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Auditing Symposium V: Proceedings of the 1980 Touche Ross/University of Kansas Symposium on Auditing Problems, pp. 101-119;

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Auditing Implications Derived from a Review of Cases and Articles Relating to Fraud

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For the past two years an interdisciplinary team of researchers¹ has been studying the problem of management fraud. The motivation for the study was threefold: a noted increase in the number of management frauds being committed, an increased awareness of auditors' responsibilities for detecting frauds, and a Peat, Marwick, Mitchell & Co. research grant. The objectives of the research were: (1) to conduct an extensive interdisciplinary review of the fraud related literature, (2) to identify individual, organizational, and societal factors that suggest a high probability of fraud, (3) to partially validate these factors by comparing them to past cases of fraud, and (4) to organize these factors into an early warning system that could be used by auditors in detecting and deterring fraud.

In completing the first objective, four data sources were investigated: (1) over 1500 literature references (books, journal and magazine articles, monographs, newspaper citations, and unpublished working papers) were reviewed,² (2) fraud perpetrators and victims were interviewed, (3) 65 organizations concerned with the detection, deterrence, prosecution, or punishment of fraud were visited in person or contacted by mail or telephone, and (4) numerous legal and organizational documents (prison and parole records, Donn Parker's extensive files on computer fraud, and corporate records) were examined.

In completing the second objective, a comprehensive list of all variables which appeared to influence or be associated with the perpetration of fraud was compiled as the data sources were examined. The variables identified were classified into three major categories: societal, organizational, and individual factors. During this process, patterns and relationships among the variables emerged and a tentative model explaining fraud was developed.

The third objective, validating the fraud-related variables, involved examining 72 past cases of fraud. Twenty of the cases came from Donn Parker's files (Stanford Research Institute) and 52 cases came from published accounts³ of fraud. Each case was carefully analyzed to determine which of the items on the master list of variables appeared to be present in the case. At the completion of this process, each item on the master list was carefully reviewed and the master list revised.

* This project was funded by a grant from the Peat, Marwick, Mitchell Foundation through its Research Opportunities in Auditing program. The views expressed herein are those of the authors and do not necessarily reflect the views of the Peat, Marwick, Mitchell Foundation.

In revising the list, only those variables that could be associated with at least one case were kept. This is a very demanding criterion because certainly the authors who wrote about the cases probably had a perspective much different than ours.

After completing the compiling and validation steps, a fraud checklist⁴ (objective 4) for use by auditors was developed. This checklist, which includes both questions auditors will ask themselves about the client and the client about themselves, should make auditors more aware of the possibility of fraud and hence increase the probability that fraud will be detected. The checklist includes both factors that could motivate an employee to commit fraud against a company for his own benefit and an executive to commit fraud on behalf of a corporation.

The purpose of this paper is to present some conclusions and implications from the study that should be helpful to auditors. In presenting these implications, two assumptions will be made:

- (1) It is assumed that readers are aware of auditors' responsibilities for the detection of fraud as stated in the SAS's, Cohen Commission Report, and various court opinions.
- (2) It is assumed that readers agree with our definition of management fraud. The definition used (Improper actions resulting in a material misstatement of financial statements) excludes several types of criminal acts that have been classified as fraud. Some of the more common omissions are consumer fraud, false advertising, embezzlement, bribes, kickbacks, and violations of regulatory agency rules.³

The remainder of this paper will be divided into three parts: (1) a description or profile of the typical fraud perpetrator, (2) an explanation of why fraud occurs, and (3) steps that can be taken by auditors to reduce their exposure to management fraud.

The Typical Fraud-Perpetrator

One aspect of the study was an attempt to describe fraud perpetrators as a group and differentiate them from other groups. This task was extremely difficult because there are not many fraud perpetrators available to study. Two reasons accounted for the sparsity of available subjects: our narrow definition of fraud eliminated many potential perpetrators, and most fraud perpetrators are never incarcerated. In trying to compile a sample, we contacted over 400 prisons nationwide as well as every state and federal probation and parole department in the U.S. and Canada. Many of the agencies and prisons responded that they could not comply with our request because of one or more of the following reasons: (1) they had no fraud perpetrators fitting our description, (2) fraud perpetrators could be listed under many different crime categories, (3) they had no computerized files or organized data on fraud perpetrators, (4) our request would take too much time, or (5) responding to our request might violate security or privacy laws. As a result, our definition of fraud had to be expanded to include embezzlers who were in managerial positions. Thus, in describing fraud perpetrators, management fraud perpetrators and managerial embezzlers were compared with prisoners incarcerated for other property offenses (theft, burglary, larceny, bank robbery, etc.), and a sample of college students. The three groups were compared across several demographic, personal, and psychological characteristics.

The results indicated that incarcerated fraud perpetrators were generally dif-

ferent than other incarcerated prisoners and quite similar to the college students. When compared to other property offenders, fraud perpetrators were less likely to be caught, turned in, arrested, convicted, incarcerated, or to serve long sentences. The fraud perpetrators were also considerably older, which might be expected since it usually takes longer to get into managerial positions or other positions of trust. While only two percent of the property offenders were female, 30 percent of the fraud perpetrators were women. The fraud perpetrators tended to have a much more stable family situation; more were married, they had more children, were less likely to be divorced, and more likely to be active church attenders.

