Chapter 7 Audit Sampling
Compilation of Important ICAI Question Answers
As discussed in Revision class:
https://www.youtube.com/watch?v=UUfDgvSTlbs

Question

Discuss the following:

Factors that should be considered for deciding upon the extent of checking on a sampling plan. (5 Marks) May 2018

Answer: factors that should be considered for deciding upon the extent of checking on a sampling plan are following:

(i) Size of the organisation under audit.

(ii) State of the internal control.

(iii) Adequacy and reliability of books and records.

(iv) Tolerable error range.

(v) Degree of the desired confidence.

Question: It is imperative for the auditor to project misstatements for the population while performing audit procedures through sampling. Comment.   (3 Marks) Nov 2018

Answer: (i) The auditor is required to project misstatements for the population to obtain a broad view of the scale of misstatement but this projection may not be sufficient to determine an amount to be recorded.

(ii) When a misstatement has been established as an anomaly, it may be excluded when projecting misstatements to the population. However, the effect of any such misstatement, if uncorrected, still needs to be considered in addition to the projection of the non-anomalous misstatements.

(iii) For tests of details, the auditor shall project misstatements found in the sample to the population whereas for tests of controls, no explicit projection of deviations is necessary since the sample deviation rate is also the projected deviation rate for the population as a whole.

Question: In the context of SA 530 'Audit Sampling', explain the terms 'Sampling Risk' and 'Non- Sampling risk'. **MAY 2019(Jan. 2021) (4 Marks)**

Answer

Sampling Risk. The risk that the auditor's conclusion based on a sample may be different from the conclusion if the entire population were subjected to the same audit procedure. Sampling risk can lead to two types of erroneous conclusions:

(i) In the case of a test of controls, that controls are more effective than they actually are, or in the case of a test of details, that a material misstatement does not exist when in fact it does. The auditor is primarily concerned with this type of erroneous conclusion because it affects audit effectiveness and is more likely to lead to an inappropriate audit opinion.

(ii) In the case of a test of controls, that controls are less effective than they actually are, or in the case of a test of details, that a material misstatement exists when in fact it does not. This type of erroneous conclusion affects audit efficiency as it would usually lead to additional work to establish that initial conclusions were incorrect.

Non-Sampling Risk. The risk that the auditor reaches an erroneous conclusion for any reason not related to sampling risk.

Example

Examples of non-sampling risk include use of inappropriate audit procedures, or misinterpretation of audit evidence and failure to recognize a misstatement or deviation.

Sources of Non Sampling risk are :

(i) Human Mistakes

(ii) Applying audit procedures not appropriate to the objectives of audit

(iii) Relying on erroneous information e.g. erroneous confirmation

(iv) Misinterpreting the sample results

Non sampling risk can never be mathematically measured.

Question 2

(b) CA B is appointed as an auditor of M/s. Divine Pharmacy, a wholesale medicine supplier.

While auditing for the financial year 2020-21, CA B wants to use test checking technique. Advise CA B, what kind of precautions should be taken by him in this regard. **(July 2021) (4 Marks)**

Answer

(b) While auditing the accounts of Divine Pharmacy, CA B wanted to use Test Checking technique. The following Precautions should to be taken by CA B while applying test check techniques:

1. **Thorough study** of **accounting system** should be done before adopting sampling

2. Proper study of **internal control systems**.

3. Areas which are **not suitable** for sampling should be carefully considered. eg: compliance with statutory provisions, transactions of unusual nature etc.

4. Proper **planning for Sampling methods** to be used and explaining the staff,

5. Transactions and balances have to be properly **classified (stratified)**

6. **Sample size** should be appropriately determined.

7. Sample should be chosen in **unbiased way,**

8. Errors located in the sample should be **analyzed properly.**

Question: With reference to SA 530 "Audit Sampling", explain briefly the following factors that the auditor may consider when determining the sample size for the Test of Details –

(i) The desired level of assurance

(ii) Stratification of the pollution. **(Dec. 2021) (3 Marks)**

Answer: Examples of factors influencing Sample Size for Test of Details:

(i) Desired Level of Assurance: An increase in the auditor's desired level of assurance that tolerable misstatement is not exceeded by actual misstatement in the population will increase the sample size. Hence, greater the level of assurance that the auditor requires that the results of the sample are in fact indicative of the actual amount of misstatement in the population, the larger the sample size needs to be.

(ii) Stratification of population: When stratification of the population is appropriate then sample size will decrease as when there is a wide range (variability) in the monetary size of items in the population, it may be useful to stratify the population. When a population can be appropriately stratified, the aggregate of the sample sizes from the strata generally will be less than the sample size that would have been required to attain a given level of sampling risk, had one sample been drawn from the whole population.

Questions

What is the meaning of Sampling? Also discuss the methods of Sampling.

