# Analysing the Role of Audit Committee in Assessing Audit Risk

Authors: Navya Ninan, Jerush John Joseph, Ninu Anna Jojo, Vignesh Chandrashekar, Rohit Sura, K R Raghavendra, Prajwal Kumar, Nimin Ponnachan, Anju Jojo – Research Scholar's, CHRIST (Deemed to be University)
Guided by : Dr. Kavitha Jayakumar, Associate Professor, CHRIST (Deemed to be University)

***Abstract:*** *The various risks related to conducting an audit is difficult to assess and measure, and this has always been a serious threat to the audit committees. This paper focuses on understanding the various types of audit risks namely control risk, inherent risk and detection risk and analysing the role of an audit committee in assessing the same. The study also throws light on the evolution and various approaches to audit risk model.*

*Index Terms: Audit risk, Risk assessment, Control risk, Inherent risk, Detection risk, Audit risk model*

## 1. Introduction

Risk Assessment is the recognizable evidence and examination of risks to the achievement of an association's objectives, to decide how those risks ought to be managed. Risk evaluation means an underlying guarantee of operational destinations, at that point a methodical identification of those activities or occasions that possibly keep unusual unit from attaining its goals. At the end of the day, it is an examination of what could turn out to be wrong.

A yearly survey of the different business forms and money related reports combined with senior administration discourses results in the making of the yearly Audit Plan which is displayed and affirmed by the Audit Committee of the Board of Trustees. The audit staff conveys the review chance and the likelihood of giving incorrect conclusions, for every audit case. Despite the fact that the audit staff has given careful consideration and exhibited appropriate viewpoint on audit, which did not prompt audit let-down, they may in any case confront the danger of claims in light of the business let-down of the audit. In this way, the examiners ought to see increasingly about the business and the undertaking of the auditors while accepting audit approval and arranging the audit; they ought to likewise utilize and design the audit function so as to redesign the audit excellence and further decrease the danger of claims.

The audit risk can be generally classified into detection risk, inherent risk and control risk. Those risks which are originated from the enterprise features and its environment are known as the inherent risk. When the internal control system fail to detect or prevent material errors, the risk arising thereof is called control risk. Detection risk constitutes those risks that arises when the auditor fail to identify misstatements.

When arranging the audit work, the auditors choose the degree of detection risk of the plans and the normal gathering of audit proof sum through their comprehension of the objective endeavor and enterprises and evaluation of the auditor's operational risk, execution of investigative procedure, earnestness of appraisal and worthy audit chance, and the degrees of innate risk and control chance. Therefore, the assurance of recognition risk would impact the advancement of audit methodologies, as well as fundamentally impact the consequences of the audit. While assessing the detection risk, the auditors ought to be progressively exact and watchful. At the point when the auditors are deciding questionable undertakings, for example, risks, they will in general utilize significant terms, for example, 'low', 'medium' and 'high', rather than successive numbers. Nonetheless, for the assurance of recognition chance, it was hard to mirror the impacts of natural risk, audit risk and control risk on identification risk just by utilizing the important terms of low, medium and high (Chang, Tsai, & Hwang, 2008).

The purpose of this paper is to understand the different types of audit risks and to review various approaches to audit risk model. The rest of the paper is assembled as follows: Section 2 discusses the concept of inherent risk and its assessment, Section 3 offers an overview of the control risk and its assessment, Section 4 explore the idea of assessment of detection risk, Section 5 reviews the evolution of audit risk model, Section 6 analyse the role of audit committee in controlling audit risk and Section 7 concludes the paper.

## 2. Inherent Risk

The inherent risk (IR) is defined by the Auditing standard (AUS 402.09) as:

“The susceptibility of an account balance or class of transactions to misstatement that could be material, individually or when aggregated with misstatements in other balances or classes, assuming there were no related internal controls”.