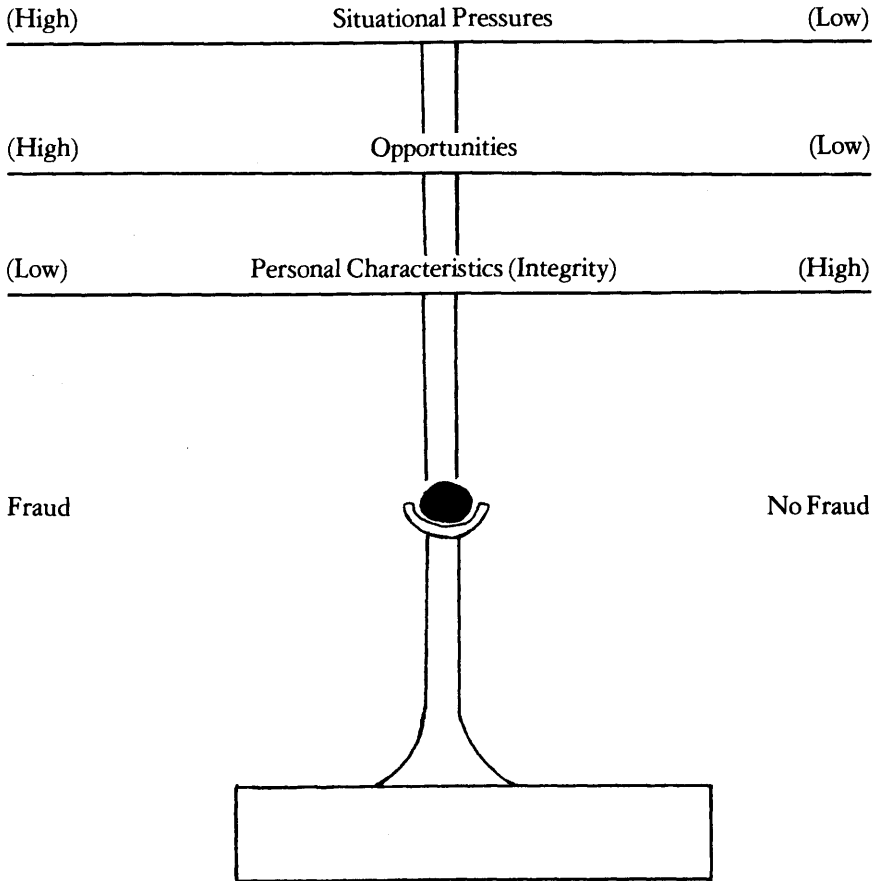
Compared to other property offenders, the fraud perpetrators were better educated, more religious, less likely to have a criminal record or otherwise be criminally inclined, less likely to use alcohol, and considerably less likely to use drugs. Fraud perpetrators were in better psychological health. They enjoyed more optimism, self-esteem, self-sufficiency, achievement, motivation, and family harmony in contrast to the other property offenders who showed more depression, self-degradation, dependence, lack of motivation, and family discord. Fraud perpetrators seemed to have significantly fewer problems; they expressed more social conformity, self-control, kindness, and empathy while other property offenders displayed greater social deviancy, impulsiveness, hostility, and insensitivity to other people.

When compared to college students, the fraud perpetrators differed only slightly. The white-collar criminals suffered more psychic pain, were more dishonest, were more independent, more sexually mature, more socially deviant, and more empathetic. The comparisons showed that fraud perpetrators were much more similar to the students than to other property offenders. In fact, in most cases, they were so different from other criminals, that when incarcerated, they tended to associate more with prison guards and officials than with other prisoners. This part of the study produced one other interesting observation. While most of the fraud perpetrators had virtually no criminal background, there was a small minority that had several previous arrests and convictions. From this observation it might be hypothesized that there are really two types of perpetrators: the typical business person who succumbs to pressures or temptations, and the more criminally-inclined person who would be dishonest in most environments or would commit fraud as just one more in a series of offenses.

An Explanation of Fraud

With all of these positive characteristics, why do these “non-criminal” type managers and executives get involved in fraud? Basically, they become involved because: (1) they are placed in situations where they are faced with a high degree of *situational pressure*; (2) they are faced with attractive *opportunities* to commit, conceal, or not be punished for their illegal acts; or (3) they have a low level of *personal integrity* or *honesty*. These three forces interact to determine whether or not a person will commit fraud. A person with a high level of integrity and little opportunity and pressure to commit fraud will most likely behave honestly. But criminal acts become increasingly likely as individuals with lower levels of personal honesty are placed in situations with increased pressure or convenient opportunities to commit a crime. Exhibit A is a graphic description of the interaction of the fraud motivating forces.