Explain in the light of SA 530 "Audit Sampling".

Answers

Meaning of Audit Sampling: "Audit Sampling" means the application of audit procedures to less than 100% of items within a population of audit relevance such that all sampling units have a chance of selection in order to provide the auditor with a reasonable basis on which to draw conclusions about the entire population.

The objective of the auditor when using audit sampling is to provide a reasonable basis for the auditor to draw conclusions about the population from which the sample is selected.

Some of the important methods of selecting the sample are discussed below –

(1) **Random Sampling**:

Random selection ensures that all items in the population or within each stratum have a known chance of selection. It may involve use of random number tables. Random sampling includes two very popular methods which are discussed below–

(i) **Simple Random Sampling**:

- Under this method each unit of the whole population e.g. purchase or sales invoice has an equal chance of being selected.

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- It is considered that random number tables are simple and easy to use and also provide assurance that the auditors' bias does not affect the selection.
- Each item in a population is selected by use of random number table either with a help of computer or picking up a number in a random way (may be randomly from a drum).
- Today random numbers are also generated using various applications on the cellphones like the random number generator.
- This method is considered appropriate provided the population to be sampled consists of reasonably similar units and fall within a reasonable range i.e it is suitable for a homogeneous population having a similar range.
- Example The population can be considered homogeneous, if say, trade receivables balances fall within the range of ` 55,000 to ` 2,25,000 and not in the range between ` 525 to ` 10,50,000.

(ii) **Stratified Sampling**:
- This method involves dividing the whole population to be tested in a few separate groups called strata and taking a sample from each of them.
- Each stratum is treated as if it was a separate population and if proportionate of items are selected from each of these stratum.
- The number of groups into which the whole population has to be divided is determined on the basis of auditor judgment.
- Example 1. In the above case, trade receivables balances may be divided into four groups as follows:- (a) balances in excess of ` 10,00,000; (b) balances in the range of ` 7,75,001 to ` 10,00,000; (c) balances in the range of ` 5,50,001 to ` 7,75,000; (d) balances in the range of ` 2,25,001 to ` 5,50,000; and (e) balances ` 2,25,000 and below.
- From these above groups the auditor may pick up different percentage of items from each of the group. From the top group i.e. balances in excess of ` 10,00,000, the auditor may examine all the items; from the second group 25 per cent of the items; from the third group 10 per cent of the items; and from the lowest group 2 per cent of the items may be selected.
- Random sample is chosen from each stratum using random number tables.
- The reasoning behind the stratified sampling is that for a highly diversified population, weights should be allocated to reflect these differences.
- This is achieved by selecting different proportions from each strata.
- It can be seen that the stratified sampling is simply an extension of simple random sampling.
- Therefore, we can say that random selection method is applied through random number generators, for example, random number tables

(2) **Interval Sampling or Systematic Sampling**:
- Systematic selection is a selection method in which the number of sampling units in the population is divided by the sample size to give a sampling interval, for example 50, and having determined a starting point within the first 50, each 50th sampling unit thereafter is selected.
- Although the starting point may be determined haphazardly, the sample is more likely to be truly random if it is determined by use of a computerized random number generator or random number tables.
- When using systematic selection, the auditor would need to determine that sampling units within the population are not structured in such a way that the sampling interval corresponds with a particular pattern in the population.
- Example If in a population of branch sales, particular branch sales occur only as every 100th item and the sampling interval selected is 100.

- The result would be that either the auditor would have selected all or none of the sales of that particular branch.
- If Accountant A is responsible to record all transaction in a particular month and Acountant B for next month ; if this structure is same throughout the year, and auditor determines as his sample to check every transaction of alternate months, then only one accountant's work is checked by the auditor i.e either Accountant A or B depending upon which month the checking started from.
- More than one starting point can be considered to minimize such risk.
- To minimise the effect of the possible known buyers through a pattern in the population, more than one starting point may be taken.
- The multiple random starting point is taken because it minimises the risk of interval sampling pattern with that of the population being sampled.

(3) **Monetary Unit Sampling**:
- It is a type of value-weighted selection in which sample size, selection and evaluation results in a conclusion in monetary amounts.
- NOTE: Value-Weighted Selection: When performing tests of details it may be efficient to identify the sampling unit as the individual monetary units that make up the population. Having selected specific monetary units from within the population, for example, the accounts receivable balance, the auditor may then examine the particular items, for example, individual balances, that contain those monetary units. One benefit of this approach to defining the sampling unit is that audit effort is directed to the larger value items because they have a greater chance of selection, and can result in smaller sample sizes. This approach may be used in conjunction with the systematic method of sample selection and is most efficient when selecting items using random selection

(4) **Haphazard sampling**:
- Haphazard selection, in which the auditor selects the sample without following a structured technique. Although no structured technique is used, the auditor would nonetheless avoid any conscious bias or predictability (for example, avoiding difficult to locate items, or always choosing or avoiding the first or last entries on a page) and thus attempt to ensure that all items in the population have a chance of selection.
- Haphazard selection is not appropriate when using statistical sampling.

