

1 Introduction

There is increasing international concern about the escalation of financial statement fraud and the difficulties of detecting and proving such fraud (Searfoss 1999; Pincus 1989). In the United States, the National Commission on Fraudulent Financial Reporting (the Treadway Commission) was appointed to identify causal factors that lead to fraudulent financial reporting and to identify the steps that could reduce its incidence (Beasley, Carcello & Hermanson 1999). The Treadway Commission (1987) suggested that the damage resulting from fraudulent financial reporting is widespread and has a devastating ripple effect. Victims range from the immediate (shareholders and creditors) to the more remote (investor confidence in stock markets and the credibility of the audit profession).

In South Africa the failure of Masterbond and its related companies led to the appointment of the Nel Commission of Inquiry in 1992. The Commission found that the financial statements of Masterbond and comparable failed companies departed so fundamentally from Generally Accepted Accounting Practice (GAAP) that no reliance could be placed on the statements (Wenzelburger 1999). The report revealed an astonishing degree of dishonesty, inefficiency, lack of integrity and independence of some of the auditors. Subsequent to Masterbond, there have been numerous examples in which investors and lenders lost substantial amounts as a result of the apparent misrepresentation of financial information. The most recent examples are Beige Holdings Limited and MacMed Health Care Limited (Business Day 7 September 1999, 1 October 2000).

A major obstacle to addressing the problem of financial statement fraud is related to the difficulty of identifying the fraud soon after it occurs. Because it is often management fraud, it is well hidden from auditors, investors and other stakeholders and it is usually only discovered by chance or when the company experiences financial difficulties, which may result in a takeover or insolvency. It is therefore important to attempt to manage the risk of fraud by using early warning signals such as red flags. Red flags are events, conditions, situational pressures, opportunities or personal characteristics that may cause management to commit fraud on behalf of the company (Romney, Albrecht & Cherrington 1980) or for personal gain.

Most of the research on red flags has been undertaken from the perspective of the auditing profession (Pincus 1989, Albrecht & Romney 1986). Red flags as a method is viewed as a means for managing audit risk and detecting fraud or error. Research on red flags has contributed to the issue of a number of international auditing statements on the detection of fraud and error. The most recent exposure draft to be issued in South Africa is ED 137 (SAICA 2000), *Auditor responsibility to consider fraud and error in an*

audit of financial statements, which is based on the International Standard on Auditing 240 (2000). ED 137 expands on the existing SAAS 240 (SAICA 1997) on fraud and error.

2 Research problem

From a review of the relevant literature, it appears that there is justification to investigate the use of red flags in a non-audit environment, from the perspective of investors and lenders in South Africa.

In the past, red flags have been addressed from the perspective of the auditors of enterprises. The research problem is that the red flags identified by the auditing profession are not necessarily relevant to lenders and investors. Lenders and investors require red flags that are appropriate to their particular interests and their access to information on the enterprise and its management. It is also investors and lenders who may take legal action against auditors and management based on their perception of negligence in respect of financial statement fraud. It is therefore important that auditors should take cognizance of the opinion of lenders and investors concerning red flags.

This study is based on a survey of investors and lenders in South Africa to establish their opinion on the importance of red flags. The research findings may also be relevant to international investors and lenders in the management of the risk profile of their investment portfolios and in assessing the probability of financial statement fraud at an early stage. Albrecht, Wernz & Williams (1995) suggest that auditors, managers, investors and others who recognize unusual events or unexplained changes to the financial statements to be fraud symptoms are not victimized nearly as often as those who do not.

The question may be raised why lenders and investors should use red flags if they are presented with *audited* financial statements. Unfortunately an expectation gap exists between the users of financial statements and the auditors regarding the detection of fraud. While auditors view the prevention of fraud as primarily a management responsibility, users expect auditors to uncover fraud as part of their audit responsibilities. Karpardis & Anderson undertook a survey in 1995 to gather information on the views of investors on financial reporting issues. Their results indicated that for material misstatements as a result of errors, only about 51% of investors believed that they should receive reasonable assurance while 47% wanted absolute assurance. With regard to fraud detection, 70% of investors believed auditors should be held to absolute assurance for detecting material misstatement as a result of fraud.

Fourie (1994) suggests that the spate of corporate collapses in recent years, repeated failure by auditors to detect and report financial fraud or illegality and successful litigation against auditing practitioners in the USA and Commonwealth countries have occurred on a scale to cause world-wide concern. The audit profession should realise that the legal as well as the social standards required of auditing have increased considerably and that they have a perceived social responsibility to detect fraud.