Exhibit A

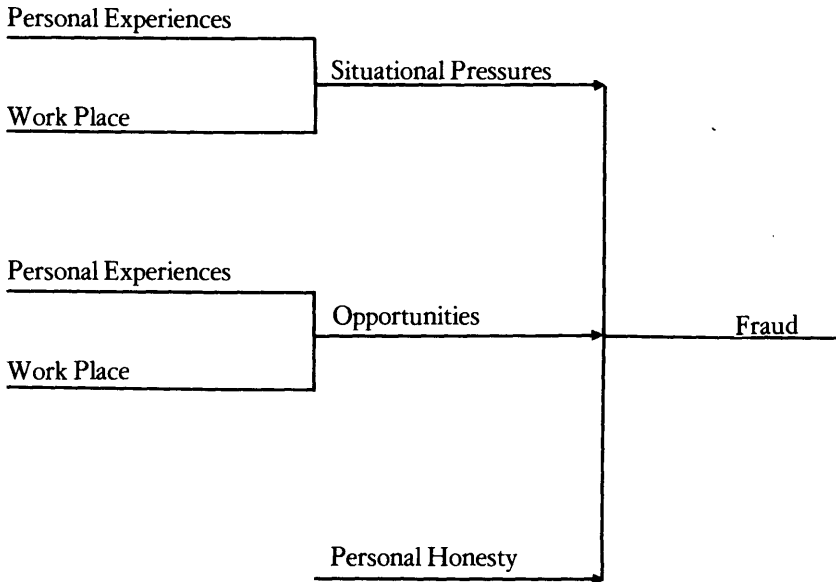


The forces that contribute to these three motivations are largely determined at three levels: society, the work place, and personal experiences. What is frightening is that the forces causing an increase in fraud are greater than ever today and are increasing on all three levels. The societal factors, which contribute to fraud by either increasing overall opportunities or creating situational pressures, provide a backdrop for the work place and personal factors. Exhibit B depicts this relationship.

There are at least eight societal factors that contribute to lowering the general level of honesty and magnifying the pressures and opportunities experienced by managers at work and in their personal lives. These factors⁷ are: (1) failure of businesses to prosecute, (2) problems with our criminal justice system, (3) ostracism of whistle blowers, (4) a lowered level of personal integrity, (5) inflation, (6)

Exhibit B

SOCIETY



increased size of organizational units, (7) increased use of computers, and (8) proliferation of egalitarian ideas.

Certainly, it would be difficult for auditors to change many of these societal factors. Maybe a strong lobbying effort or high placed connections could help, but generally auditors must live with these factors.

The combination of increased responsibilities to detect fraud, increased societal reinforcement for fraud, and the absence of an obvious criminal type profile makes it imperative that auditors make fraud detection an explicit part of their audit. We believe there are two steps auditors must take to reduce their exposure to fraud. First, they must make sure that only "clean" firms are accepted as clients. Many well known frauds have involved new clients (e.g., Home-Stake Production, National Student Marketing, Republic National Life, and Stirling Homex). We have previously argued⁶ for the use of investigative agencies as a better way to screen potential new clients. A thorough review of prospective clients should help to eliminate exposure to those frauds committed by the criminally-inclined perpetrators.

Secondly, auditors can pay much closer attention to situational pressures and opportunities experienced by managers at both the work place and in their personal lives. One way to focus on these factors would be to include a “red flag” checklist as part of the audit program. Presently, there are several such checklists available.⁹ One rather comprehensive checklist that includes situational pressure, opportunity, and personal characteristic red flags is included in Exhibit C.

Exhibit C **Situational Pressure Red Flags**

Personal Situational Pressures

1. High personal debts or financial losses
2. Inadequate incomes
3. Living beyond one’s means
4. Extensive stock market or other speculation
5. Excessive gambling
6. Involvement with members of the opposite sex
7. Undue family, company, or community expectations
8. Excessive use of alcohol or drugs
9. Perceived inequities in the organization
10. Resentment of superiors
11. Frustration with the job
12. Peer group pressures
13. Greed or desire for self-enrichment and personal gain

Company Situational Pressures

1. Unfavorable economic conditions within the industry
2. Heavy investments or losses
3. Insufficient working capital
4. Dependence on one or two products, customers, or transactions
5. Excess capacity
6. Severe obsolescence
7. High debt
8. Extremely rapid expansion through new business or product lines
9. Reduced ability to acquire credit
10. Profit squeeze (costs and expenses rising higher and faster than sales and revenues)
11. Difficulty in collecting receivables
12. Unusually heavy competition
13. Restrictive loan agreements
14. Progressive deterioration in quality of earnings
15. Significant tax adjustments

16. Urgent need for favorable earnings (to support high price of stock, meet earnings forecast, etc.)
17. Need to gloss over a temporarily bad situation (in order to maintain management position and prestige)
18. Significant litigation (especially between stockholders and management)
19. Unmarketable collateral
20. Significant reduction in sales backlogs indicating future sales decline
21. Long business cycle
22. Existence of revocable and possible imperiled licenses (especially when necessary for the continuation of business)
23. Suspension or delisting from a stock exchange
24. Pressure to merge
25. Sizable inventory increase without comparable sales increases

Opportunity Red Flags

Personal Opportunities

1. Extensive familiarity with operations (including cover-up capabilities) and in a position of trust
2. Close association with cohorts, suppliers, and other key people
3. A firm which does not inform employees about rules and disciplinary actions of fraud perpetrators
4. A firm in which there is rapid turnover (quit or fired) of key employees
5. A firm in which there are no annual vacations or transfers
6. A firm which does not use adequate personnel screening policies when hiring new employees to fill positions of trust
7. A firm in which there is an absence of explicit and uniform personnel policies
8. A firm which does not maintain accurate personnel records of dishonest acts or disciplinary actions for such things as alcoholism and/or drug abuse
9. A firm which does not require executive disclosures and examinations
10. A firm which has a dishonest management and/or environment
11. A firm which has a dominant top management
12. A firm which is always operating on a crisis basis
13. A firm which pays no attention to details
14. A firm in which there is too much trust in key employees
15. A firm in which there are few interpersonal relationships
16. A firm which has unrealistic productivity measurements
17. A firm which has poor compensation practices
18. A firm in which there are no vested employee interests
19. A firm which has inadequate training programs