As the definition states it is generally the risk caused by an error or omission in the financial statements due to various factors except for the failure of control (Martinov & Roebuck, 1998). When the degree of complexity is more for few transactions or when the decisions to be undertaken are judgemental there are chances for inherent risk. Auditors are expected to be very cautious when they are reviewing the Financial Statements. Entities which into Highly Regulated Sectors are more exposed to inherent risk, provided if those entities doesn’t maintain a proper internal audit control. Due to the high complexity factor which is involved, there might be conditions where an auditor might find it difficult to rectify those errors and in turn the opinion of the investors regarding the financial stability of the firm may change. (Kenton, 2018)

When Inherent risk is assessed it is very much important to analyse how susceptible the financial statement assertions are to material misstatement when relayed to the nature and purpose of the firm which is being audited. (Loughran) There are many factors which might cause or leads to inherent risk. The environmental and external factors, where the economical condition pertaining the business, source and availability of finance and capital, frequent changes that will be experienced by the firms. Another identified reason is that, there might be chances where the company may incur minor mistakes which were immaterial to the business and failed to rectify, and in future that might cause serious implications. It is very well important to consider or to take into account the inherent risk factors when materiality is determined.

## 3. Control Risk

Control risk (CR) is that type of risk where the occurrence of misstatement prevails in the financial statements of an entity, which may be in the form of audit materiality, either at an individual level or at an aggregate level. The auditor may not be able to assess, detect and prevent such risks with the help of internal control system in the due course of the entire audit. The implementation of an effective internal control procedure and its operation enables the entity in achieving its objectives while preparing the accounting statements. An element of control risk will be present always in an audit due to the presence of various limitations in the internal control system (AICPA, 2006).

The presence of a strong structure in the internal control system in an organization lead to negligence of material misstatement in the financial statement. The errors arising out of the weaknesses in the internal control procedures lack prevention. The documentation of the reports of the past surveys is considered a necessity, in order to enhance the motivation in the employees by explaining the work regime and the supervision undergone. Control risk can be represented in a range of coefficients ranging between 0 and 1 or in percentage. The either ends 0 and 1 are outrageous cases.

The initial end recommends in the identification of control structures which are solid to identify where there is no probability of mistake. The other outrageous shows that internal control, that there is no probability of mistake. The other extreme) shows that interior control structures are inconsistent and that there is a high likelihood (sureness) that mistakes will happen. In the event that the accounting framework and the controlling techniques are surveyed as efficient and effective, at that point the dimension of control risk can be considered as low. The correct dimension of the evaluated risk relies upon their abstract proficient frame of mind. At long last, we can reason that before the adoption of the conclusions of the audit, it is important to analyze and check the past advance of evaluated risk control is been discussed by (Pece Nikolovskia, 2016) in their paper.

## 4. Detection Risk

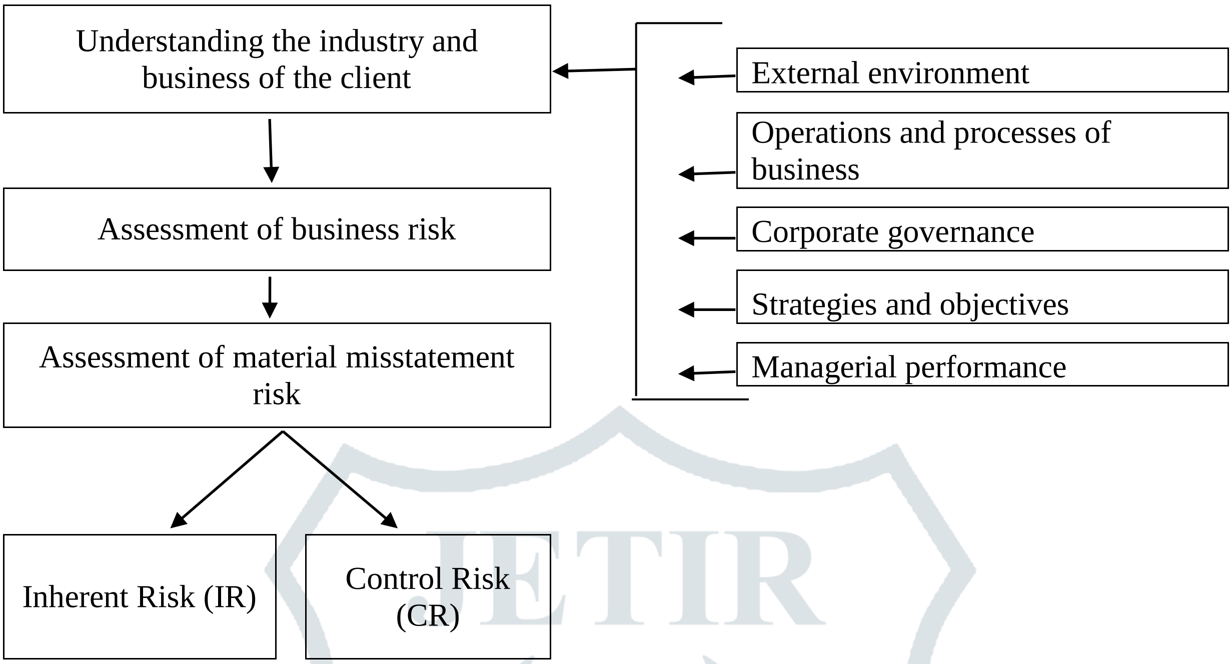
Detection risk is the risk that has not been noticed by the internal control system and the auditor do not identify an error or mistake in the auditor's procedures. The paper sets certain assumptions, which are incited by generally accepted auditing standards by using a hypothesis-testing framework for decision making. The author develops comparative strategies with respect to payoffs of auditor and auditee. The distinguishing feature of this paper is the addition of substantive testing to the audit setting which permits the determination of detection risk in a strategic setting. The apparent reparability of the control risk and detection risk analyses develops a partial equilibrium modelling. The model representing auditor and auditee payoffs assumes that all relevant payoff aspects of the controls tests(WATTS, 1990).

