



Financial Perspectives on Risk

Tuesday 29 April 2008, PwC, Leeds

For the first time the Networking Northwest group trekked across the Pennines to Leeds, the better to involve our colleagues in the North East. We also publicised our meeting through both the North West and North East branches of ALARM, and we are grateful for their help. As a result an attentive audience of over 50 listened to a range of presentations on the theme of financial perspectives on risk. The intention was not to cover financial risk *per se*, but to look at ways people deal with the financial aspect of everyday risk management in the hope that this is an area where it is useful to understand the concepts others use, and the approaches they build.

The day was chaired by Kate Boothroyd who encouraged IRM members from the North East to get together and form a group if they thought it would be useful.

The day was very generously hosted by PwC who provided the venue, lunch and refreshments, especially welcome at the end of the meeting. We are very grateful for their hospitality. The presentation slides are on the website alongside this note which provides a brief summary (with the responsibility for any errors or misinterpretations being mine alone!).

First, George Houghton of Magnox Electric went through the basics of calculating contingencies at project level. He set out a number of important principles:

- you need a cost estimate and the project plan / schedule before you can do the risk analysis;
- you need to distinguish between uncertainties and discrete risks;
- you need to plan for success; and consequently
- work out the residual risk taking account of the (costed!) risk management plan and contractual risk allocation.

He then described a simple journey time illustration of how Monte Carlo works to estimate schedule risk. In his experience project managers are at first reluctant to undertake this type of analysis, but are eventually sucked in by what they learn from the P-values, S-curves and so on, which can highlight risks and potential problems in key areas, and give an opportunity to take corrective action. George concluded by saying that the techniques he described are most useful when they are at their most difficult to apply, and need expert use to derive maximum benefit.

After lunch David Booth, the 'risk guy of BAE Systems', gave an account of how this type of approach was used throughout BAE Systems' large and diverse portfolio of projects and programmes worth £50 bn per year, with an expectation that risk will be 'done really well'. This is all based on some key principles for project-level risk management: the project manager has serious P&L responsibility; an effective stage gate review process; mature and comprehensive management accounting providing assurance and control; and development of a common risk language between partners in a given programme. Building on this it becomes possible to develop the risk management plan across the project portfolio, identifying and resolving



problems and focussing on areas where interests overlap. A single toolset helps keep things under control with consistent data: a very important requirement. BAE Systems aims to be very confident of delivery and their view of the confidence comes from several sources including the quantitative risk analyses they carry out.

Next, Paul Curtis from the newly-enlarged Ministry of Justice talked about their approach to the challenges posed by growth, the need for accurate budgeting, a requirement to bring financial risk onto the corporate radar identified in the MCA *Upside of Risk* report, and upstream and downstream costs. This is a specific feature of their organisational environment whereby policy changes in other departments can impose costs on them and likewise, their own policy may generate costs in other departments. Again building on an infrastructure of sound business unit level and corporate level risk management, Paul described how additional registers of financial risks incorporating measures of likelihood and financial impact were generated. This culminated in a single page in the department's monthly performance reports showing the main risks, how they are being managed and a quantitative measure of the residual risk.

After tea, Fergus Mackie gave an account of the approach to comprehensive financial risk modelling used in Axa Insurance. The background is a FSA-driven move to risk based assessment of capital requirements. This replaces the old EU Solvency I approach which contained some illogical features (Solvency II is not expected until 2012 and there was seen to be a more urgent need.) The underlying principle of ICAS (individual capital adequacy standards) is that insurance companies should be able to pay claims in full with 99.5% probability in the event of a further year's trading, followed by run-off. To show this is met, it is necessary to comprehensively assess all risk and Axa's approach encompasses and integrates the following categories: market (investment performance), credit (default, including claims performance of reinsurance companies!), underwriting, reserving (against existing claims and issues), operational (the second most difficult to quantify), parameter (ie what is used on the models, the most difficult to quantify) and model risk (ie the risk that whole edifice is inappropriate). Fergus also discussed how best to deal what the FSA and noted that they want proof that the risk model is used in day-to-day business.

Finally, moving from insurance to banking, Tim Brooke of PwC described the corresponding initiative for banks: the EU Capital Requirements Directive (CRD), which is based on the Basel II model. Basel II builds on Basel I with a view to dealing with the sort of risks which brought down Barings. This means operational risk is now included and there are provisions for greater visibility. In fact there are three pillars to determining the minimum capital requirements: an assessment of credit, market and operational risk; an individual capital adequacy assessment process (ICAAP) which seeks to find issues not covered by the first pillar, and a requirement for disclosure about the process and the risks covered. Again the FSA want to see this used at the coal face and they provide a big incentive for banks to manage risk well: the better their risk management, the less capital is required.