Company Opportunities

1. A firm which has related party transactions

2. A firm which has a very complex business structure
3. A firm which does not have an effective internal auditing staff
4. A highly computerized firm
5. A firm in atypical or "hot" industries
6. A firm which uses several different auditing firms or changes auditors often
7. A firm which has a reluctance to give auditors needed data
8. A firm which uses a large number of banks none of which can see the entire picture
9. A firm with inadequate internal controls
10. A firm which uses unduly liberal accounting practices
11. A firm which has poor accounting records
12. A firm which has inadequate staffing in the accounting department
13. A firm which inadequately discloses unusual accounting practices

Personal Characteristic Red Flags

1. A person with low moral character (possessing deceptive or dishonest tendencies, for example)
2. A person who rationalizes his contradictory behavior
3. A person without a strong code of personal ethics
4. A person who is a "wheeler dealer" (someone who has a desire for power, influence, or social status)
5. A person who lacks stability (employment history, etc.)
6. A person with a strong desire to beat the system
7. A person with a criminal or questionable background
8. A person with poor credit rating and financial status

The "red flag" list provided in Exhibit C is the one developed by the authors. It is more comprehensive than other available lists and does have the advantage of having been partially validated. To illustrate how relevant these red flags have been to past cases of fraud, we have selected 27 of the 72 cases studied and examined their relevance to these red flags. The 27 cases are listed in Exhibit D.

Exhibit D

Allied Crude Vegetable Oil
 Ampex
 BarChris
 Black Watch Farms
 Cenco
 CIT Financial
 Continental Vending
 Equity Funding
 Fisco
 Four Seasons
 Georgia Pacific
 Giant Stores
 Hochfelder

Home-Stake
McKesson & Robbins
National Student Marketing
Penn Central
Photon
Republic National Life
Stirling Homex
Talley Industries
U.S. vs. Benjamin
Ultramares
Vesco
Westec
Westgate
Yale Express

All the publicly available literature on these cases was reviewed to see if any explicit mention of these factors could be found. While the results that follow (Exhibit E—at end of paper) indicate that almost all of the red flags were mentioned in the writings about many of the 27 cases, the absence of a case from a given red flag does not mean the red flag was not a factor in the case. Certainly, the authors who wrote about the cases had a perspective much different than ours and thus the mention of the variables in the publicly available literature is a very demanding criterion.

It is quite obvious that these “red flags” can be associated with many of the major past cases of fraud. While this association doesn’t guarantee that future frauds will also have these relationships, it does seem that auditors should pay some attention to these facts. While auditors have given heed to many of the opportunity factors (through internal control checks) and recently even examined some of the firm pressures, there are many of these factors that have not been explicitly considered.

We realize that it would be difficult to investigate many of these variables. Certainly, most auditors will and probably should be reluctant to probe managers about their personal gambling and sex habits. However, we would argue that the decision of whether or not to use these factors is a cost-benefit question. We are convinced that more frauds could be detected earlier if these red flags were used. We also recognize the costs involved in doing so. Thus, only when the perceived benefits exceed the perceived costs should they be used. Also, the cost of using the various red flags is not equal. Some have relatively low costs while the costs of others may be almost prohibitive. In general, we would argue that auditors should look at each red flag from a cost-benefit perspective.

We also realize that even if used, the presence of one or even all of these red flags doesn’t necessarily guarantee the existence of fraud. We would argue that as the number of red flags increases, the probability of fraud increases. At best, however, the red flags can only be viewed as a risk-evaluation tool. Also, the relevance and fraud predictability of the red flags haven’t yet been assessed. Certainly, some are “better” than others. We are presently working on a discriminant approach that should provide insight into which “red flags” are the best fraud predictors.

Concluding Comments

Management fraud is a major problem that concerns auditors. The auditing literature, standards, and court cases expect auditors to assume more responsibility for its detection. Management fraud will continue to increase because society reinforces those factors which contribute to fraud. Fraud perpetrators generally have personal characteristics that are typical to those of college students, and most likely, the general population. They have personal characteristics much different than other property offenders. There are three factors that contribute to fraud: (1) situational pressures, (2) opportunities, and (3) personal honesty. Because of the combination of more responsibility for fraud detection, increasing reinforcement for fraud, and the absence of a "criminal type" profile, it is critical that auditors become better fraud detectives. Two ways to be better detectives are: (1) to better screen potential new clients, and (2) to look for situational pressure, opportunity, and personal characteristic red flags both in organizations and in managers' and executives' personal lives.