(5) **Block Sampling:**
- This method involves selection of a block(s) of contiguous items from within the population.
- Block selection cannot ordinarily be used in audit sampling because most populations are structured such that items in a sequence can be expected to have similar characteristics to each other, but different characteristics from items elsewhere in the population.
- Although in some circumstances it may be an appropriate audit procedure to examine a block of items, it would rarely be an appropriate sample selection technique when the auditor intends to draw valid inferences about the entire population based on the sample.
- Usually a range of continuous transaction shall have similar characteristics, therefore, selection of a group at one time will not give a reasonable basis for opinion on the overall population as different types of transactions and unusual transactions may not be covered in the group taken all at once.
- There is a close similarity between this method and non-statistical sampling.
- Consequently it has similar characteristics, namely, simplicity and economy. On the other hand there is a risk of bias and of establishing a pattern of selection which may be noted by the auditees.

Questions

With reference to Standard on Auditing 530, state the requirements relating to audit sampling, sample design, sample size and selection of items for testing.

Answers

Audit Sampling: As per SA 530 on "Audit Sampling", the meaning of the term Audit Sampling is – the application of audit procedures to less than 100% of items within a population of audit relevance such that all sampling units have a chance of selection in order to provide the auditor with a reasonable basis on which to draw conclusions about the entire population.

The requirements relating to sample design, sample size and selection of items for testing are explained below-

Sample design - When designing an audit sample, the auditor shall consider the purpose of the audit procedure and the characteristics of the population from which the sample will be drawn.

Sample Size- The auditor shall determine a sample size sufficient to reduce sampling risk to an acceptably low level.

Selection of Items for Testing- The auditor shall select items for the sample in such a way that each sampling unit in the population has a chance of selection.

Question:

What are the advantages of Statistical sampling in Auditing.

Answer: The advantages of statistical sampling may be summarized as follows –

(1) The amount of testing (sample size) does not increase in proportion to the increase in the size of the area (universe) tested.

(2) The sample selection is more objective and thereby more defensible.

(3) The method provides a means of estimating the minimum sample size associated with a specified risk and precision.

(4) It provides a means for deriving a "calculated risk" and corresponding precision (sampling error) i.e. the probable difference in result due to the use of a sample in lieu of examining all the records in the group (universe), using the same audit procedures.

(5) It may provide a better description of a large mass of data than a complete examination of all the data, since non-sampling errors such as processing and clerical mistakes are not as large.

(6) It is widely accepted way of sampling as it is more scientific, without personal bias and the result of sample can be evaluated and projected in more reliable way.

Question: State the considerations required at the time of Sample Design

Answer: When designing an audit sample,

- the auditor's consideration includes the **specific purpose** to be achieved and the combination of audit procedures that is likely to best achieve that purpose.

- Consideration of the **nature of the audit evidence sought and** possible deviation or misstatement conditions or other characteristics relating to that audit evidence will assist the auditor in defining what constitutes a deviation or misstatement and **what population** to use for sampling.

- In fulfilling the requirement of SA 500 "Audit Evidence", when performing audit sampling, the auditor performs audit procedures to obtain evidence that the **population from which the audit sample is drawn is complete.**

Question: The auditor shall perform audit procedures, appropriate to the purpose, on each item selected. Comment.

Answer: **PERFORMING AUDITPROCEDURES**

♦ The auditor shall perform audit procedures, appropriate to the purpose, on each item selected.

♦ If the audit procedure is not applicable to the selected item, the auditor shall perform the procedure on a **replacement item.**

♦ If the auditor is **unable** to apply the designed audit procedures, or suitable alternative procedures, to a selected item, the auditor shall treat that item as a **deviation from the prescribed** control, in the case of tests

of controls, or a misstatement, in the case of tests of details.

♦ An example of when it is necessary to perform the procedure on a replacement item is when a voided check (**Cancelled cheque**) is selected while testing for evidence of payment authorization. If the auditor is satisfied that the check has been properly cancelled such that it does not constitute a deviation, an appropriately chosen replacement is examined. A replacement would then mean a proper and valid cheque through which payment has been made.

♦ An example of when the auditor is **unable to apply** the designed audit procedures to a selected item is when documentation relating to that item has been lost. If the documentation of a sales is lost, like the sales order record, sales invoice, document for dispatch etc, then confirmation can be sought from the debtor as per SA 505. If it is a cash sale, the cash book can be cross verified for the existence of such transactions.

