Audit risk model

Audit Risk Model This is defined in AUS 402 as the susceptibility of an account balance .. to misstatement that could be material .. assuming there were no related internal controls (AUS 402. 09). Estimating the inherent risk (IR) for each account balance or class of transactions requires the auditor to take into account such factors as the level of complexity involved in determining the correct balance of an account, the complexity of transactions involving the particular account(s) and the portability of the assets involved. The estimation of IR is done as though no internal controls exist it looks only at the nature of the account being evaluated. Control Risk AUS 402 defines this as the risk that misstatements that could occur in an account balance ..

that could be material .. will not be prevented or detected on a timely basis by the internal control structure (AUS 402. 06). The evaluation of the level of control risk (CR) requires the auditor to have a thorough understanding of the internal control structure that is in place, and practiced (not necessarily the same thing) within the organisation to be studied. Elements such as the segregation of duties, the existence of management overrides, and the level of formalised policies and procedures in use are among the factors to be considered. Audit Risk Defined in AUS 402 as the risk that the auditor gives an inappropriate audit opinion when the financial report is materially misstated.

(AUS 402. 03) The level that is set as the acceptable audit risk (AR) reflects the degree of certainty that the auditor and audit subject wish to achieve. An audit opinion can never be a guarantee (AR = 0), even if every transaction during the year was tested, due, at least in part, to the interpretive nature of

many of the accounting decisions involved. Detection Risk The final part of the risk model outlined in AUS 402 is defined as the risk that an auditors substantive procedures will not detect a misstatement.. (AUS 402. 07) This risk relates to the volume, effectiveness and sufficiency of the audit testing and investigation undertaken. Both IR and CR are related to the probability that a particular balance will contain an error, either accidental or fraudulent, while detection risk (DR) is the probability that the auditor will not detect the error (Graham, 1985, p. 15).

The audit risk model is a joint probability statement of independent events (Wade, 1996) which attempts to combine these probabilities and give an overall chance of a misstatement existing (IR * CR) and remaining undetected (* DR) leading to the auditor giving an inappropriate audit opinion (AR). B) Armidale Pty Ltd Year 1 Inherent & Control Risk Levels In the first year of an engagement the auditor will have gained only a limited knowledge of the client and their practices. Faced with a poor internal control structure the auditor may question the level of management experience and knowledge, which AUS 402. 14(b) suggests may be an indicator of high inherent risk. This, combined with the newness of the engagement, would be sufficient cause to set IR at a high level at the financial report level, and for most, if not all, of the assertions below that. AUS 402. 32 & AUS 402. 34 mandate the setting of control risk to high unless the auditor is able to identify internal controls ..

likely to prevent or detect and correct a material misstatement (AUS 402. 32(a)). Given the conclusion of the auditor that such a control structure does not exist within Armidale Pty Ltd they would have no option but to set CR as

high which is a logical choice given our previous definition of CR. Detection Risk & Evidence Accumulation Assuming that the auditor wishes to achieve a low level of Audit Risk, especially given the newness of the engagement and the lack of an effective control structure we can, by restating the audit risk model as DR = AR / (IR x CR) determine what the level of detection risk must be set at to achieve the desired level of AR. If, for example, an AR of 5% is desired with both IR & CR set to 100% the DR comes out to be: DR = . 05 / (1 x 1) DR = . 05 (5%) This means that the auditor can only accept a 5% probability that their substantive procedures fail to detect any material misstatements. Achieving this level of assurance will require the gathering of a large amount of evidence large samples will need to be carefully tested and examined across most assertions. As the accumulation of evidence is, due to the time and resources required, one of the more expensive components of an audit the cost of running an audit with high CR & IR ratings will be greater than normal.

The auditor must balance the costs and fees of this initial audit against the long term relationship with this new client as well as their local competitors. C) Armidale Pty Ltd Year 3 Setting Audit Risk High With more knowledge and exposure to the client and their environment the auditor could choose to set the audit risk to a higher level when, for example, there are few external users of the financial statements (AFM312, 1999). It can also be set higher when control risk is low due to the presence of a strong internal control structure and inherent risk is also assessed as low. IR can be set lower based on the auditors judgement on such factors as the stability of the company and the environment it operates in, the level of management expertise, and

the complexity and nature of transactions and accounts involved. What is a low level of IR & CR Issuing an inappropriate audit opinion can be expensive for an auditor, especially in our increasingly litigious society and with courts having a fairly wide definition of an auditors duty of care.