Exhibit E Situational Pressure Red Flags

Personal Situational Factors

- | | |
|---|--|
| 1. <i>High Personal Debts or Financial Losses</i> | McKesson & Robbins
Penn Central
Vesco |
| Allied Crude Vegetable Oil | |
| Black Watch Farms | 5. <i>Excessive Gambling</i> |
| Continental Vending | Four Seasons |
| Four Seasons | Penn Central |
| Hochfelder | Vesco |
| Stirling Homex | 6. <i>Involvement with Members of Opposite Sex</i> |
| Vesco | Allied Crude Vegetable Oil |
| 2. <i>Inadequate Incomes</i> | Equity Funding |
| Vesco | McKesson & Robbins |
| 3. <i>Living Beyond One's Means</i> | Penn Central |
| Allied Crude Vegetable Oil | 7. <i>Undue Family, Company, or Community Expectations</i> |
| Black Watch Farms | Ampex |
| Equity Funding | Black Watch |
| Four Seasons | CIT Financial |
| Home-Stake | Equity Funding |
| McKesson & Robbins | Stirling Homex |
| National Student Marketing | Talley Industries |
| Penn Central | Yale Express |
| Stirling Homex | 8. <i>Excessive Usage of Alcohol or Drugs</i> |
| 4. <i>Extensive Stock Market Speculation</i> | Equity Funding |
| Allied Crude Vegetable Oil | |
| Black Watch Farms | |
| Continental Vending | |
| Four Seasons | |
| Georgia Pacific | |

9. *Perceived Inequities in Organization*
 Allied Crude Vegetable Oil
 Equity Funding
 McKesson & Robbins
 Vesco
10. *Resentment of Superiors*
 Vesco
11. *Frustration with Job*
 None of the 27 major cases
12. *Peer Group Pressures*
 Equity Funding
 Stirling Homex
13. *Greed or Desire for Self Enrichment or Gain*
 Allied Crude Vegetable Oil
 Continental Vending
 Equity Funding
 Four Seasons
 Hochfelder
 Home-Stake
 McKesson & Robbins
 Penn Central
 Stirling Homex
 Talley Industries
 Vesco
 Westec
 Westgate

Company Situational Pressures

1. *Unfavorable Economic Conditions in Industry*
 Allied Crude Vegetable Oil
 Ampex
 BarChris
 U.S. vs. Benjamin
 Equity Funding
 Four Seasons
 Giant Stores
 McKesson & Robbins
 Penn Central
 Republic National Life
 Stirling Homex
 Westec
 Yale Express
2. *Heavy Investments or Losses*
 Allied Crude Vegetable Oil
 Ampex

- BarChris
 - Continental Vending
 - Equity Funding
 - Fisco
 - Four Seasons
 - Georgia Pacific
 - Giant Stores
 - Home-Stake
 - McKesson & Robbins
 - National Student Marketing
 - Penn Central
 - Photon
 - Republic National Life
 - Stirling Homex
 - Talley Industries
 - Westgate
 - Yale Express
3. *Insufficient Working Capital*
 Allied Crude Vegetable Oil
 Ampex
 BarChris
 U.S. vs. Benjamin
 Black Watch Farms
 Cenco
 CIT Financial
 Continental Vending
 Equity Funding
 Four Seasons
 Giant Stores
 Hochfelder
 Home-Stake
 McKesson & Robbins
 National Student Marketing
 Penn Central
 Stirling Homex
 Yale Express
 4. *Dependence on Single Products, Customers, or Transactions*
 Allied Crude Vegetable
 BarChris
 Black Watch Farms
 CIT Financial
 Four Seasons
 Georgia Pacific
 McKesson & Robbins
 Republic National Life
 Stirling Homex
 Talley Industries

- Westgate
5. *Excess Capacity*
Allied Crude Vegetable Oil
McKesson & Robbins
Penn Central
Yale Express
 6. *Severe Obsolescence*
Ampex
McKesson & Robbins
Penn Central
Photon
Stirling Homex
 7. *High Debt*
Allied Crude Vegetable Oil
Ampex
BarChris
Black Watch Farms
Cenco
CIT Financial
Continental Vending
Equity Funding
Four Seasons
Giant Stores
Hochfelder
Penn Central
Photon
Republic National Life
Stirling Homex
Ultramares
Westec
Westgate
Yale Express
 8. *Extremely Rapid Expansion*
Allied Crude Vegetable Oil
Ampex
BarChris
U.S. vs. Benjamin
Black Watch Farms
Cenco
Equity Funding
Fisco
Four Seasons
Georgia Pacific
Giant Stores
Home-Stake
McKesson & Robbins
National Student Marketing
Penn Central
 - Photon
Republic National Life
Stirling Homex
Talley Industries
Vesco
Westec
Westgate
Yale Express
 9. *Reduced Ability to Acquire Credit*
Ampex
BarChris
Black Watch Farms
CIT Financial
Continental Vending
Four Seasons
Giant Stores
McKesson & Robbins
Penn Central
Photon
Westec
Yale Express
 10. *Profit Squeeze*
Ampex
Four Seasons
Home-Stake
National Student Marketing
Penn Central
Stirling Homex
Talley Industries
Yale Express
 11. *Difficulty Collecting Receivables*
Ampex
BarChris
CIT Financial
Continental Vending
Equity Funding
Four Seasons
Giant Stores
National Student Marketing
Penn Central
Stirling Homex
Yale Express
 12. *Unusually Heavy Competition*
Allied Crude Vegetable Oil
Ampex
BarChris
Four Seasons
Giant Stores

