Association of Certified Fraud Examiners

Together, Reducing Fraud Worldwide

Financial Statement Fraud

Detecting Financial Statement Fraud

Introduction

- This section focuses on the various tools and methods the auditor can use to identify fraudulent financial statement schemes.

Identifying Fraud Symptoms

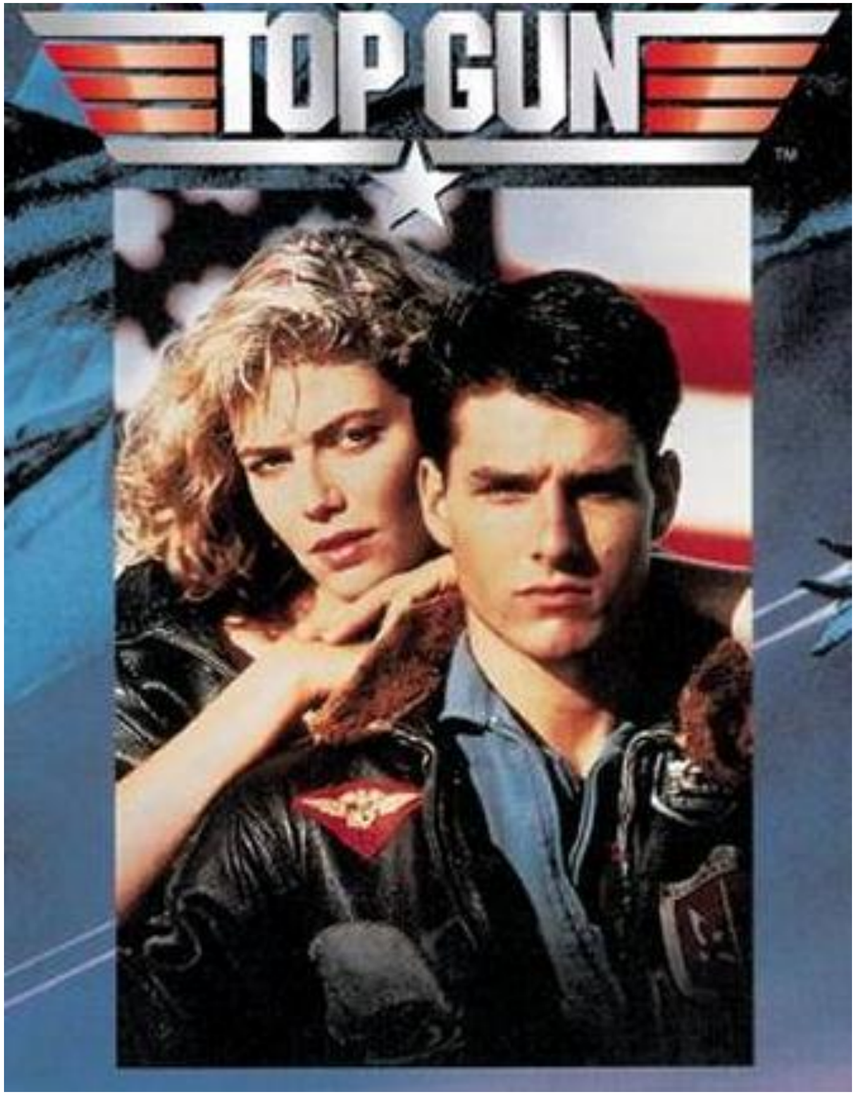
1. Analytical Symptoms
2. Documentary Symptoms
3. Lifestyle Symptoms

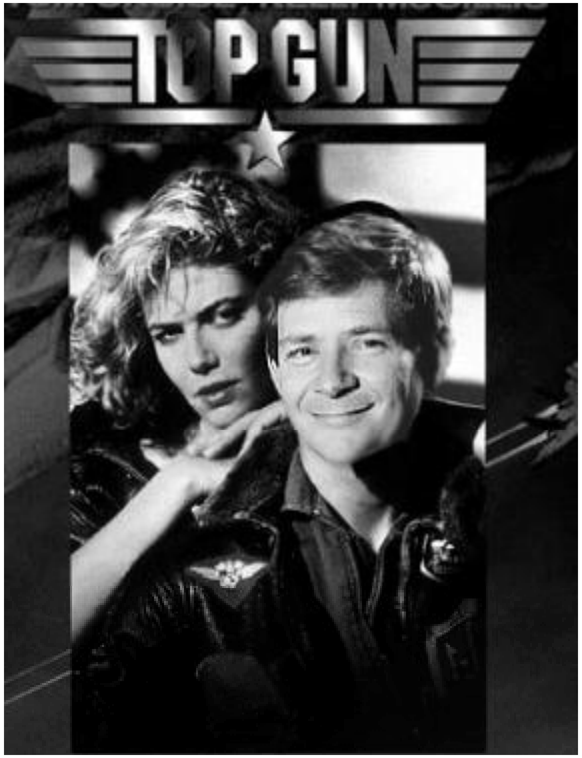
4. Control Symptoms
5. Behavioral and Verbal Symptoms
6. Tips and Complaints

