Materiality and Risk

I. Introduction

- Preparation Question: While you are scanning the entries in R & M you see an entry for $250,000 which far exceeds all the other dollar amounts of the entries. Future investigation finds that the $250,000 is for the replacement of paddles in the company's wind tunnel. What management assertion may be at risk? What questions do you need to ask? What are you likely to conclude?

- Material misstatements affect decisions
- Don’t sweat the small stuff. What's small is a relative question.
- Reasonable assurance that there are no material misstatements
- Rely on sampling.
- Flowchart on p. 250

II. Materiality – go through a five step process (A through E).

SAS 107 requires this process to be documented.

A. Set Preliminary Judgment About Materiality for Financial Statements

Preparation Question: The preliminary judgement about materiality is the __________ amount by which the auditor believes the statements could be misstated and still not affect the decisions of reasonable users.

1. Relative vs. Absolute
2. Qualitative issues
   - Fraud vs. error
   - Contract violation
3. Select a base
   - EBT
   - Net income
   - Total assets
4. Set level
   - +/- percentage -
     - need not be quantified.
     - judgmentally decide what will NOT affect the decisions of a reasonable user.
   - can use different over- and under-statement.
   - may change level during audit.
   - the lower the acceptable variance between audit and book the greater the amount of evidence needed.
Example: At the county fair, you pass by a booth where you can win a 42" color television by estimating the number of beans in a 12-inch high glass jar and being closest to the actual physical count. Three potential ways to come up with a count are:

<table>
<thead>
<tr>
<th>Audit</th>
<th>Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>blind guess</td>
<td>actual physical count</td>
</tr>
<tr>
<td>count 1 in. then X by 12</td>
<td>actual physical count</td>
</tr>
<tr>
<td>count 6 in. then X by 2</td>
<td>actual physical count</td>
</tr>
</tbody>
</table>

**Preparation Question:** Which estimate in the above example is most reliable and most likely to be closest to actual?

B. Set Tolerable Misstatement for Segments

**Preparation Question:** True or false: The total tolerable misstatements will equal the preliminary judgement.

**Preparation Question:** Auditors are more likely to allocate preliminary judgement to the balance sheet or income statement?

**Preparation Question:** What are the three difficulties in allocating materiality to the financial statements?

- The total tolerable misstatement has relation to A but not necessarily agreement.
  1. More likely that account is misstated the greater the assigned tolerable misstatement amount.
  2. Can use different over/under variances – example: stricter on overstatements of assets than understatements.
  3. Relative audit costs affect width of over and under ranges.

C. Estimate Misstatement in Segment = [(Misstatement in sample/Total sampled) X Total recorded population value for segment] +/- Sampling error

D. Combine misstatements

E. Compare Difference to Preliminary Judgment
Very simplified example (i.e., normally include liabilities and stockholders’ equity):

<table>
<thead>
<tr>
<th></th>
<th>Reported Value</th>
<th>Tolerable Misstatement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$1 million</td>
<td></td>
</tr>
<tr>
<td>A/R, net</td>
<td>$5 million</td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>$20 million</td>
<td></td>
</tr>
<tr>
<td>P. P. E.</td>
<td>$150 million</td>
<td></td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>$176 million</strong></td>
<td></td>
</tr>
</tbody>
</table>

1. Set Preliminary judgment about materiality

2. Set tolerable misstatement

<table>
<thead>
<tr>
<th>Account</th>
<th>expected variance</th>
<th>Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td></td>
<td>strong controls; bank obligated to deal with honestly; bank reconciliation – keep account in-line, very few unresolved issues.</td>
</tr>
<tr>
<td>A/R</td>
<td></td>
<td>judgments involved in write-offs, allowance estimate; disputes with customers over price and quantity, errors – more likely to be uncaught</td>
</tr>
<tr>
<td>Inventory</td>
<td></td>
<td>mfg - raw – disputes with suppliers over quantities and prices; w-i-p – involves estimate of completion, costs; finished goods – unit cost, variances, applied overhead, etc.</td>
</tr>
</tbody>
</table>

3. Estimate misstatement

Test a sample of $25,000 dollars worth of accounts receivable, find that for the sample the audited value is $27,500 or understated by $2,500. The estimate of the misstatement is:

\[
\frac{\text{Mistmt. in sample}}{\text{Total sampled}} \times \frac{\text{Total rec'd popl'n val. of seg.}}{\text{Est. of the misstatement}} = \text{______}
\]
Diagram the acceptable reported balance range and the auditor determined projected balance range. Assume a sampling error of $750,000.

A/R

\[ \text{\$5 million} \]
\[ \text{Reported balance} \]

A/R

\[ \text{Audited balance} \]

Points:
1. For assets more concerned with overstatements, which is not what we have
2. Can wait to see how other segments come out.

