June 2011 sees a number of new additions to the Paper P1 Study Guide. I explain these changes through articles in two consecutive issues of Student Accountant. In this article, I conclude my discussion.

I am introducing a number of new additions to the P1 Study Guide for Paper P1 exams from, and including, June 2011. This is the second of two articles in which I explain the main changes.

New C3 (d): Describe the process, and importance of, externally reporting on internal control and risk
This is a minor change and the difference is in the addition of ‘and the importance of’. One of the reasons for the introduction for this particular external reporting requirement by governments and financial authorities is that internal control weakness has been the cause of several corporate governance failures. The provision of this information (specified in the US by s404 of Sarbanes–Oxley, for example) is an important safeguard for shareholders that their investment is being responsibly stewarded through effective internal controls.

C3 (f): Explain and assess the ALARP (as low as reasonably practicable) principle in risk assessment and how this relates to severity and probability
On the graph in Figure 1, you will see that the general relationship between the level of a risk and its acceptability. This graph is important because it conveys the relationship between risk and the acceptability of that risk. As a rule of thumb, a higher risk is less acceptable than a lower risk.

FIGURE 1: LEVEL OF RISK AND ACCEPTABILITY GRAPH

Clearly though, it would be irrational simply to say that higher risks should never be taken because higher return is often associated with higher risk: risk and return are usually positively associated. It is also the case that many risks are unavoidable in a given situation and must be accepted, at least in part.

An example of the ALARP principle is in incurring health and safety risk. Many companies engage in potentially hazardous activity that can give rise to injury or the loss of life of those working in a particular environment (such as a oil rig, a factory, a farm, etc). Health and safety risks are an inherent part of these industries and so the risk management task cannot be to avoid the risks completely. To reduce the risk to an acceptable level will involve incurring the costs of risk mitigation: installing protective shielding, issuing safety equipment like hats and protective glasses, etc. The level of investment in health and safety risk mitigation is a trade off between its cost and the assessment derived from the risk’s perceived likelihood and impact. There may also be compliance considerations with health and safety risks in some countries.
The important concept here, then, is that the actual risk carried must be as low as reasonably practicable given the range of activities undertaken and the mitigation costs. I understand for example (not being a transport expert), that the risk likelihood of rail accidents can be almost eliminated with the installation of a highly elaborate electronic control equipment that over-rides human error when it occurs (such as going through red lights and exceeding speed limits). In most countries, however, the cost of installing this equipment is so prohibitively expensive (such that it would significantly increase the costs of rail travel) that simpler and cheaper systems are usually installed instead. Although these cheaper systems are not as effective and rail accidents do sometimes tragically occur, it is a compromise solution that maintains the risk as low as reasonably practicable.

C3 (g): Evaluate the difficulties of risk perception including the concepts of objective and subjective risk perception

One of the problems with risk assessment is the quality of the information fed into the risk assessment ‘calculation’. Given that risk assessment can be a vital and strategically important activity for many organisations, it is important that the likelihood and impacts of a risk are accurately established.

The problem arises when it is difficult to assign accurate and reliable values to those variables. Sometimes these tasks are straightforward and sometimes they are more problematic. This raises the issue of measurability.

Some risks can be assessed (which involves establishing the likelihood and impact) with a very high degree of certainty. If both can be measured with scientific accuracy then we can say that the risk can be objectively assessed. The information going into the assessment is ‘hard’ in that there is no need for subjective judgment. In many cases, however risk problems can be ‘messy’ and it can be difficult to accurately assign a value to a likelihood or an impact. This is where subjective judgements can be used although there are obvious limitations with such judgments (see Table 1).

### TABLE 1

<table>
<thead>
<tr>
<th>Objective likelihood measurement</th>
<th>Subjective likelihood measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>The next outcome of a tossed coin</td>
<td>A nuclear accident will occur this year in the UK</td>
</tr>
<tr>
<td>The gender of the next student to knock at my office door (there is a 50/50 male/female ratio at my university)</td>
<td>A fatal accident will occur in a given factory this year</td>
</tr>
<tr>
<td>Rolling a six on a normal die</td>
<td>An investment fund will fail to make an annual rate of return of 10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objective impact measurement</th>
<th>Subjective impact measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of shareholders that will be affected by a large loss in a company’s value (the number of shareholders is known by the company)</td>
<td>The loss to ACCA resulting from a major terrorist incident in the UK in the next five years (depends on so many factors that only a subjective assessment is possible)</td>
</tr>
<tr>
<td>The amount I will lose if my car gets stolen (the value of the no claims discount on my insurance policy plus any excess on the policy)</td>
<td>The financial loss resulting from an environmental incident in a factory some time in the next decade</td>
</tr>
</tbody>
</table>
Why is this an important thing to appreciate in risk management? The certainty of a risk assessment and its robustness depends upon the ‘quality’ of the information used. If the assessment is based on objective measurement of likelihood and impact, then clearly the certainty of a risk’s assessment is more robust than if some of the assessment is based on subjective judgement. This, in turn, might affect the risk mitigation or risk management strategy.

In organisations, an example of correlated risk might be environmental risks and reputation risks. If a company begins an activity that has a large environmental risk, perhaps that might result in a chemical spill or leakage, then it also increases its reputation risk because a potential spill or leakage could also adversely affect its reputation in society. If both unrealised liabilities (risks) materialise then it will have the costs to bear of an environmental clean up and also of repairing its damaged reputation. Both risks decline if the potentially environmentally damaging activity is reduced or discontinued.

Negatively correlated risks are also present in some situations. If, for example, a company borrows money to reduce its environmental emissions then it might be that its environmental risks are reduced but, with its increased gearing, its financial risks are increased at the same time. This is because the higher gearing will increase the vulnerability to rising interest rates and put pressure on cash flow. In this case, then, there is a direct relationship between the environmental risk reducing and the financial risk increasing.

Similarly (using another medical example), if you start jogging in order to lose weight, then your risk of heart disease decreases but your risk of joint injury (perhaps to your knees, caused by the repeated trauma of jogging) increases. Hence in this case, heart attack risk and joint injury risk are negatively correlated. It is important to note that the related risks do not need to be equal, merely that they are related: the reduced risks of heart disease brought about by exercise massively outweigh the increased risks of joint injury from that exercise.

D2e: Identify and assess how business organisations use policies and techniques to mitigate various types of business and financial risk

The purpose of this addition to the study guide is to clarify the need to formulate and implement risk mitigation strategies for business and financial risks. The ‘assess’ (level 3) verb is used to signify that candidates may be asked to assess the adequacy of risk mitigation measures in exam questions.

This also highlights the importance of ‘policies and techniques’. This is a reference to the different levels at which risk management can be implemented in organisations. In many situations, a policy is in place to deal with a particular risk. It may have been agreed (as many major risk policies are) at the strategic level of the organisation. In addition, though, risk mitigation techniques will be applied at the various levels of the organisation. These will be specific to the risk and be dependent upon the costs of applying the technique against the outcome of the risk assessment.

D3a change: Now reads ‘Explain, and assess the importance of, risk transference, avoidance, reduction and acceptance.’ This is a minor change intended to clarify the meaning of this entry. These are the four risk management strategies that follow on from the risk assessment. Transference of risk is sometimes referred to as sharing. This is the ‘TARA’ framework of risk strategies that has appeared in Paper P1 exams in the past and is an important part of risk assessment and management.

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