Analytical Symptoms (Largest Focus of This Course)

- **Look for CHANGE!!**
- **Too big**
- **Too small**
- **Wrong timing**
- **Wrong person**
- **The unusual**
- **The unexpected**

BEWARE OF FALSIFED DOCUMENTS!!!





Documentary Symptoms—Sophisticated v. Simple Schemes

"At one point, they were forced to create <u>fake invoices</u> using the authentic invoices and a <u>bottle of correction fluid</u>."

- HealthSouth Fraud (www.al.com)

Lifestyle Symptoms

When people steal, they spend!

Changes in lifestyle once the critical need is met

- **Habits**
- **Possessions**

Control Symptoms

Breakdown in:

- **Control environment**
- **Accounting systems**
- **Internal control activities**

Or:

Management override!!

Responding to the Risk of *<u>Management Override</u>*

Public Oversight Board Quote:

"Opportunity is a necessary feature of fraud and explains why <u>management is in a unique position</u> to perpetrate it. <u>Management possesses the power to manipulate</u> the accounting records and prepare fraudulent financial reports."

Responding to the Risk of <u>Management Override</u>

"Collaborative fraud is maybe impossible to detect. <u>On paper, HealthSouth had a formidable system of internal controls,"</u> Lamphron said. "What we didn't know was that there was a large group of criminals behind the scenes . . . who were <u>overriding those internal controls."</u>

Behavioral Symptoms

- **First time offenders (not experienced crooks)**
  - **Guilt**
  - **Stress**
  - **Changed Behavior**

Behavioral Symptoms—HealthSouth

- **Leif Murphy (who resigned in 1999 rather than participating in the fraud) said Mike Martin, who has pleaded guilty, initially tried to persuade him to stay and offered him $1 million.**

  LATER:

- **Murphy said Martin "sucker punched" him twice in a bar fight at his going-away party.**

  WHY?

Behavioral Symptoms—HealthSouth (Rationalization)

- **Martin felt Murphy had betrayed him.**
- **"I felt like I was sitting on the Titanic, and he (Murphy) was getting off in a row boat," Martin said.**

Analytical Symptoms (AGAIN!)

- **Look for CHANGE!!**
- **Too big**
- **Too small**
- **Wrong timing**
- **Wrong person**
- **The unusual**
- **The unexpected**

Analytical Procedure Elements

- <u>Evaluations of financial information</u> made by a <u>study of plausible relationships</u> among both financial and nonfinancial data.
- The analysis of <u>significant ratios</u> and <u>trends,</u> including the resulting investigation of <u>fluctuations</u> and <u>relationships</u> that are <u>inconsistent</u> with other relevant information or <u>deviate from predicted amounts</u>.

Analytical Procedures

- Requires comparison:
  - What is observed
  - A reasonable expectation
- Both financial and nonfinancial data are useful
  - Examples of each type?????

Comparisons to What??

Analytical procedures include:

The comparison of financial information with, for example:

- **Comparable information from prior periods**
- **Anticipated results—(budgets, forecasts, or auditor's expectations)**
- **Relationships among financial statement elements**
- **Relationships between financial information and nonfinancial data**
- **Similar industry information**

Industry Considerations

You MUST understand the industry:

- **Establish <u>reasonable base of expectation</u>**
  - **Trends**
  - **Ratios**
  - **Value drivers**
- **Knowledge of industry <u>risks and opportunities</u>**
- **Knowledge of industry <u>accounting issues</u>**

Basic Methodology

- Expectation formation
- Determine the amount of difference from the expectation that should lead to investigation
- Compare expectation to observed amount or relationship
- Investigate—take action
- Document the work

Methodology Effectiveness—Error Detection in Audits

40–50% discovered by:

- Formal analytical procedures
- Discussions with clients
- Comparison to expectations from prior year's experience

- 50–60% discovered by:
  - Detailed testing
    - More effective, but more time consuming

Level of Performing Analytical Procedures

- **Analytical procedures may be applied to:**
  - **Consolidated financial statements**
  - **Financial statements of components (subsidiaries, segments)**
  - **Individual elements of financial information**

–Which level is more effective??

