

## NUMBERS MISS WHAT COUNTS

Bankers like numbers. That's what probably attracts little girls and boys to banking when they grow up. Or maybe it's the big numbers they think they'll earn. But the lure of banking is palling, according to the last issue of *Financial World* ('Refilling the talent pool', April/May 2016). A key reason, of course, is the odour surrounding it following the catastrophic failures of leadership, risk management and culture over the last decade or more. Which brings us to operational risk and numbers.

Back in 1997, I was involved in a survey of operational risk in 50 international banks. Many defined it as 'anything other than credit or market risk'. A few enlightened ones had worked out that operational risk was not just about systems and processes, but was based on unpredictable, irrational, perhaps predictably irrational, human beings, whether in the Boardroom or on the trading floor. And it was also about equally unpredictable exogenous events, whether pandemics, terrorists or any other disaster.

And so we came up with a definition, 'the risk of loss resulting from failures of people, processes and systems and from external events'. A definition dealing with cause, the basis of risk management. A short while later, to our astonishment, it appeared in the first Basel II consultation paper involving operational risk where it has remained.

Now we had it, of course it had to be measured. 'Give me a number.' So what better to use than the trusted tools which have so inadequately modelled financial risks such as credit and market risks. Despite the fact that operational risk is totally different. It isn't based on hard transactions. The data have to be individually and imperfectly reported by human beings. You can't cap it, secure it or hedge it. Most importantly, unlike financial risks which are relatively homogeneous, operational risk events and their causes are hugely heterogeneous. Even worse it involves every activity and every person in the firm, including external stakeholders from customers to suppliers.

Friedrich von Hayek summarised the problem in his acceptance speech for the Nobel Prize for economics in 1974, *The Pretence of Knowledge*, 'Unlike the position that exists in the physical sciences, in economics and other disciplines that deal with essentially complex phenomena, the aspects of the events to be accounted for about which we can get quantitative data are necessarily limited and may not include the important ones.'

Operational risk deals with complex phenomena and is a social not a physical science, where financial risks can be found. It deals with the sexy things of the moment, fintech, cyber risk, innovation, as well as model risk and even, speak it who dares, regulatory risk.

It is the difference between risk and uncertainty, as promulgated by Keynes and Knight. Keynes explained that he wasn't talking about the difference between what is known for certain from what is only probable. He was using the term in which 'there is no scientific basis to form any calculable probability whatever. We simply do not know.'

Operational risk lies in the realms of uncertainty, along with Nassim Taleb's black swans. Yet still we try to quantify it, basing our prediction of the future on past events and data,

however imperfectly we capture them. Except that in operational risk, if something major happens we tend to try to ensure it doesn't happen again.

And the world is constantly changing. Using the old social science mnemonic, PRESTEL, risk management is concerned with the changing elements of politics, regulation, economics, society, technology, the environment and the law. They are the stuff of operational risk, all unpredictable.

But despite all of this, bankers being bankers and regulators being regulators, still cry out 'Give me a number'. And so the quants beaver away. The lead article in the latest issue of the *Journal of Operational Risk* is entitled 'Evaluating operational risk by an inhomogenous counting process based on Panjer recursion'. Heroic, Minister!

Of course, there are scenarios, but they are flawed because humans have great difficulty predicting the unusual, especially when they are told that their scenarios should be 'plausible'. 9/11 was considered by the CIA, but put on the too implausible pile.

Interestingly, the Basel Committee has been consulting on a simplified Advanced Measurement Approach, styled the Standardised Management Approach. The simple formula alone takes up 7 lines. It's possible the new formula will enable regulatory capital to be consistent and comparable but there is little or nothing to incentivise risk management. Perhaps simplification may encourage banks to divert precious resource to managing rather than spuriously measuring operational risk.

Just as the econometricians were unable to answer the Queen's simple question - why didn't you predict the financial crisis? - so econometric regulation has failed badly. And econometric risk measurement has inevitably failed banks in the most pervasive risk they have, operational risk.

Economics students are demanding post-Crash economics. Banks and regulators need to think differently with a new post-Crash mentality. At a recent CSFI event, the Dutch regulator explained how they are recruiting organisational psychologists into their supervisory teams. They are concentrating on how firms are led, how effective boards are and how decisions are made. They don't have a set prescription, but demand agreed action plans if they see failings.

Today's buzz word is disruption. We need to disrupt the world of operational risk management and wrest it away from impenetrable dialogues about quantification. Unless we change our mind-set in thinking about this fundamental, pervasive and intrinsically different risk, we are living in another pre-Crash environment.

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