♦ An example of a **suitable alternative procedure** might be the examination of subsequent cash receipts together with evidence of their source and the items they are intended to settle when no reply has been received in response to a positive confirmation request.

Question: **In analyzing the deviations and misstatements identified, the auditor may observe that many have a common feature, for example, type of transaction, location, product line or period of time. Comment.**

Answer:

♦ In such circumstances, the auditor may decide to identify all items in the population that possess the common feature, and extend audit procedures to those items. In addition, such deviations or misstatements may be intentional, and may indicate the possibility of fraud.

♦ Therefore, the auditor shall investigate the nature and causes of any deviations or misstatements identified, and evaluate their possible effect on the purpose of the audit procedure and on other areas of the audit.

♦ In the extremely rare circumstances when the auditor considers a misstatement or deviation discovered in a sample to be an anomaly, the auditor shall obtain a high degree of certainty that such misstatement or deviation is not representative of the population.

♦ The auditor shall obtain this degree of certainty by performing additional audit procedures to obtain sufficient appropriate audit evidence that the misstatement or deviation does not affect the remainder of the population.

Question: **comment on : EVALUATING RESULTS OF AUDIT SAMPLING**

Answer: The auditor shall evaluate-

(a) **The results of the sample; and**

(b) **Whether the use of audit sampling has provided a reasonable basis** for conclusions about the population that has been tested.

- For tests of controls, an unexpectedly high sample deviation rate may lead to an increase in the assessed risk of material misstatement, unless further audit evidence substantiating the initial assessment is obtained.
- For tests of details, an unexpectedly high misstatement amount in a sample may cause the auditor to believe that a class of transactions or account balance is materially misstated, in the absence of further audit evidence that no material misstatement exists.
- In the case of tests of details, the projected misstatement plus anomalous misstatement, if any, is the auditor's best estimate of misstatement in the population.
- When the projected misstatement plus anomalous misstatement, if any, exceeds tolerable misstatement, the sample does not provide a reasonable basis for conclusions about the population that has been tested. The closer the projected misstatement plus anomalous misstatement is to tolerable misstatement,

> the more likely that actual misstatement in the population may exceed tolerable misstatement
>
> In case the auditor concludes that audit sampling **has not provided a reasonable basis** for conclusions about the population that has been tested, the auditor may request management
>
> I. to investigate misstatements that have been identified and the potential for further misstatements and
>
> II. to make any necessary adjustments; or tailor the nature, timing and extent of those further audit procedures to best achieve the required assurance. For example, in the case of tests of controls, the auditor might extend the sample size, test an alternative control or modify related substantive procedures.

IMPORTANT: WRITE FACTORS AFFECTING SAMPLE SIZE FROM TABLE DONE IN REVISION CLASS FROM TECHNIQUE WRITTEN THERE IN CLASS.(to be learned for exam purpose, as discussed separately for test of controls and test of details)

Question 1

(f)The non-statistical sampling is criticized on the grounds that it is neither objective nor scientific. **(Nov., 2019) (2 Marks)**

Answer

(f) Correct: The non-statistical sampling is criticized on the grounds that it is neither objective nor scientific. The expected degree of objectivity cannot be assured in non -statistical sampling because the risk of personal bias in selection of sample items cannot be eliminated. The closeness of the qualities projected by the sample results with that of the whole population cannot be measured because the sample has not been selected in accordance with the mathematically based statistical techniques.

Question 1

(i) When statistical sampling is used to select a sample, sample need not be representative because the statistical sampling takes care of the representation. (2 **Marks)** (May 2018)

Answer

(i) Incorrect: Whatever may be the approach non-statistical or statistical sampling, the sample must be representative. This means that it must be closely similar to the whole population although not necessarily exactly the same. The sample must be large enough to provide statistically meaningful results.

Question 1

(e) In stratified sampling, the conclusion drawn on each stratum can be directly projected to the whole population. **(July 2021) (2 Marks)**

Answer

(e) Incorrect: In case of stratified sampling, the conclusions are drawn on the stratum. The combination of all the conclusions on stratum together will be used to determine the possible effect of misstatement or deviation. Hence the samples are used to derive conclusion only on the respective stratum from where they are drawn and not the whole population.

Question 1

(e) Statistical sampling being more scientific and without personal bias will always be appropriate to use under all circumstances.   **(Dec.2021) (2 Marks)**

Answer

(e) Incorrect: Statistical sampling is widely accepted way of sampling as it is more scientific, without personal bias and the result of sample can be evaluated and projected in more reliable way.

Under some audit circumstances, statistical sampling methods may not be appropriate. The auditor should not attempt to use statistical sampling when another approach is either necessary or will provide satisfactory information in less time or with less effort. For instance, when exact accuracy is required or in case of legal requirements etc.