To contribute towards the identification of appropriate red flags for lenders and investors in South Africa, the survey had the following research objectives:

- to establish whether investors and lenders were familiar with the term *red flags*;
- to determine whether they have used red flags in their investment decisions;
- to establish whether they use formalised questionnaires/checklists on red flags;
- to indicate their opinion on the relative importance of red flags identified in the literature;
- to identify additional red flags that they perceive to be important.

The information gained from this research could benefit the investor community and lending institutions by serving as an early warning system to fraudulent financial statements. It could also benefit the audit profession and audit standard setters in as much as a list of important red flags from an investor and lender perspective are identified. Finally, it should benefit researchers and academics who have a particular interest in this field by suggesting further research opportunities.

Financial statement fraud is often a consequence of creative accounting and the misuse of the flexibility of GAAP. It is therefore important to address red flags in the context of GAAP, creative accounting and financial statement fraud. To that end the following section discusses these three aspects in greater depth.

3 GAAP, creative accounting and financial statement fraud

There is no generally accepted definition of creative accounting. In accounting literature, creative accounting bears with negative connotations (Wolk, Francis & Tearney 1984). Creative accounting is negative when it is used by management with the intention to mislead or defraud stakeholders (Mathews & Pereira 1996). The use of “negative” creative accounting may

not necessarily be fraudulent in a legal sense, although the intent underlying these practices are often immoral, unethical and deceptive (Merchant 1987).

There is increasing pressure on management to consistently report favorable results for the enterprise although this may not necessarily reflect the economic reality. Kneer, Reckers & Jennings (1996) confirm that in competing for the economy's scarce resources, there is pressure on companies to report flattering results. They suggest that financial statements are no longer just a record of a company's performance and state of affairs. Instead, in competitive markets, financial statements primarily keep shareholders satisfied with smooth income flows and consistent growth. Albrecht, Wernz & Williams (1995) suggest that typical incentives for management fraud include strong financial pressure; a perceived opportunity to commit and conceal a fraud and a way to rationalise or justify the fraud.

Creative accounting can however, have "positive" effects in the development of new accounting practices. It is positive if used in an innovative manner to reflect the economic substance of transactions and events and to achieve a true and fair view of the financial performance and position of an enterprise. It is especially in new areas of business and areas where there are no guidelines or standards that new practices develop. Mathews & Pereira (1996) contend that technology and business methods are advancing faster than accounting standards and legislation. Because accounting lags behind new business developments, practitioners have to develop innovative practices to account for new accounting issues.

The flexibility inherent in GAAP arises in permitting alternative accounting treatments, determining the appropriate accounting treatment based on management intent and subjective judgement, and through different interpretations of the standards. This flexibility often provides an opportunity for creative accounting. The flexibility and vagueness of accounting standards are compounded with undefined terms such as "true and fair", "probable", "consistency" and "matching", concepts which are reliant on professional judgement (Mathews & Pereira 1996). Merchant (1987) confirms that questionable financial reporting practices such as the selection of liberal accounting policies or the manipulation of reserves and provisions are often legal and consistent with GAAP. The underlying *intention* is, however, to deceive stakeholders. The more flagrant abuses of the flexible accounting practices are systematically being prohibited by new legislation and standards, but the preparers of financial statements still have a vast array of techniques available to them to "massage the figures which are presented" (Griffiths 1995). The solution may not be to introduce rigid and comprehensive accounting standards and legislation for each conceivable event or situation as this would result in the removal of the

professional judgement of accountants (Lee 1987) and merely create new opportunities to circumvent legislation and standards.

Management fraud is usually a broader concept than financial statement fraud. Management fraud may or may not manifest itself in the financial statements. It could include issues such as conflict of interest or bribery and corruption, the impact of which may not effect the financial statements directly. Wells (1990) identifies these issues as on-book and off-book fraud. The former fraud, such as fictitious expenses and embezzlement, usually have audit trails. Off-book fraud, such as kickback and bribery schemes, lack the normal audit trails and often fall beyond the scope of normal audits. In this article the term financial statement fraud rather than management fraud is used as the lenders/investors do not usually have access to the type of information required to assess and uncover the occurrence of certain types of management fraud.

Financial statement fraud can be defined as the deliberate fraud committed by management that injures investors and creditors through materially misleading financial statements (Elliot & Willingham 1980). It evolves from creative accounting practices, when unethical or dishonest management moves into the gray area between creative accounting and outright financial statement fraud. Even honest management may use creative accounting in the belief that it is in the interest of shareholders and other stakeholders to smooth profits so as not to shock the stock market. It is when market conditions do not improve or suddenly deteriorate that these managers have no option but to move from creative accounting to financial statement fraud. