Audit Risk: Its Relevance, Assessment & Minimization

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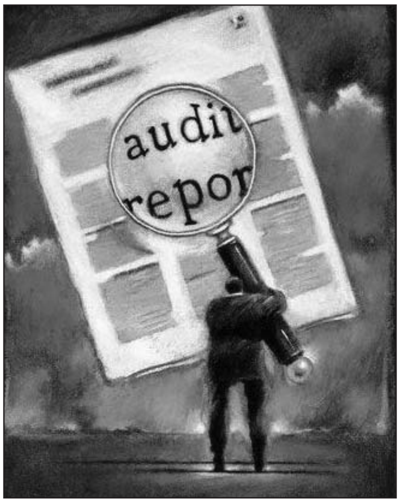
Audit of financial statements involves audit risk. The risk is that an auditor gives an inappropriate audit opinion when the financial statements are materially misstated. It is also possible, though most unlikely, that the auditors issue a qualified audit opinion when it is not warranted. While assuring delivery of audit services in time, the auditor must keep in mind the risk of issuing inappropriate audit opinion.



As the time available to the auditors is limited, it is necessary to assess the risk in carrying out the audit. Therefore, interim audit may be taken up before close of the accounting year when the auditor can devote some time to assess the associated risk. Proper risk assessment definitely improves the audit quality, because having assessed the risk element, the auditor can decide the areas requiring focused attention, thereby enabling him to reduce cost. Thus, more time can be devoted to important areas of audit concern. Assessment of risk results in effective audit plan, setting appropriate materiality level, determining appropriate sample size for compliance testing and determination of the timing and extent of substantive procedures. It may be noted that an auditor can minimize audit risk only when he assesses the audit risk objectively and properly.

Evaluation of Risk and Internal Control

The Auditing and Assurance Standard (AAS)-6 Risk Assessments and Internal Control issued by the Institute of Chartered Accountants of India (ICAI) has prescribed standards on the procedures to be followed by the auditor for understanding the client's accounting and internal control systems and on audit risks and its components. The corresponding International Standard of Auditing 400 has prescribed similar procedures. Understanding the client's accounting and internal control systems is essential for making an effective audit plan and developing an effective audit approach. Broadly, audit risk is the risk of a material misstatement of a financial statement item that is or should be included in the audited financial statements of an entity. In this regard, a financial statement item includes any related notes to the financial statements.

Theoretically, audit risk ranges anywhere from zero (complete certainty of no material misstatement) to one (complete certainty of a material misstatement). In practice, however, audit risk is always greater than zero. There is always some risk of material misstatement, as it is not possible, (except for the audit of the simplest of financial statements), due to the limitations inherent in both accounting and auditing, to be absolutely certain that a material misstatement will not exist. Audit risk (AR) can be divided into two components:

1. Risk of material misstatement of a material financial statement item in the unaudited financial statements (RMM)
2. Risk that the misstatement will

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not be detected by the auditor [i.e. 1 minus the probability of detection by the auditor, 1- Pr (Da)]

Assuming that there is 40% risk of material misstatement in a financial statement item in the unaudited financial statements and a probability of 70% that the misstatement would be detected by the auditor, audit risk would be calculated as follows:

AR = RMM – (1 – Pr (Da)) = 0.4 x (1- 0.7) = 0.4 x 0.3 = 0.12

The risk of material misstatement in the unaudited financial statement (RMM) may be divided into two parts as follows:

1. Inherent risk of material misstatement occurring (RMMi.)
2. Risk that will not be detected by the client [i.e. 1 minus the probability of the client detecting the misstatement 1 – Pr (De)]

Thus substituting the two components of RMM, audit risk can be mathematically expressed as follows:

AR = RMMi x (1 – Pr (De)) x (1 – Pr (Da))

Hence, if there is 80% inherent risk of a material misstatement in a financial statement item, 30% probability of such a misstatement being detected by the client and a probability of 40% that in case the misstatement is not detected by the client, it will be detected by the auditor, the audit risk is:

AR = RMMi x (1 – Pr (De)) x (1 – Pr (Da)) = 0.8 x (1 – 0.3) x (1 – 0.4) = 0.336

The three components of audit risk viz. RMMi, 1 – Pr (De), (1 – Pr (Da) are referred to as inherent risk (IR), control risk (CR) and detection risk (DR). This gives rise to the following audit risk model:

AR = IR x CR x DR

However, in practice the auditors evaluate risk components using terms such as low, moderate and high rather than using the probabilities. The model has certain limitations like aggregation problem, the lack of independence between variables and the fact that the model focuses on only one decision i.e. audit approach. Therefore, those limitations are to be kept in mind while applying the model in practical situations. Assessment of audit risk is essentially a professional judgment of the auditor. Therefore, he should use his professional judgment to design audit procedures in such manner that the audit risk is reduced to an acceptable low level.

As stated three components of audit risk are inherent risk, control risk and detection risk.

- **Inherent risk** is the susceptibility of an account balance or class of transactions to material misstatement, individually or when aggregated with misstatements in other balances or classes, assuming there were no related internal controls. Inherent risk is a measure of the auditor's assessment of the likelihood that there are material misstatements in any account balance or class of transactions before considering the effectiveness of internal control system of the client. Inherent risk is the perceived level of risk that a material misstatement may occur in the client's unaudited financial statements, or underlying levels of aggregation, in the absence of internal control procedures. For example, there may be a change in technology that may render number of plant and machineries useless and idle requiring write-down of such plant and machineries. Another example may be when the company is exposed to uncertainty of realisation of dues from its overseas customers due to restriction imposed by the law of the country or when the company is passing through a global recession.
- **Control risk** is the risk that a misstatement will not be prevented or detected and corrected on timely basis by the client's accounting and internal control systems. Such misstatement may occur in an account balance or class of transactions that could be material individually or when aggregated with misstatements in other balances or classes. Thus control risk is the perceived level of risk that a material misstatement in the client's unaudited financial statements, or underlying levels of aggregation, will not be detected and corrected by the management's internal control procedures. For example, a stores material is directly delivered to the shop floor of the enterprise without entering its central stores and as a result though the consumption might be recorded, the liability might be omitted or the client has not established procedures for physical verification of inventories constituting a material portion of total assets or the client has not established proper cut-off procedures, etc.
- **Detection risk** is the risk that even though the auditors might have performed substantive audit procedures, such proce-

dures may fail to detect a misstatement that can exist in any account balance or class of transactions that may be material on individual basis or when combined with misstatements in other balances or class. Therefore, detection risk is the perceived level of risk that a material misstatement in the client's unaudited financial statements, or underlying levels of aggregation, will not be detected by the auditor. For example, where a bill for a substantial repair job is received by the enterprise's user department, but information about the same is not passed on to the accounts department before the cutoff date for providing the liability or even before finalisation of the accounts. In my opinion the detection risk should be perceived to be more where the prior period items of income and expenses are on the higher side.

It should be noted that audit risk is a function of three types of sub-risk. Inherent risk and control risk are beyond the control of the auditors and therefore, both must simply be assessed by the auditors. If control risk is to be taken as anything other than high, the auditor must undertake specific procedures to confirm the assessment of control risk. Given an acceptable level of audit risk and assessed levels of inherent and control risk, it is ultimately the detection risk that determines the extent of the auditor's work.

While developing the audit approach the auditor should consider the preliminary assessment of inherent risk and control risk for determining the nature, timing and extent of substantive audit procedures.

There is no straightjacket formula for assessment of inherent risk. In developing the overall audit plan, the auditor should assess inherent risk at the financial statement level.

Assessment of Inherent Risk

There is no straightjacket formula for assessment of inherent risk. In developing the overall audit plan, the auditor should assess inherent risk at the financial statement level. In developing the audit programme, the auditor should relate such assessment to material account balances and classes of transactions at the assertion level or assume that inherent risk is high for the assertion. The assumption of high inherent risk can be made after considering the factors relevant to the financial statements as a whole and to the specific assertions. In order to assess inherent risk the auditor should use his professional judgement to evaluate many factors considering his previous experience with the client, any controls established by the clients to compensate for high risk and his own knowledge of any significant changes that might have taken place since his last assessment.

Factors indicative of high inherent risk at the financial statement level are usually as follows:

(a) Lack of management integrity: For evaluation of management integrity the following criteria may be used-

- Is management dominated by a single person or is it a small group? For example the chairman of the company may be its chief executive or percentage of independent directors in the board is low.
- A high rate of turnover of key accounting or finance people may indicate dispute between management and finance people on reporting standards.
- Extent of significant and prolonged understaffing may indicate that the management has very little interest in quality financial reporting.
- Absence of significant number of independent directors.
- Extent of related party transactions. Extensive transactions with related parties may affect the interest of owners and the client.
- A continuing failure to correct any major weakness of internal control system that indicates anything from lack of management's interest in internal control to aversion to internal control.
- Past events indicating lack of integrity.
- Recent change in auditors or frequent change in legal counsel.

(b) Lack of management competence: It refers to competence of the directors and the senior management personnel. It includes the matters such as industry experience, knowledge of entity's business, commercial skills, knowledge of good corporate governance, etc. The auditor can assess management competence by considering the factors like number of years of experience of each director in the industry, the numbers of years of experience of each director of the client, the extent of change to management in last several years, etc.

(c) Unusual pressures on management: Sometimes there are pressures that may predispose management to misstate the financial statement intentionally or unintentionally. Following are some examples-

- Lack of adequate capital to continue operations or there is downward trend in current ratio.
- Unexpected loss or downturn in profit.
- Client's inexperience.
- Potential going concern problems.
- Client's need to fulfill budgeted result that is communicated to the government or other agency.
- The industry itself is subject to stiff competition.
- The client has unresolved disagreements with the auditors.
- The client is contemplating issue of equity shares.
- Capital market's expectation of improved performance.

(d) Presence of certain factors relating to the nature of the client's business: The following factors are indicative of high inherent risk:

- Senior level management personnel are remunerated based on results.
- Existence of significant equity holding or option over equity holding by senior management.
- Client has some features different from the others in industry e.g. different ROI, growth, accounting policies, etc.
- Complex corporate structure.
- Client faces increased business risk. This increases inherent risk, because there is risk of concealment of loss through use of inappropriate accounting practices.

(e) Presence of certain industry specific factors: The nature of industry may be such that it has reduced performance or growth. There is risk that losses may be attempted to be concealed by inappropriate accounting practices. Thus if the client's business is sensitive to economic conditions or fast change in technology or design or the industry is experiencing high rate of failure or depression, the assessment of inherent risk would be comparatively high.

(f) Application of information technology to the data processing environment: Most of the businesses today have some level of IT applications. In IT environment organizational independence is more important because of greater concentration of knowledge, but it is more difficult to achieve because there is less personnel. This increases the risk of material misstatement in the unaudited financial statements. In an IT environment there is greater concentration of data compared to a manual environment and both data and software are more vulnerable to unauthorized access, loss or destruction (both accidental or deliberate) as the data are more in machine readable form. The other factors that increase inherent risk include systems with invisible audit trail, absence of invisible audit trail, absence of input document, absence of visible output, possibility of data loss (through broken transmissions) and data and software corruption (through tapping and hacking) and the increased risk of unauthorized data corruption owing to data sharing in a data base system.

Inherent risk is considered as low, when few inherent risk factors are present. It is considered as moderate or high, when a significant number of inherent risk factors are present. For existing clients, much of the information referred to above will be available from prior year's working papers or from knowledge held by the auditor and his/her staff employed on previous engagements. However, changes in, for example, the management, directors, legal advisers, financial and litigation status, market conditions, products sold, and even operating procedures usually indicate a need to reassess the level of inherent risk compared to the previous year.

Factors indicative of high inherent risk at level of assertion of account balance or transaction group are as follows:

(a) Management discretion over the value of the account balance: sometime account balance involves high degree of management's estimation or judgement. In that case the inherent risk is assessed as high. Certain balances or transaction groups may be susceptible to misstatement due to high degree of estimation. For example, provision for warranty claims and free service in case of automobile industry, provision for quality complaints in coal industry, accounting for dredging subsidy on the basis of claims made by riverine port, etc. For example, trade debtors are normally subject to a provision for bad debts. This may involve a high degree of management discretion. In such instances, the inherent risk is evaluated as high. The risk factors relating to an account balance assertion are evaluated net of any related provision.

(b) A high susceptibility of the asset to obsolescence: The susceptibility of an asset to obsolescence or change in consumer demand or technological change that can affect its value raises the risk of accuracy of valuation of account balance compared to those account balances that are not susceptible to changes. For instance the inherent risk relating to the accuracy of the valuation of inventory finished goods inventory of a computer retailer should be assessed as moderate or high, as the value of such inventory is susceptible to technological change.

(c) Susceptibility of asset to asset to misappropriation-The susceptibility of an asset to loss or misappropriation affects the inherent risk relating to completeness of the account balance. For example multi product retail store.

(d) Presence of unusual transactions: If an account balance contains unusual transactions, inherent risk is assessed high. For example purchase account of a company may contain significant transactions with related parties. Transactions with related parties require disclosure. There is an increased risk that reportable transactions will not be disclosed. Thus there is risk of accuracy of description of account balance.

(e) Susceptibility of the account balance to adjustment: If an account balance is susceptible to adjustment, the inherent risk for particular assertion is increased. For example, in the earlier year the account balance was found to be misstated and required adjustment.

All the above factors increase inherent risk for a particular account balance assertion. Inherent risk is rated low when few of the above risk factors are present and it is rated moderate or high when significant numbers of inherent risk factors are present.

It should be borne in mind that inherent risk assumes absence of internal control procedures. If control risk of the client is assessed as less than high, obviously there will be some amelioration of the overall risk of misstatement of account balance assertion.

Inherent risk may be set for segments rather than for the overall audit because misstatements occur in segments. By identifying expectations of misstatements in segments, the auditor is thereby able to modify audit evidence by searching for misstatements in those segments. Extensive misstatements in the prior year's audit would cause inherent risk to be set at a high level (may be even 100%).

When inherent risk is increased from medium to high, the auditor should increase the audit evidence to determine whether the expected misstatement actually occurs.

Assessment of inherent risk depends on the auditors having a high level of knowledge of the business of the client. In the first year of audit the auditor may assess many of the inherent risks as high. This can be reduced in subsequent years as the auditor gains more experiences of the client organisation.

AAS 6 requires documentation of assessment of inherent risk, when such risk assessed is not high.

The auditor may assign maximum score to each of the factors considered by him in assessing inherent risk and also assign actual score to each such factor using his professional judgement. At this stage he is in a position to find out percentage of actual scores to the maximum score. He can classify risk score obtained as high, medium or low depending upon his own perception of risk. For example he may decide to consider risk score over 80% as indicator of high risk, risk score between 50% and 80% as indicator of medium risk and risk score below 50% as indicator of low risk.

Evaluation of inherent risk at the financial statement level

Level of Aggregation	Audit Stages				
	Client Acceptance/ Retention	Audit Planning	Control Testing	Substantive Testing	Opinion Formulation
Financial Statement Level	IR_1	NA	NA	NA	IR_5

Inherent risk at the financial statement level is assessed in the first and last stages of audit. In the client acceptance stage, the evaluation of IR_1 is essentially based on the auditor's preliminary knowledge of the client's business. IR_5 is assessed when the auditor obtains a detailed knowledge of the client's business. Inherent risk is assessed as low, moderate or high.

Assessment of control risk

Like inherent risk, this risk may be assessed at various levels of aggregation (for example at financial statement level, account balance level) and at various stages in course of audit (client acceptance or client retention stage or at the stage of planning for audit).

Evidence in relation to evaluation of control risk at the financial statement level is the evidence of the nature of control environment that influences the client's accounting information system. The control environment of client reflects the various control policies established by the client. Certain control environment i.e. client with extensive control policies is conducive to the minimization of inherent risk. This is called positive control environment. Existence of few or no control policies does not reduce the inherent risk. This is called negative control environment.

Factors indicative of control risk at the financial statement level are as follows:

a. **Risk averse management philosophy and operating cycle:** Management that is risk averse opts for establishing controls even though establishing and maintaining controls may involve cost.

b. **Established organizational policies:** A client having a well-structured organisation with defined authority and responsibility pattern can be considered as having more positive control environment.

c. **Well-defined authorisation policies:** Establishment of policies relating to assignment of authority to management and their employees is an evidence of positive control environment.

d. **Presence of a structured internal audit function:** Existence of a full-fledged internal audit system in an organisation strengthens the control environment. This is more when the internal auditors monitor whether the employees adhere to the established control procedures.

e. **Good information technology policy:** Where the policies exist for design, operation and control of the client's information system, the control environment is strengthened.

f. **Well-defined human resource policy:** Where the human resource policy aims to enhance the competence of management and other staff, the control environment of the organisation is likely to be positive.

g. **Existence of independent audit committee:** Existence of audit committee with majority independent directors is a sign of positive control environment.

For existing clients most of the information should be available from the last year's audit working paper file. However, the auditor should consider any significant change in policies or philosophy since last year.

Control risk at the financial statement level is the risk that a material misstatement in the unaudited financial statements will not be detected and rectified on timely basis. This assessment is a far broader assessment of control risk than the assessment of control risk at specific account balances assertion level. Control risk at the financial statement level is assessed in the first stage and last stage of audit i.e. at the client acceptance/retention stage. It may be referred to as CR_1 at the client acceptance stage and CR_5 at the audit opinion formulation stage.

Assessment of control risk at financial statement level

Level of Aggregation	Audit Stages				
	Client Acceptance/ Retention	Audit Planning	Test of Control	Substantive Testing	Opinion Formulation
Financial Statement level	NA	CR_2	CR_3	CR_4	NA

In the client acceptance stage CR_1 is initially evaluated on the basis of the auditor's preliminary understanding of the client's business as opposed to a detailed understanding of the business. A preliminary knowledge of business is necessary to determine whether to accept the audit or not or to continue with the audit.

Control risk at the financial statement level is assessed as low where control environment is fully positive. It is assessed as moderate where control environment is partly positive. Control environment is assessed as high where the control environment is found to be negative or not known to be positive.

Control risk at the account balance assertion level is the risk that a material misstatement of an account balance assertion (including misstatement of an underlying class of transaction) will not be detected and rectified by the client's internal control system on timely basis. The auditor makes assessment of control risk at the account balance assertion level on the basis of the following:

(a) **General understanding of the accounting information system and related internal control:** Irrespective of audit approach the auditors form an idea of accounting systems and related internal control procedures. Such understanding is obtained through enquiries, inspection of records, review of the systems and systems documentation, observation of the client's activities and operations, review of permanent working paper files. The understanding of accounting information systems and related controls should be documented by the auditor.

(b) **Identification of control procedures:** After obtaining general understanding of the control procedures the auditor should identify specific control procedures that address the risks identified. These are the procedures upon which he wishes to place reliance.

(c) **Evaluation of effectiveness of design of internal control procedures:** The auditor makes an evaluation of effectiveness of the internal controls. The auditor gathers evidence of the effectiveness of the control procedures or evidence as to the theoretical ability of the control procedures to detect or prevent misstatement. Control risk is low if the design and effectiveness of the control procedures relating to particular account balance assertion is more. The auditor should obtain evidence as to the effectiveness of internal control procedures through enquiry, compliance testing or through proper computer assisted audit techniques (these are collectively known as "tests of control"). If the auditor evaluates the control risk less than high, he is expected to document the basis of such evaluation in his work paper. That means the auditor should obtain audit evidence by performing tests of control to support assessment of control risk, which is less than high. Lower the control risk, more evidence as to designing and effective operation of the internal control systems is required to be obtained.

. The risk may be assessed at the stages of audit planning, testing of control and substantive audit procedures and may be referred to as CR_2, CR_3 and CR_4 respectively.

Level of Aggregation	Audit Stages				
	Client Acceptance/ Retention	Audit Planning	Test of Control	Substantive Testing	Audit Opinion Formulation
Account Balance Assertion Level	NA	CR_2	CR_3	CR_4	NA

Evaluation of CR_2 is based on general understanding of the accounting systems and related control procedures, the identification of the control procedures upon which reliance may be placed and the effectiveness of design of internal control procedures upon which reliance is intended to be placed.

Whatever the assessment of inherent risk and control risk may be, the auditor should always perform some substantive procedures for account balances and classes of transactions that are material.

CR_3 is evaluated on the basis of the auditor's understanding how effective is the operation of internal control procedures of the client, deviations from control procedures acceptable level of control deviations. CR_3 seeks to provide guide to the auditor as to whether he should continue to rely on the controls as planned.

CR_4 is nothing but a revaluation of CR_3. CR_4 is based on the additional knowledge of effectiveness of internal controls that is obtained through substantive procedures performed by the auditor.

Control risk at account balance assertion level is assessed as high, moderate or low.

AAS 6 requires that before concluding the audit, the auditor should make a final assessment of control risk. He should satisfy himself that the assessment of control risk is confirmed through substantive procedures performed and other audit evidences obtained in course of audit. In case deviations from the accounting control systems are noticed, he should make necessary enquiries to consider implications of such deviations. If the deviations are noticed, he should try to obtain evidence from other tests of control to see whether such evidence supports his initial assessment. Otherwise, he should amend his assessment. If the auditor feels that his assessment of control risk requires revision, he should modify the nature, timing and extent of his planned substantive procedures.

Assessment of detection risk

The auditor considers his assessment of inherent risk and control risk to determine the nature, timing and extent of substantive procedures to be performed by him to reduce the audit risk. Audit risk cannot be reduced to zero even if he examines cent percent of the account balances, because the most of the audit evidences are persuasive rather than conclusive in nature. However, the auditor is required to reduce the audit risk to an acceptably low level. He should decide the nature of such test e.g. whether he should test the debtors' balances by examining the bills and other internal evidences or by examining customer's statement of accounts or balance confirmation. The timing of substantive procedures i.e. before period end interim audit or after the period end. The extent of substantive procedures actually refers to the size of samples to be checked.

Whatever the assessment of inherent risk and control risk may be, the auditor should always perform some substantive procedures for account balances and classes of transactions that are material.

Where the inherent and control risks are assessed to be high, the auditor should obtain more audit evidence by performing substantive procedures. The auditor should consider whether substantive procedures would provide sufficient audit evidence to reduce detection risk, thereby reducing the audit risk to an acceptably low level. If the auditor finds that detection risk regarding financial statement assertion for a material account balance or a class of transactions cannot be reduced to an acceptable level, the auditor has no option other than expressing a qualified opinion or a disclaimer, whichever is appropriate.

Like other risks, detection risk may be assessed at various levels of aggregation e.g. at financial statement level and at account balance level and also at various audit stages e.g. client acceptance/retention stage, planning stage, etc.

Level of Aggregation	Audit Stages				
	Client Acceptance/ Retention	Audit Planning	Control Testing	Substantive Testing	Opinion Formulation
Financial Statement Level	DR_1	NA	NA	NA	DR_5
Account Balance Assertion Level	NA	DR_2	DR_3	DR_4	NA

The achievable level of detection risk at the financial statement level is the risk that a material misstatement in the unaudited financial statements will not be detected by the auditor. The achievable level of detection risk at the financial statement level can be assessed in the first and last audit stages. The achievable level of detection risk at the account balance assertion level is the risk that a material misstatement of an account balance assertion will not be detected by the audit procedures. Detection risk at the account balance assertion level may be assessed in the three stages viz. audit planning, test of control and substantive procedures.

Conclusion

Assessment of audit risk enables the auditor to reduce the risk of material misstatement through appropriate test of controls and substantive procedures. Risk assessment improves audit efficiency and it helps the auditor to provide value added service to the client through constructive management letter indicating material weaknesses in the accounting and internal control systems and suggesting improvements thereto. ■

ANNOUNCEMENT

CHANGE OF NAME OF THE COMMITTEE ON ETHICAL STANDARDS & UNJUSTIFIED REMOVAL OF AUDITORS (CESURA) AS "COMMITTEE ON ETHICAL STANDARDS (CES)".

The Council of the Institute has a non-standing Committee by the name "Committee on Ethical Standards & Unjustified Removal of Auditors (CESURA)" to, inter alia, examine various issues concerning Code of Ethics governing the member of the institute and to deal with the cases of Unjustified Removal of Auditors as per procedure.

Recently, the Council at its 249th meeting held on 22nd-24th March, 2005 decided to change the name of the Committee from "Committee on Ethical Standards & Unjustified Removal of Auditors (CESURA)" to "Committee on Ethical Standards (CES)".