Disaggregation Effectiveness

Analytical procedures at a more detailed level involve:

- **<u>Less reliance on industry benchmarks</u> (because data is often not available at your level)**
- **<u>More reliance on horizontal and vertical analysis</u> (company comparisons over time)**
- **<u>Model-based procedures</u> (nonfinancial data)**

Common Predictable Relationships

- Interest expense to average balance of outstanding debt
- Trade receivables to sales
- Accounts payable to total purchases
- Commission expense to net sales
- Advertising to sales

But be careful!!

Comparisons to Industry Data

- Sources
  - RMA Statistics
  - "Financial Studies of Small Businesses"
  - "Almanac of Business and Industrial Financial Ratios"
  - Trade Organizations
    - PIA
    - NAPL
    - National Restaurant Association
  - Internet Sources

Comparisons with Nonfinancial Data Between Periods

- **Units of production**
- **Unit sales**
- **Direct labor hours**
- **Number of beds in hospital**
- **Size of sales staff**
- **Square feet of selling space (sales per square foot)**

Financial Statement Analysis

- Comparative financial statements provide information for current and prior accounting periods.

Financial Statement Analysis

- Vertical Analysis
- Horizontal Analysis
- Financial Ratio Analysis

Analytical Procedure Effectiveness by Type

Generally:

- **<u>Horizontal analysis is weakest</u>, relying on data from a single account ($ change, % change), aka "trend analysis"**
- **<u>Vertical analysis is more effective</u>—relationships between an account and a base (removes $ amounts)**
- **<u>Ratio analysis is more effective</u>—incorporates the expected relationship between two or more accounts (numerator and denominator) and more than one financial statement in many cases**
- **<u>Model-based procedures are most effective</u>—direct test of consistency (but most time consuming)**

Vertical Analysis

- A technique for analyzing the relationships among the items on an income statement, balance sheet, or statement of cash flows by expressing components as percentages.

Horizontal Analysis

- A technique for analyzing the percentage change in individual financial statement items from one year to the next.

Page 145 in text:
Vertical and Horizontal Analysis of Two Years

Financial Ratio Analysis

- A means of measuring the relationship between two different financial statement amounts

Financial Ratio Analysis

- Current Ratio
- Quick Ratio
- Receivable Turnover
- Collection Ratio

Current Ratio

- Comparison measures a company's ability to meet present obligations from its liquid assets
- The greater the ratio of assets to liabilities, the better
- Can be a prime indicator of the manipulation of the accounts involved

Quick Ratio

- Compares assets that can be immediately liquidated to current liabilities.
- Divides the total of cash, securities, and receivables by current liabilities.
- Used more prevalently during turbulent economic times, providing the analyst with a worst-case look.

Receivable Turnover

- Net sales divided by average net receivables
- Measures the number of times accounts receivable is turned over during the accounting period
- Uses both income statement and balance sheet accounts

Receivables Turnover—Possible Interpretations

- **Slow (long average collection period)**
  - **Excessive bad debt exposure**
  - **Receivable overstatement**
  - **Misclassifications (includes non-trade A/R)**
- **Short (quick average collection period)**
  - **Overly stringent credit policy (limiting sales)**
  - **Revenue overstatement issues**
- **Inconsistency or significant variance in this ratio is a red flag**

Collection Ratio

- Accounts receivable aging
- Divides 365 days by the receivable turnover ratio to arrive at the average number of days required to collect receivables
- The lower the collection ratio, the faster receivables are collected

Inventory Turnover Ratio

- Relationship between a company’s cost of goods sold and average inventory.
- This ratio measures the number of times inventory is sold during the period.
- Good determinant of purchasing, production, and sales efficiency.
- A higher inventory turnover ratio is considered more favorable.

Inventory Turnover—Other Possible Interpretations

- **Slow (long average collection period)**
  - **Strain on liquidity**
  - **Possible excess or obsolete items on hand**
  - **Fraudulent overstatement of inventory**
- **Quick**
  - **Just-in-time systems**
  - **Lost sales due to insufficient quantities on hand**

Average Number of Days Inventory Is in Stock

- Restatement of the inventory turnover ratio expressed in days.
- Inconsistency or significant variance in this ratio is a red flag for fraud investigators.
- Used to examine inventory accounts for possible larceny schemes.
- Significant changes in the inventory turnover ratio are good indicators of possible fraudulent inventory activity.

