



SOCIETY OF ACTUARIES

Article from:

The Actuary Magazine

February/March 2013 – Volume 10, Issue 1

A Look Into ERM

HELP WANTED: RISK TOLERANCE

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MANY, MANY FIRMS struggle with developing good statements of risk tolerance. This is startling because regulators and rating agencies alike say that good risk management requires a statement of risk tolerance.

For this discussion, risk tolerance will be used to mean the amount of risk that an organization might choose to retain after risk mitigation. The term risk appetite, which is often used interchangeably, will be used to mean the amount of risk that an organization plans to take, usually an amount less than the risk tolerance.

More than half of all experienced business managers faced with the question of making a statement about exactly how much risk they are willing to take choose to make vague statements and then change the subject. Most companies do not have a functional risk tolerance statement.

But a risk management system without a risk tolerance statement is like a brand new highway without any speed limit signs. Each person driving on the highway will make their own assessment of the road conditions, traffic, their car and their driving skill and

make an on-the-spot decision about how fast to drive, each time they get on the road.

One driver might think that 80 MPH is a good speed while another may think that 35 MPH is prudent. Chaos will result.

That doesn't happen within a company because the employees who accept and manage risk for a firm usually keep the risk level at a similar level to what it was previously. As long as the company carefully restricts risk taking/managing by new employees until they have a "feel" for how the company does things, and the managers are rarely called upon to judge the acceptability of the risk of a totally new opportunity, this "feel" approach will usually work.

The managers of these firms cannot answer the risk tolerance question in a functional, quantitative manner usually because their approach to risk has not included regular measurement of risk. They are like the driver of the car with no speedometer who is asked to recommend speed limits. They will just stare at the questioner blankly. Or possibly just get angry at the question.

To form a good functional risk tolerance statement, the management of a company needs just two things: (1) to identify what adverse event that they will base their tolerance upon, and (2) the likelihood of that adverse event at their tolerance level.

Alternately, a risk tolerance statement can be built upon something that is itself tied directly to some likelihood, like a risk capital value at a 1/200 loss or the top speed of a car that is implicitly tied to an (unstated) level of likelihood of an accident.

But that unstated likelihood for the car speed is really the key to understanding why risk tolerance is so difficult for many, many managers.

You see, most people who drive a car will develop a tolerance for speed over time as they get experience with driving. They each have an internal mechanism that tells them that they have reached a speed that "feels" too dangerous. It is that roller coaster flip in the gut when the car barely holds the road on a tight turn; that adrenaline rush that comes right after the near accident. They are not calculating probabilities there, but



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their resulting tolerance could be seen to be calibrated to some safety margin that varies by individual.

Many companies are trying to respond to external pressures to form a risk tolerance statement. But often they are trying to form a risk tolerance for their company before they have any experience driving with a speedometer, in effect. The quantum of risks that a company takes is just not obvious. And even when there are individual risks that are well known, their aggregation usually is not, to any degree of precision.

So the thing that is missing for most managers is the experiential feel for their risk. Before setting a risk tolerance, they need to drive around with one eye on the speedometer of their company. That is with continual awareness of the amount of risk that the company is taking. They will need to do this for a multi-year period so that they will see when their knuckles go white.

Waiting for this experience to accumulate may not be acceptable to managers feeling pressure to get going with using a risk tolerance. To quickly accumulate a feel for the risk quantum it can work to, look backwards at the risk level for the past five to 10 years of company history. For managers who have been there long enough, they have a good feel for when the company was going a little too quickly around the corners. The risk tolerance can be set by working from that worst year and figuring out how close to that situation that the company management is comfortable getting in the future.

Now to do this, it is much easier to simply pick a likelihood number. The number then defines the risk calculation. The risk would be the amount of loss that is expected at that likelihood value given the company plans for risk taking as well as the actual risks taken.

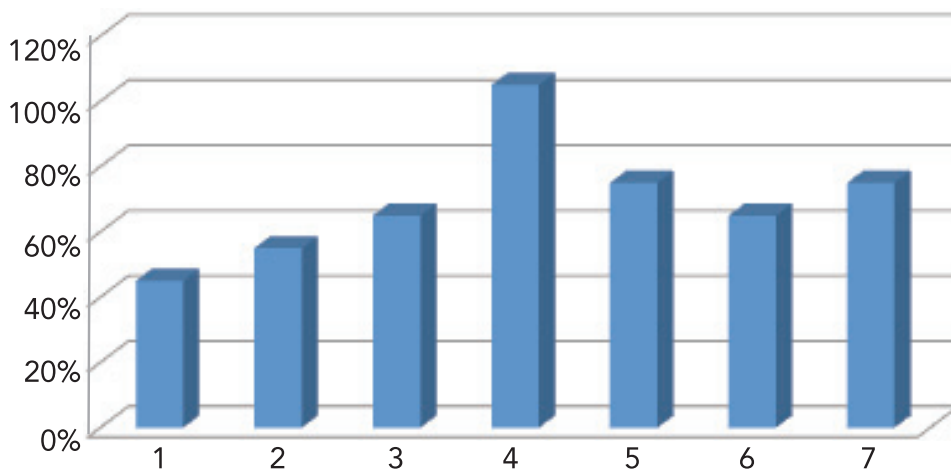
Then to build up that experience, managers need to look at the comparison between the risk and the capital or between the risk and the earnings of the company over

their recent past and immediate future.

One thing to look for is how the actual risk taken compared to the plan. In many insurance companies, goals are set in terms of premium dollars written. But in some years, the premium goal is met, but the business written is actually much riskier than the plan. This may be the reason behind the bad experiences that the company has experienced. If that is the case, then the company needs to look to strengthen risk control practices before worrying about risk tolerance.

The graph below shows the insurance company risk number was smaller than the surplus number in all years except year 4. Company management agrees that they were too exposed to a major loss that year. So they have set their risk tolerance to their risk measure at 90 percent of surplus. With tolerance set at that level, every other year was comfortably within tolerance. They want risk tolerance to be a guide, not a leash that is already too tight.

Risk as Pct Surplus



This is the best way for management to set a risk tolerance—based upon experience, just like a person’s driving speed tolerance is based upon their driving experiences. **A**

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