- Yale Express
13. *Restrictive Loan Agreements*
Ampex
McKesson & Robbins
Republic National Life
Stirling Homex
 14. *Deterioration in Quality of Earnings*
Allied Crude Vegetable Oil
Ampex
BarChris
CIT Financial
Equity Funding
Giant Stores
Home-Stake
National Student Marketing
Penn Central
Stirling Homex
Westec
 15. *Significant Tax Adjustments*
Allied Crude Vegetable Oil
Continental Vending
Four Seasons
Home-Stake
 16. *Urgent Need for Favorable Earnings*
Ampex
BarChris
U.S. vs. Benjamin
Black Watch Farms
Cenco
Continental Vending
Equity Funding
Four Seasons
Giant Stores
McKesson & Robbins
National Student Marketing
Penn Central
Photon
Republic National Life
Stirling Homex
Talley Industries
Westec
Westgate
Yale Express
 17. *Need to Gloss Over Temporarily Bad Situation*
 - Ampex
BarChris
Cenco
CIT Financial
Equity Funding
Giant Stores
Home-Stake
National Student Marketing
Penn Central
Republic National Life
Stirling Homex
Westgate
Yale Express
 18. *Significant Litigation*
Allied Crude Vegetable Oil
Equity Funding
Four Seasons
Georgia Pacific
Home-Stake
Penn Central
Republic National Life
Talley Industries
 19. *Unmarketable Collateral*
Allied Crude Vegetable Oil
U.S. vs. Benjamin
CIT Financial
Continental Vending
Republic National Life
 20. *Significant Reduction in Sales Backlog*
BarChris
Stirling Homex
Talley Industries
 21. *Long Business Cycle*
Ampex
BarChris
CIT Financial
Stirling Homex
 22. *Existence of Imperiled Licenses*
Allied Crude Vegetable Oil
Four Seasons
Republic National Life
 23. *Suspension From Stock Exchange*
Allied Crude Vegetable Oil
Black Watch Farms
Cenco
Continental Vending

Equity Funding
 Four Seasons
 Home-Stake
 Photon
 Republic National Life
 Stirling Homex
 Talley Industries
 Vesco
 Westec
 Westgate

24. *Pressure to Merge*
 Georgia Pacific
 Giant Stores
 National Student Marketing
 Penn Central
 Talley Industries
 Westec
25. *Sizable Inventory Increase*
 No major cases

Opportunity Red Flags

Personal Opportunities

1. *Familiarity With Operations*
(Cover Up Ability)

Allied Crude Vegetable Oil
 Ampex
 BarChris
 U.S. vs. Benjamin
 Black Watch Farms
 Cenco
 CIT Financial
 Continental Vending
 Equity Funding
 Four Seasons
 Georgia Pacific
 Giant Stores
 Hochfelder
 Home-Stake
 McKesson & Robbins
 National Student Marketing
 Penn Central
 Photon
 Republic National Life
 Stirling Homex
 Ultramares
 Westec
 Westgate
 Yale Express

2. *Close Association With Cohorts*

Allied Crude Vegetable Oil
 BarChris
 U.S. vs. Benjamin
 Black Watch Farms
 Continental Vending
 Equity Funding
 Four Seasons

Giant Stores
 Hochfelder
 Home-Stake
 McKesson & Robbins
 National Student Marketing
 Penn Central
 Photon
 Republic National Life
 Stirling Homex
 Vesco
 Westec
 Westgate
 Yale Express

3. *Doesn't Inform About Rules For*
Fraud
 Equity Funding

4. *Rapid Turnover of Key People*

Allied Crude Vegetable Oil
 Continental Vending
 Equity Funding
 Four Seasons
 Giant Stores
 Home-Stake
 McKesson & Robbins
 National Student Marketing
 Penn Central
 Photon
 Stirling Homex
 Vesco

5. *No Mandatory Vacations or*
Transfers

Allied Crude Vegetable Oil
 BarChris

- Cenco
 Continental Vending
 Equity Funding
 Four Seasons
 Giant Stores
 Hochfelder
 McKesson & Robbins
 National Student Marketing
6. *No Adequate Screening Policies*
 Equity Funding
 Giant Stores
 McKesson & Robbins
7. *Absence of Explicit Personnel Policies*
 Equity Funding
8. *Doesn't Maintain Adequate Personnel Records*
 Equity Funding
 McKesson & Robbins
9. *No Executive Disclosure Requirements*
 Continental Vending
 Four Seasons
 Home-Stake
 Hochfelder
 McKesson & Robbins
 Penn Central
 Westec
 Westgate
10. *Unethical Management*
 Allied Crude Vegetable Oil
 Ampex
 BarChris
 U.S. vs. Benjamin
 Black Watch Farms
 Cenco
 Continental Vending
 Equity Funding
 Fisco
 Four Seasons
 Georgia Pacific
 Giant Stores
 Home-Stake
 McKesson & Robbins
 National Student Marketing
 Penn Central
 Republic National Life
- Stirling Homex
 Talley
 Ultramares
 Westec
 Westgate
 Yale Express
11. *Dominant Top Management*
 Allied Crude Vegetable Oil
 Ampex
 BarChris
 Black Watch Farms
 Cenco
 Continental Vending
 Equity Funding
 Four Seasons
 Georgia Pacific
 Giant Stores
 Hochfelder
 Home-Stake
 McKesson & Robbins
 National Student Marketing
 Penn Central
 Republic National Life
 Stirling Homex
 Talley Industries
 Vesco
 Westec
 Westgate
 Yale Express
12. *Operates on a Crisis Basis*
 Allied Crude Vegetable Oil
 BarChris
 CIT Financial
 Equity Funding
 Giant Stores
 Republic National Life
 Stirling Homex
13. *Pays No Attention to Details*
 Allied Crude Vegetable Oil
 National Student Marketing
 Penn Central
 Ultramares
14. *Too Much Trust in Key Employees*
 Allied Crude Vegetable Oil
 Ampex
 BarChris
 Continental Vending