Several studies have been done as a result of the pressure by financial statement users, where new auditing standards propagated by the AICPA presume that auditors have greater responsibility for the revelation and reporting of management fraud. The Statement on Auditing Standards (SAS) No. 53: The Auditor's Responsibility to Detect and Report Errors and Irregularities increases explicit responsibility on the auditor's judgment with respect to errors and irregularities. The material misstatements in the financial statements are caused by increased errors and irregularities. So the auditor should assess the risk and depending on that assessment, the auditor should outline the audit to supply rational assurance of discovering misconceptions and deformities that are material to the financial statements.

In audit planning, auditors use the audit risk model for risk assessment to evaluate whether an audit plan appears reasonable or not. It helps to determine detection risk and the appropriate amount of evidence and as a judgment aid (as a reminder of relations among risk and evidence). The analysis concentrates on the elements of risk assessment and the judgment aid the employment of the audit risk model. The probability of irregular occurring of audit risk and its non-detection by the internal control system, where the auditor judgment and the audit evidence will not detect a material error is known as the detection risk. It leads to the derivation of the inherent risk and detection risk components of NSAR (nonstrategic audit risk) and SAR (strategic audit risk). The assumed independence of payoffs and information between the controls test and substantive testing evaluates inherent risk and detection risk separable from the evaluation of control risk. Assessment of control risk will affect the optimal choice of detection risk. The detection risk is increased whereby the SAR directly diminishes due to misreport of decreased incentive, but the auditor responds by "rejecting" the auditee indirectly less often (Shibano, 1990).

On understanding the principal amount of earnings, the illicit auditee can make use of his informational advantage. It discloses if he is fraudulent by furnishing a record such that the amount of the fraud and the risk of identification integrate to enhance his anticipated reward with respect to the standard. The auditor goes through less audit effort due to the decreased fraud and auditee's incentive composition, thereby invoking a greater detection risk. When report-dependent audit planning is executed, overall audit risk swells because of the increased inherent and detection risks due to unaffected control risk. By reducing the amount of fraud by the auditee and redistribution of costs by the auditor, moving them off from audit effort to the anticipated costs from unidentified fraud can cause an increase in the audit and detection risk (Newman, Patterson, & Smith, 2001).

## 5. Audit Risk Model (ARM)




(Khorwatt, 2015) proposes that a broader apprehension of the environment and the organization itself is vital to asses to audit risk. Throughout the initial stages of planning an audit the auditors consider the risk factors to evaluate the gross risk material misstatement as stated in the auditing standards. Business risks are those risks which curtails an entity from achieving its objectives. Control environment as a component of the internal control system must be assessed efficiently considering the factors affecting its quality. These factors are

- External environment
- Operations and processes of business
- Corporate governance
- Strategies and objectives
- Managerial performance

Audit risk model (ARM) is a methodology that we apply to recognise the audit strategy that we need to follow to manage the audit risk in the performance of the audit. It helps an auditor in the determination of the risk involved in an audit procedure and also prescribes the ways in which such risks can be managed.

