the process of developing and monitoring KRIs can be a difficult, not to mention costly, one. Institutions must, therefore, “pace themselves” in implementation, even when they have the backing of senior management.

It is possible for banks to have too many KRIs, said Cruz, argued simplicity and usefulness must be key. Responding to a question on the appropriate number of KRIs, Cruz told an anecdote. “I have a friend who is a pilot. One day I was invited to the cockpit, and said ‘Oh my god, you have so many gauges here!’

He said, ‘No, I only look at three. This one, I don’t even know what it is.’

For most models you will have three or four dominating factors that are important.”

According to Cruz, many institutions should bear this in mind, taking simple, objective metrics and using them more effectively in the business for operational risk management. Citing transaction monitoring, Cruz said an example might be a bank simply comparing its locations and asking, “How many transactions are processed in this cost centre in New York and how many in London?”

The simplicity of such an indicator can be helpful. “Complex KRIs can become an issue to measure, they should be direct and objective,” he said. But it

is clear he does not underestimate the challenges for institutions of all sizes. “The collection is a long and detailed process, so the costs can be high, but the benefits can be tremendous.”

The supermodels – modelling

The Richmond Fed’s Sekeris took to the stage directly after Cruz to discuss the progress he had perceived as a regulator, while underlining some areas that remain troublesome.

Describing the common view of op risk management as a discipline forged in the fires of Basel II, Sekeris said it is “in significantly better shape” and

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Evan Sekeris, Richmond Fed

that in the past few years in particular, “we’ve seen a lot of advances”, specifically in the field of data modelling, which didn’t exist in the early stages of op risk management. “This being said, there is still a long way to go,” he warned. “We have come quite far, but I think there are still some big gaps in operational risk management.”

In particular, Sekeris said, institutions continue to struggle when it comes to what he calls “bridging the gaps between ‘quant’ modelling and actual risk management”.

“If you look at how modelling has been done in the past, there’s often been a divide between the

modelling in ‘quant’ and the actual risk management – and I think we, as regulators, are probably as guilty as the industry on this one,” he said.

Sekeris argued the perception persists that modelling is done by “geeks” secreted away from the remainder of the organisation, particularly from those who manage the risks and those who run them. “The only bridge there, often, has been scenario analysis, but I think there’s a lot more to be done, and actually, in a way, we as quants have to offer that to risk managers,” he said.

The crucial steps towards this, he said, are acknowledging the weaknesses in modelling techniques and acting to mitigate them.

“The way we have dealt with operational risk up to now has been an exposed, static approach,” said Sekeris, noted modelling attempts have often been based on a collation of historical losses, combined with external data and scenario analysis, and attempts to “force fit” distribution lines onto those data points to extrapolate a prediction.

“These numbers don’t mean much to people who are not modellers. It means a lot to regulators from a capital point of view, and it gives us a baseline capital-wise, but in terms of risk management, I don’t think it goes far enough,” he said.

Internal loss data information is combined with information on the frequency and severity of those losses, but often, Sekeris argued, this is based on a fundamental flaw – numbers that are not adjusted or responsive to external conditions. He said frequency and severity numbers are assumed to be constants “that never change over time” and are not affected by other variables.

Sekeris also highlighted issues around data collection, saying banks often do not use information below certain severity levels because they are

not required to. Many institutions only collect and maintain information on losses greater than \$10,000 or \$20,000, with some not using losses below \$50,000. In doing so, Sekeris said, they are failing to use important data.

“For certain units of measure, you’re crying about the lack of data – we all complain a lot about the lack of data,” he said. “And when you look at some of these units of measure, you realise a large percentage of data lies below the data collection threshold.”

However, he conceded that in some institutions thresholds are in place because collecting information on all losses would be prohibitively expensive. This, he said, is a particular problem in smaller institutions, where budgets might be tight.

“There’s still a lot of work to be done on modelling in operational risk,” he said. “There’s no such thing as a perfect model and our understanding of this is crucial to avoid this overreliance on modelling and this siloing of modelling and risk management.”

Reforming US markets

One of the highlights of the conference was a presentation given by Randall Kroszner, former governor of the Federal Reserve from 2006–2009.

In a light-hearted presentation, Kroszner began by introducing himself as the man to blame for the financial crisis, which was met by hearty guffaws from the audience. “Many people have, so feel free to do that also!” he joked.

During his time on stage, Kroszner addressed a number of important issues in operational risk management, but focused on interconnectedness, something he said is particularly important. He argues this is crucial when considering external communication and how it is perceived. “If you have risks, but can’t articulate what they are, and everyone knows that



Marcelo Cruz, global head of operational risk measurement and metrics at Morgan Stanley, drove home the importance of key risk indicators in capital modelling

you have risks, then people will assume the worst,” he said. “People will experience a crisis of confidence.”

Kroszner illustrated this with a story from shortly after he joined the Fed. Honouring a previous commitment to speak on an academic panel about hedge funds, Kroszner, as a new member of the board, found a large number of journalists in the room were eager to hear about monetary policy from the regulator:

“I had been at the Fed two weeks, so the only numbers I was going to say were ‘five minutes left’, ‘two minutes left’ and ‘one minute left’. I wasn’t going to say anything about interest rates,” he said. “So they ran back to their laptops... It came across the screen: ‘Fed Reserve governor Kroszner says nothing about monetary policy’.”

Kroszner said the way messages are communicated and perceived is important, and this must be understood by institutions in regard to managing risks. “It’s not just about the potential for these kinds of things to occur, or the potential for a shock to hit and the specifics of what happened, it’s also about the uncertainty surrounding it,” he said.

The confidence of investors and the wider public in an institution’s management to resolve issues can

make a substantial difference to a bank’s success, something Kroszner said is a challenging to cultivate using traditional structures.

“It’s difficult to capture in a systematic model, but when thinking about risk, it’s not just about the scenario analysis. It’s also about making the markets comfortable this isn’t going to turn into a broader confidence crisis rather than something simple and limited,” he said.

This further relates to interconnectedness, Kroszner said, when one studies the subprime crisis. “Interconnections are something we didn’t really appreciate between the institutions and the markets,” he said. “People started to ask not just about the quality of the hedges, but who the counterparties were being hedged with. Those kinds of questions hadn’t really been asked before.”

Institutions would now be wise to learn not only the risks of their own portfolios, but also to open up the chain of matryoshka dolls, assessing the weakness of counterparties and, as Kroszner said, “the quality of hedging not only of the counterparties’ counterparty, but also of the counterparties’ counterparties’ counterparty”. ■