Average Number of Days in Inventory

- **Inconsistency or significant variance in this ratio is a red flag.**
- **Significant changes in the inventory turnover ratio are good indicators of possible fraudulent inventory activity.**

Debt to Equity Ratio

- Computed by dividing total liabilities by total equity.
- Heavily considered by lending institutions.
- The higher the ratio, the more difficult it will be for the owners to raise capital by increasing long-term debt.
- Sudden changes in this ratio may signal an examiner to look for fraud.

Profit Margin

- Net income divided by net sales.
- Reveals profits earned per dollar of sales.
- Net income may be artificially overstated and the profit margin ratio will be abnormally high, which may signal fraud.
- Over time, this ratio should be consistent.

Profit Margin Ratios

- Types
  - Net income/net sales
  - Gross profit/net sales
  - Operating profit/net sales
  - Pre-tax profit/net sales
- Can be read directly from percentages on common-sized statements

Profit Margin

- ***Gross profit/net sales should usually be more consistent than others***
  - ***Can be affected by operating cost structure and volume changes***
    - ***Fixed vs. variable***
    - ***High tech vs. low tech***
  - ***Can be affected by changes in material prices with no change in actual production activity***

Asset Turnover

- Net sales divided by average operating assets
- Used to determine the efficiency with which asset resources are utilized

Model-Based Analytical Procedures

Example for <u>Rental Revenue Test</u>:

- **Capacity (number of available units) X occupancy rate X rental rate = expectation**

Compared to:

- **Recorded Rental Revenue**

Notes: A pure trend analysis based on recorded balances would not necessarily uncover <u>unrecorded</u> rental revenue. A detailed testing of selected leases would not necessarily uncover the problem.

Tax Return Review

- Good sources of additional and comparative information on the operations of the business.
- Complete review and comparison to the financial statement may provide information unknown to the lender.
- Lack of properly prepared or timely filed tax returns may be a method of stalling.

More Headlines!

- **“$440 million tax refund for debt-laden HealthSouth:** **IRS returns taxes paid on bogus profits” (www.al.com 10/16/07)**
  - **The bogus income not only made the books look better than they were, it required the company to pay higher taxes.**

(Conclusion: These HealthSouth executives were willing to pay the IRS hundreds of millions of dollars more in taxes that the company really did not owe in order to continue to perpetuate the fraud)

Red Flags of Financial Statement Fraud

- Managers have lied to the auditors or have been overly evasive in response to audit inquiries.
- The auditor’s experience with management indicates a degree of dishonesty.
- Management places undue emphasis on meeting earnings projections or other quantitative targets.

Red Flags of Financial Statement Fraud

- Management has engaged in frequent disputes with auditors.
- The client has engaged in opinion shopping.
- Management's attitude toward financial reporting is unduly aggressive.
- The client has a weak control environment.

Red Flags of Financial Statement Fraud

- A substantial portion of management compensation depends on meeting quantified targets.
- Management displays significant disrespect for regulatory bodies.
- Management's operating and financial decisions are dominated by a single person or a few persons acting in concert.

Red Flags of Financial Statement Fraud

- Client managers display a hostile attitude toward the auditors.
- Management displays a propensity to take undue risks.
- There are frequent and significant difficult-to-audit transactions.
- Key managers are considered highly unreasonable.

Red Flags of Financial Statement Fraud

- The client's organization is decentralized without adequate monitoring.
- Management and/or key accounting personnel turnover is high.
- Client personnel displays significant resentment of authority.
- Management places undue pressure on the auditors.

Red Flags of Financial Statement Fraud

- The client's profitability is inadequate or inconsistent relative to its industry.
- The client is confronted with adverse legal circumstances.
- Management exhibits undue concern with the need to maintain or improve the image/reputation of the entity.

Red Flags of Financial Statement Fraud

- There are adverse conditions in the client's industry or external environment.
- Accounting personnel exhibit inexperience or laxity in performing their duties.
- The client entered into one or a few specific transactions that have a material effect on the financial statements.
- Client management is inexperienced.

Red Flags of Financial Statement Fraud

- The client is in a period of rapid growth.
- This is a new client with no prior audit history or insufficient information from the predecessor auditor.
- The client is subject to significant contractual commitments.

Red Flags of Financial Statement Fraud

- The client's operating results are highly sensitive to economic factors (inflation, interest rates, unemployment, etc.).
- The client recently entered into a significant number of acquisition transactions.