The evolution of the Audit Risk Model as a statistical tool can be dated back to the early 1970's, when (Elliot & Rogers, 1972) advocated the need for establishing an assessment mechanism of audit risk using a statistical approach and following which, AICPA introduced a SAS (Statement of Auditing Standards) encompassing an ARM model for the first time in SAS-47. The inclusion of an ARM model as a separate audit standard conjoined the statistical as well as the relative risk facilitating a comprehensive model for the assessment and detection of risk. (Roberts, 1974)further explained the statistical applicability of the auditing standard SAS-47 incorporated earlier by AICPA and replaced the terms 'reliability' and 'precision' in Audit Sampling as propounded by (Elliot & Rogers, 1972)with 'Risk'. The presence of audit risk in an entity is directly proportional to the reliability on the existing internal control system. The study states that the level of audit risk can be precisely measured with the help of the internal control mechanism.

The concept of Substantive Audit Test was evolved with an objective of detecting the errors from an audit sample, wherein the auditor follows a regime of procedures to estimate the actual monetary errors and compares the same along with the desired level of errors in the financial accounts under the audit. (Cushing & Loebbecke, 1983)developed a formula in order to determine the level of reliability on the substantive test. The determination of the reliability level on the internal control and substantive procedures ensure the success of statistical sampling as well as the proper conduct of the audit.

$$S = 1 - \frac{(1-R)}{(1-C)}$$

where,

S = Substantive Procedural Reliability

R = Reliability Level Estimated

C = Level of Control System

'The reliance on the internal control system can be dependent on the results yielded in the substantive audit procedures undertaken by the auditor'. The early analytical review, before an audit can extract material facts regarding the financial statement and internal control system, which may impact the actual audit extensively. Such facts are identified in the substantive tests. The mathematical representation aforesaid statement is made by (Stringer, 1975) :

$$S = 1 - (1-D)(1-A)$$

where,

S = Substantive Test Reliability

D = Reliability Level Estimated on Test Detail

A = Level of Reliability on the Initial Analysis

The aforesaid formula is rearranged to derive the 'desirable level of Combined Reliability' of all the aspects involved in an audit procedure is as formulated by (Cushing & Loebbecke, 1983):

$$R = 1 - (1-C)(1-A)(1-D)$$

where,

R = Desirable level of Combined Reliability

C = Reliability Level Assigned on Control

A = Level of Reliability on the Initial Analysis Review

D =Reliability Level Estimated on Test Detail

The Canadian evidence of the audit risk model can be cited back to the 1980s when the Canadian Institute of Chartered Accountants (CICA) formulated an Audit Risk Model in order to meet the specific audit needs of the Canadian-based firms. Along with the CICA ARM, (Leslie, Teitlebaum, & Anderson, 1980)also discussed an extended version of the Audit Risk Model termed as Joint risk-model which considered the inherent risk to be prior-probability.

$$Joint\ Risk = IR \times CR \times PR \times STR$$

where,

IR = Inherent Risk

CR = Control Risk

PR = Procedural Risk

STR = Substantial Test Risk

The CICA ARM model positioned the inherent risk to be a risk of probability to be occurred before the audit but the model developed by (Daniel, 1988)stated that the audit risk as a whole, is entirely dependent on the assessment of inherent risk in the initial stages of audit and it is found to be sound statistically.

$$UR = \frac{IH \times IC \times AR \times TD}{(IH \times IR \times AR \times TD) + (1 - IH)}$$

where,
UR = Ultimate Risk
IC = Internal Control Risk
AR = Analytical Risk
IH = Inherent Risk
TD = Reliance on Testing of Detail Risk

The widely acclaimed and practiced Audit Risk Model across the world, was developed by the (AICPA, 1983). It points out that professional judgment of the auditor, to determine a level for various types of audit risk, in order to reduce the audit risk.

$$AR = IR \times CR \times DR$$

$$DR = \frac{\mathrm{AR}}{\mathrm{IR} \times \mathrm{CR}}$$

Where,
AR = Audit Risk
DR = Detection Risk
CR = Control Risk
IR = Inherent Risk

| Company A | Company B |
|---|---|
| Situation: High IR/CR | Situation: Low IR/CR |
| High risk of misstatements | Low risk of misstatements |
| Increased audit effort | Decreased audit effort |
| Low DR | High DR |