No system of internal controls can guarantee 100% detection of material misstatement mistakes, whether accidental or fraudulent, will occur and some will escape detection, again either by deception or an oversight. Adopting a minimum level of CR of around 30% allows for this in effect the auditor says that they believe the internal controls are sufficient to ensure that a minimum of 70% of misstatements will be detected and/or corrected. Inherent risk is, by definition, evaluated as though no internal control system is in place. While it can be set lower as suggested in the previous section, the relationship between DR, AR, CR & IR as expressed in the model means that setting it to a lower value increases the allowable detection risk to achieve a desired level of audit risk. For a 5% AR with CR set to 30% and IR to 80% we get a DR value of: DR = 0. 05 / (0. 3 * 0. 8) DR = 0. 21 If we lower IR to 30% DR becomes 0. 56 our substantive procedures now need to be less than 50% effective at detecting misstatements because we trust the client and their systems. Increasing the allowable level of DR could, for example, lead to a less thorough audit process on old & trusted clients. D) The Audit Risk Model in Practice Is the audit risk model as outlined in AUS 402 a useful tool for helping to plan audit evidence requirements in practice? Much of the documentation and discussion relating to the assessment of the various risk elements involved in the model addresses the issue at the individual account balance or transaction class level.

An area of concern (AFM312, 1999; Lea et al, 1992; Wade, 1996) is the link between these many individual assessments and an overall risk rating at the financial statement level. As the model uses various independent probabilities it is not possible to simply sum together the assessment for individual areas. There have been suggestions of methodologies for providing overall aggregation of assertion level risk assessments (Lea et al, 1992) however these have not been included in any of the current Auditing standards. This linkage problem limits the value of the model to an auditor as the amount of work required to derive all of the estimates that AUS 402 suggests could be viewed as excessive and requiring substantial amounts of duplication of effort. This limitation appears to have led to the model being largely ignored, or at least circumvented.

Studies such as those by Mock and Wright (1999) have investigated the effect of different levels of assessed risk on the design of actual audit programs. These studies have found that, in the majority of cases, auditors utilise a standard set of substantive procedures for all engagements, regardless of variations in risk factors. Others such as Fitzsimons (1992) and Jacoby (1995) found that both inherent and control risk are, particularly for small to medium sized businesses, consistently set to 100%, even with continuing engagements reinforcing the use of a standard test plan. Reliance on standard plans may give the auditor a sense of security, whether justified or not, as they have built a level of confidence in the results and can easily compare this year to last year. Performing less substantive testing than normal may open the auditor to claims of negligence if a material misstatement escapes detection and a user of the audited statements

suffers damage as a result. The studies assert that the auditor therefore tends to be conservative and maintain a heavy reliance on substantive testing.

If both IR & CR are automatically set at 100% for all clients, and the auditor relies on achieving a 5% overall AR, detection risk must, according to the model, also be set to 5%. Detection risk is made up of two components, sampling risk, and non-sampling risk. Sampling risk arises from the selection of samples within an overall population of transactions and accounts. If the samples selected do not accurately reflect the population the testing may not capture a misstatement. Sampling risk can be countered by increasing the proportion of the overall population being tested. Accumulation of evidence, testing the sample, is one of the high cost areas of an audit and decreasing the sampling risk can, therefore, be a high cost exercise (Arens et al, 1987).

Non-sampling risk derives from the selection and application of the actual audit procedures to the selected samples. Inappropriate or ineffective procedures may return misleading information and lead to incorrect evaluation of results. The audit risk model assumes that non-sampling risk is negligible and that detection risk is largely controllable through sample size manipulation. While it is contended by, for example, Gul et al (1995) that this risk can be reduced to a low level through effective training, planning and supervision the use of standard test plans for all clients could lead to blind rote application of procedures without any real understanding of the purpose or relevance of a particular test. In these conditions a series of small non-sampling errors could rapidly accumulate and reduce the value of the

substantive testing. Where only a small allowance for error exists, due to the reluctance of the auditor to place more emphasis on the internal control systems, the desired level of AR could become unachievable.

The audit risk model outlined in AUS 402 as well as many of the overseas auditing standards would seem to be useful for planning the level of testing required for specific accounts or account classes. This is particularly so where the auditor believes internal control systems are in place and effective (low CR) and where the inherent risk is also medium to low. It appears, however, that, for many reasons, the auditing fraternity has not rushed to utilise the model in developing audit plans preferring to rely on standard series of tests although Mock & Wright (1999) did identify some movement towards increasing use of the model for planning purposes.