4. Combine all segment misstatement.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Reported Value</th>
<th>Tolerable Misstatement</th>
<th>Direct Projection</th>
<th>Sampling Error</th>
<th>Total Understatement</th>
<th>Total Overstatement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$1 M</td>
<td>0</td>
<td>0</td>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/R, net</td>
<td>$5 M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>$20 M</td>
<td>1,000,000</td>
<td>1,500,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P. P. E.</td>
<td>$150 M</td>
<td>2,000,000</td>
<td>2,500,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$176 M</td>
<td></td>
<td>2,500,000</td>
<td></td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

* Outside the acceptable tolerable misstatement range.

5. Compare to preliminary judgment.
   Are the total assets materially misstated?

Preparation Question: If the overall financial statements are fairly presented, but one account is materially misstated, what type of audit report may be issued?

III. Risk
A. Audit Risk Model - guides in decisions about substantive evidence

Preparation Question: State the audit risk model.
Preparation Question: Which of the following tests would be associated with control risk? Which of the following questions would be associated with substantive tests?

1. Understand internal controls
2. Tests of Controls
3. Substantive tests of transactions
4. Analytical procedures
5. Tests of details of balances

B. Terms
1. Planned Detection Risk (by segment) **PDR**
   • Measure of risk that audit evidence for a segment will fail to detect misstatements exceeding a tolerable amount, should such misstatements exist.
   • Risk willing to take that evidence will not reveal a misstatement that exceeds the tolerable amount (i.e., auditor willing to take some risk for missing something important).
   • Lower implies willing to take less risk; therefore, need more substantive evidence. Substantive evidence is focused on dollar amounts - especially BRAOs, and considered to be more "expensive" evidence to gather.
   • Goal, therefore, is to gather enough evidence to reduce risk of exceeding tolerable misstatement to PDR.
   • PDR depends on other 3 components, inversely affects amount of substantive evidence.

2. Acceptable Audit Risk **AAR**
   • Measure of how willing to accept that financial statements are materially misstated.
   • If set at zero, want 100 certainty (no risk acceptance), need 100% evidence (count all beans in jar). If set at 100%, want complete uncertainty (wild guess).
   • 1 - AAR = Level of assurance (or Audit assurance)
   • Factors to consider in setting AAR:
     o External users’ reliance on financial statements (size, distribution, liabilities)
     o Likelihood of financial difficulties (liquidity, profits, financing, nature of operations, management competence)
     o Management integrity

3. Control Risk **CR**
   • Likelihood that misstatement exceeding tolerable amount in a segment will **NOT** be detected or prevented by the internal control system.
   • Private company - assume 100%, i.e., no reliance.
   • Public company – assume less than 100% - must test assumption
   • 1. Assessment of effectiveness
   • 2. Intention to set below maximum of 100% (no reliance) needs to be supported: a) understand system, b) evaluate system, c) test effectiveness
• Factors to consider in setting CR:
  o Effectiveness of Internal Control
  o Discussed in Chapter 10

4. Inherent Risk IR
• Likelihood of material misstatement occurring in a segment, regardless of internal controls.
• Factors to consider in setting IR:
  o nature of the client’s business
  o results of previous audits
  o initial versus repeat engagement
  o related parties
  o non-routine transactions
  o judgment required to correctly record account balance
  o makeup of population
  o factors related to fraudulent financial reporting
  o susceptibility of assets to misappropriation

Risk of material misstatement is \( CR \times IR \)

**Preparation Question:** Which figure in the text summarizes the factors influencing the auditor’s decisions about levels of AAR, IR, and CR?

**Table 9-2.** Good examples of how pieces fit together.

**C. What It All Means to the Auditor:**

\[
PDR = \frac{AAR}{(IR \times CR)}
\]

<table>
<thead>
<tr>
<th>Component</th>
<th>Change in component</th>
<th>Affect on PDR</th>
<th>Affect on substantive evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAR</td>
<td>increase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>decrease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IR</td>
<td>increase</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Increasing AAR means willing to take **more** risk for F/S misstatement, therefore need **less** substantive evidence.
* Decreasing CR means **more** trust in internal controls to catch misstatements, therefore need **less** substantive evidence.
* Increasing IR means believe **greater** likelihood of misstatements, therefore need **more** substantive evidence.
Example using Allowance for Doubtful Accounts (when in doubt remember that UNDER-auditing more of a concern than over-auditing):

<table>
<thead>
<tr>
<th>Situation</th>
<th>AAR</th>
<th>IR</th>
<th>CR</th>
<th>Evidence</th>
<th>Types of evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>H</td>
<td>L</td>
<td>L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>L</td>
<td>H</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>H</td>
<td>M</td>
<td>M</td>
<td>M (-)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>L</td>
<td>H</td>
<td>L</td>
<td>H (-)</td>
<td></td>
</tr>
</tbody>
</table>

\[
\text{AcAR} = \text{IR} \times \text{CR} \times \text{AcDR}
\]

Achieved (Ac) vs. Planned (P) Risk
Reduce IR, CR or AcDR to reduce AcAR