There is higher risk in Company A due the inherent nature of the client or the poor internal control system. Likewise, in Company B there is a low risk due to the inherent nature of the client or strong internal control system. A client with higher CR/IR has a greater probability of having misstatements than a lower CR/IR. Low DR means a high probability of detecting misstatements or a low risk of not detecting a material misstatement. And, high DR means low chances of detecting material misstatements. Hence, inherent/control risks are inversely proportional to the detection risk.

## 6. Role of Audit Committee in Controlling Audit Risk

Be it an audit committee, management, independent auditor all have distinct roles to play. Management has the responsibility to prepare financial statements and establish the required internal control while the independent directors have to comment on the reasonableness of the financial statements and on other aspects such as results of the operations, financial position of the enterprise and several other such aspects thereafter. Similarly the audit committee is accountable for administering the entire financial reporting process as a whole. To accomplish the said objective effectively and efficiently the audit committee must be aware of the processes and control that management has established and determine whether or not they are framed constructively (Deloitte, 2018).

The term audit risk in its simplest element can be viewed as uncertainty connected in dealing with the client. It can be inferred that the auditor functions on the belief that risk assessment involves after an audit firms are engaged in the audit process and before the applications of the procedure (H Fenwik Huss, 2000).

The audit committee's responsibility is carrying out the responsibility of oversight and monitoring. The committee may rely on the management for same. The audit committee must consider having discussions with the management so that in the mean time accounting policies, regulatory affairs that could influence the financial statements and judgments made can be analyzed.

The audit committee obtains its duty from the board of directors and exchange listing governments for instance the public companies audit committee is responsible for appointment, remuneration and omision of work directly where as in the private company that is not the case. The authority of the audit committee can be viewed as functions of audit committee (F. Todd De Zoort, 2002)

Following are few of the authorities of the audit committee amongst many other:

- The management's initiative to implement any latest technical or regulatory guidelines must be updated to the audit committee.
- The unresolved technical and regulatory matters that could hit the financial statements must be discussed among the management and audit committee.
- Review of balance sheet structure as a recurring agenda
- Monitoring if there is any actual violation, including management's risk
- Understand policies and procedures in place specifically in detail to detect fraud and mitigate audit related risk

With reference to the audit risk, the audit committee should be satisfied that should initially make sure that the company has policies in place such that they identify and prevent fraud. It should work with the management hand in hand to establish an appropriate antifraud controls, policies and programs to take adequate steps when fraud is detected. The committee must also be satisfied that the organization has bought into force suitable ethics and compliance system in place to establish a reporting hotline (Deloitte, 2018).

However, audit planning and execution of the professional duties compensate with the risk associated with a particular client individually. Given a distinguished perceived nature of the compensatory nature of the audit process assessing the risk involved in dealing with the individual client becomes much easier. There are various researchers who have questioned the notion of the audit risk, by the way of comparing the existing models and subjective assessments of the auditor. Incapacity the auditors from the past court decisions and present scenarios there was a theory bought in to assess the audit risk, which is as follows:

$$\text{Audit Risk} = (IR * (1 - \text{Assurance}))$$

Where IR is the intrinsic risk that is the potential loss to the investor due to unreliable financial statements assurance is determined from 0 to 1 range. 0 being no assurance and 1 being complete assurance says (H Fenwik Huss, 2000)

## 7. Conclusion

Assessing and responding to risks of any kind is of utmost importance. Risk assessment is the central driving facet of an organization. It deals with governing the collection of evidence, assignment of personnel to audit engagement and so on. The audit risk assessment should be made above the financial statements of the entity. The risk assessment process is not just assessing the risk of material misstatement but also getting a sense for the business risks that clients face.

The audit risk model is an effective tool for the auditors to use when designing the audit of financial statements of an entity. The risk allied to the audit engagement can be easily understood with an audit risk model. This qualifies the auditor in productive planning to reduce the quantum of risk. Audit risk can be minimized with the help of a strong audit team/committee, proper understanding of the organizational practices, explicit assessment of the internal control systems, and by adequate audit planning.

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