- Equity Funding
- Georgia Pacific
- Giant Stores
- Hochfelder
- McKesson & Robbins
- Penn Central
- Stirling Homex
- Westec
- Westgate
- Yale Express
- 15. *Low Interpersonal Relationships*
 - Ampex
 - Equity Funding
 - Penn Central
 - Yale Express
- 16. *Unrealistic Productivity Measurements*
 - Allied Crude Vegetable Oil
 - Ampex
 - Four Seasons
 - Talley Industries
- 17. *Poor Compensation Practices*
 - Allied Crude Vegetable Oil
 - Home-Stake
- 18. *Lack of Internal Security*
 - Allied Crude Vegetable Oil
- 19. *Inadequate Training Programs*
 - Equity Funding
 - Giant Stores
 - Yale Express

Company Opportunities

1. *Related Party Transactions*
 - Allied Crude Vegetable Oil
 - BarChris
 - Cenco
 - CIT Financial
 - Continental Vending
 - Equity Funding
 - Four Seasons
 - Home-Stake
 - McKesson & Robbins
 - Penn Central
 - Republic National Life
 - Stirling Homex
 - Talley Industries
 - Vesco
 - Westec

- Westgate
- 2. *Complex Business Structure*
 - Allied Crude Vegetable Oil
 - Ampex
 - BarChris
 - Cenco
 - Equity Funding
 - Four Seasons
 - Georgia Pacific
 - Home-Stake
 - McKesson & Robbins
 - National Student Marketing
 - Penn Central
 - Republic National Life
 - Stirling Homex
 - Talley Industries
 - Vesco
 - Westec
 - Westgate
- 3. *No Effective Internal Auditors*
 - Allied Crude Vegetable Oil
 - Ampex
 - Cenco
 - Continental Vending
 - Equity Funding
 - Fisco
 - Four Seasons
 - Giant Stores
 - Home-Stake
 - McKesson & Robbins
 - Penn Central
 - Westec
 - Westgate
 - Yale Express
- 4. *Highly Computerized Firm*
 - Cenco
 - Equity Funding
 - Four Seasons
 - Georgia Pacific
 - Penn Central
 - Stirling Homex
 - Westgate
 - Yale Express
- 5. *Atypical or "Hot" Industries*
 - Ampex
 - BarChris
 - U.S. vs. Benjamin
 - Black Watch Farms

- Equity Funding
 - Four Seasons
 - Georgia Pacific
 - Giant Stores
 - Home-Stake
 - National Student Marketing
 - Stirling Homex
6. *Different Auditors or Change of Auditors Often*
- Black Watch Farms
 - Continental Vending
 - Equity Funding
 - Home-Stake
 - National Student Marketing
 - Republic National Life
 - Westgate
7. *Reluctance to Give Auditors Needed Data*
- Allied Crude Vegetable Oil
 - BarChris
 - U.S. vs. Benjamin
 - Black Watch Farms
 - Continental Vending
 - Equity Funding
 - Four Seasons
 - Georgia Pacific
 - Republic National Life
 - Stirling Homex
 - Talley Industries
 - Ultramares
 - Westec
 - Westgate
 - Yale
8. *Large Number of Banks*
- Allied Crude Vegetable Oil
 - BarChris
 - CIT Financial
 - Continental Vending
 - Equity Funding
 - Four Seasons
 - Georgia Pacific
 - McKesson & Robbins
 - Penn Central
 - Republic National Life
 - Stirling Homex
 - Ultramares
 - Westec
9. *Inadequate Internal Controls*
- Allied Crude Vegetable Oil
 - Ampex
 - Black Watch Farms
 - Equity Funding
 - Hochfelder
 - Fisco
 - Four Seasons
 - Giant Stores
 - Home-Stake
 - McKesson & Robbins
 - National Student Marketing
 - Penn Central
 - Photon
 - Stirling Homex
 - Talley Industries
 - Ultramares
 - Westec
 - Westgate
 - Yale Express
10. *Unduly Liberal Accounting Practices*
- Allied Crude Vegetable Oil
 - Ampex
 - BarChris
 - U.S. vs. Benjamin
 - Black Watch Farms
 - CIT Financial
 - Continental Vending
 - Equity Funding
 - Fisco
 - Four Seasons
 - National Student Marketing
 - Penn Central
 - Photon
 - Republic National Life
 - Stirling Homex
 - Talley Industries
 - Ultramares
 - Westec
 - Westgate
 - Yale Express
11. *Poor Accounting Records*
- Allied Crude Vegetable Oil
 - Ampex
 - BarChris
 - U.S. vs. Benjamin
 - Continental Vending
 - Equity Funding

