



Revitalising the Risk toolbox

Summary

Risk management has been around a long time and makes use of well-established methods. For emerging or re-emerging risks, however, these well-established methods may not suffice. Two examples are given here: liquidity risk and political risk, neither of which has been served well by the traditional risk approaches. A specific approach is warranted for both risks, in this case through regulatory oversight and techniques from policy analysis respectively.

Dear reader,

By definition, risks are elusive. Not only are they multifarious and ever changing, they also depend on future states of the world that are inherently unknown. An outsider could be forgiven if he was to assume that risk management is therefore a highly innovative, explorative undertaking. The truth is, of course, a bit more mundane. The practice of risk management, like any activity, is actually quite set in its ways, and innovations come only gradually and are slow to gain acceptance. That in itself is not a bad thing. But at the same time, risks do evolve and the way risk management is practiced in banks should contain a mechanism to deal with situations that do not fall under the established risk types. This newsletter discusses two separate cases for which the existing risk practices do not suffice: dealing with leverage and coping with political risk.

Dealing with Leverage

Leverage means many things. Ever since LTCM¹, it has a special resonance in the risk world. Here, I take leverage as the basic notion of using debt to trade on margin. As an example, a broker might accept a margin of 50% to trade in some future contract, thereby doubling your potential gains (and losses). That would mean a 2:1 leverage. In the foreign currency markets, leverage ratios of 100:1 are not uncommon, based on the idea that intra-day fluctuations are usually small. Leverage was taken as the normal way for banks to do business, and typically one would see leverage of 20:1, 30:1 or even more. Meanwhile, leverage itself was kept clear of regulation, and anybody who argued otherwise was simply spoiling a good party.

What was never in dispute was that leverage exposes the bank and the customers to risk. And yet neither credit risk (a defaulting counterpart) or market risk (the effect of adverse effects of changes in market prices, interest rates, foreign exchange rates, or commodity prices on portfolios) captures this risk. To be sure, market risk was expected to somehow account for leverage, but the measure employed (Value at Risk) in fact obscures an easy to interpret simple financial ratio. With its focus on correlation, the volatility of assets and the mitigating effect of diversification, VaR is highly sophisticated. And as sophisticated measures go, they may just be too subtle for a simple risk.

The risks posed by leverage are, in fact, such that it can act as a runaway train. In the case of

¹A simple 4 page case study of the events leading up to the LTCM disaster can be found at:

<http://www.erisk.com/Learning/CaseStudies/Long-TermCapitalManagemen.asp>

A notable detail is that Myron Scholes and Robert C. Merton, Nobel laureates and intellectual fathers of the Black-Scholes formula for option trading were both involved in LTCM.



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LTCM, the firm that had a debt to equity ratio of 25:1 in early 1988, ended up with a ratio of 250:1 in September 1998, at which point it was unable to dig itself out of the hole and had to be bailed out by a consortium of investors under the auspices of the Federal Reserve Bank of New York.

The answer, in the case of leverage risk, may be a regulatory treatment rather than the bank's own decisions. Some proposals, like that of CICT and FINRA seek to cap the clients' exposure² and have met with fierce opposition from the industry. As part of Basel III, the BIS introduced the leverage ratio as an *additional* risk measure³ for banks, although critics have pointed out that while providing transparency, overreliance on this statistic will also have negative consequences. In both cases, the pushback suggests that the regulators are on to something and will not let go easily.

Coping with Political risk

Political risk is be treated under country risk in most banks, but as the recent conflagration in the middle east has shown, countries may not be the natural boundaries or even the best focus for political risk. The toughest nut to crack in this respect is how to deal with the constant call for quantification and measurements, without which senior management finds it hard to take a position.

Here, the solution might be to take a long view, and focus on instruments that were developed in the area of policy analysis. Having to make long term investment decisions (for, say, a space programme, a system of levies and dams, how to finance medical research etc, there are a multitude of facts and numbers to analyse and model. When it comes to making a decision based on this analysis, however, the mode changes from that of *investigative* analysis to that of *comparison*. That comparison can be done along any scale or using any dimension: numerical, non-numerical or categoric. It is this comparison that ultimately counts, and it needs to be guided by a formal process, such as, e.g., that adopted by the early users of scenario analysis. That differs radically from the way banks evaluate country risk.

The traditional way to evaluate country risk typically gets stuck in the analysis phase. To cope with political risk, banks should take a broader view. It will be too late to do that once it hits the front page when all you can do is to make on the spot decisions. That should make any risk manager uncomfortable, whereas policy analysis can help to *manage* political risk rather than panic over it.

Conclusion

Traditionally, risk management has had a fantastic tool box. It is, however, wrong to assume that all issues lend themselves to that traditional tool box. Active risk management also means revisiting and revitalising that tool box when new risk types become more prominent.

² As proposed by the US Commodity Futures Trading Commission (CFTC), and Financial Industry Regulatory Authority (FINRA).

³ Basel Committee on Banking Supervision, Consultative Document *Strengthening the resilience of the banking sector*, December 2009, <http://www.bis.org/publ/bcbs164.pdf>