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|--|----------------------------|
| Four Seasons | Ampex |
| Home-Stake | BarChris |
| National Student Marketing | U.S. vs. Benjamin |
| Photon | Black Watch Farms |
| Republic National Life | CIT Financial |
| Stirling Homex | Continental Vending |
| Talley Industries | Equity Funding |
| Ultramares | Four Seasons |
| Yale Express | Georgia Pacific |
| 12. <i>Inadequate Staffing in Accounting Department</i> | Giant Stores |
| Allied Crude Vegetable Oil | Home-Stake |
| U.S. vs. Benjamin | National Student Marketing |
| Cenco | Penn Central |
| National Student Marketing | Republic National Life |
| 13. <i>Inadequate Disclosure of Unusual Accounting Practices</i> | Stirling Homex |
| Allied Crude Vegetable Oil | Talley Industries |
| | Ultramares |
| | Westec |
| | Westgate |

Personal Characteristics Red Flags

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|---|----------------------------|
| 1. <i>Low Moral Character</i> | Home-Stake |
| Allied Crude Vegetable Oil | McKesson & Robbins |
| Ampex | Vesco |
| BarChris | Westgate |
| U.S. vs. Benjamin | Yale Express |
| Black Watch Farms | 4. <i>Wheeler-Dealer</i> |
| Continental Vending | Allied Crude Vegetable Oil |
| Equity Funding | Ampex |
| Four Seasons | U.S. vs. Benjamin |
| Hochfelder | Black Watch Farms |
| Home-Stake | Continental Vending |
| McKesson & Robbins | Equity Funding |
| National Student Marketing | Four Seasons |
| Stirling Homex | Georgia Pacific |
| Ultramares | Home-Stake |
| Vesco | McKesson & Robbins |
| Westgate | National Student Marketing |
| Yale Express | Republic National Life |
| 2. <i>Rationalizer</i> | Stirling Homex |
| Equity Funding | Talley Industries |
| Westgate | Vesco |
| 3. <i>No Strong Code of Personal Ethics</i> | Westec |
| Allied Crude Vegetable Oil | Westgate |
| U.S. vs. Benjamin | Yale Express |
| Black Watch Farms | 5. <i>Lacks Stability</i> |
| Equity Funding | Equity Funding |

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|--|---|
| McKesson & Robbins | Continental Vending |
| Stirling Homex | Home-Stake |
| 6. <i>Strong Desire to Beat System</i> | McKesson & Robbins |
| McKesson & Robbins | Penn Central |
| 7. <i>Criminal or Questionable</i> | Stirling Homex |
| <i>Background</i> | Westgate |
| Allied Crude Vegetable Oil | 8. <i>Poor Credit Rating or Financial</i> |
| U.S. vs. Benjamin | <i>Status</i> |
| Black Watch Farms | McKesson & Robbins |

Bibliography

- Albrecht, W. S., Romney, M. B., Cherrington, D., Payne, R., and A. Roe, "A Red Flag Approach to the Detection of Fraud," Monograph, Brigham Young University, 1979 (forthcoming as a book from Prentice-Hall).
- Albrecht, W. S., "Surprising Profile of the White-Collar Crook," *U.S. News & World Report*, July 23, 1979, p. 61.
- Albrecht, W. S., and M. B. Romney, "The White-Collar Criminal," *Prosecutors Brief*, September-October, 1979.
- Albrecht, W. S., and M. B. Romney, "White-Collar Crime in Banks," *The Bankers Magazine*, Nov.-Dec. 1980, pp. 60-64.
- Albrecht, W. S., Romney, M. B., and D. Cherrington, "How America Fuels White-Collar Crime," Working Paper, Brigham Young University.
- Albrecht, W. S., Romney, M. B., Cherrington, D., Payne, R., and A. Roe, "Auditor Involvement in the Detection of Fraud," *MANAGEMENT FRAUD*, Edited by Robert K. Elliott and John J. Willingham, Petrocelli Books, Inc., 1980.
- Cherrington, D., Romney, M. B., and W. S. Albrecht, "The Role of Management in Reducing Fraud," Forthcoming in *Financial Executive*.
- Romney, M. B., and W. S. Albrecht, "A Checklist for the Detection of Fraud," forthcoming in the *Journal of Accountancy*, May 1980, pp. 63-69.
- Romney, M. B., and W. S. Albrecht, "Red-Flagging White-Collar Crime," *Management Accounting*, March, 1980, pp. 51-54, and 57.
- Romney, M. B., and W. S. Albrecht, "The Use of Investigation Agencies by Auditors," *Journal of Accountancy*, October, 1979, pp. 61-67.

Footnotes

- In addition to the authors of this paper, the research team consisted of David Cherrington (Associate Professor of Organizational Behavior—B.Y.U.), Reed Payne (Professor Psychology—B.Y.U.), and Allan Roe (Criminal Psychologist—Utah State Prison).
- A complete bibliography can be found in Albrecht et. al. [1].
- A separate case bibliography is included in Albrecht et. al. [1].
- This checklist is included in Romney et. al. [8].
- While the definition of fraud used in this paper includes only improper action resulting in a material misstatement of financial statements, the original research also included a study of major embezzlements and defalcations.
- Sample sizes were 49 fraud perpetrators, 677 property offenders, and 148 college students.
- A full description and analysis of these factors is included in Albrecht et. al. [5].
- See Romney and Albrecht [10].
- In addition to ours, fraud checklists have been prepared by the AICPA, Coopers and Lybrand, and Touche Ross & Co.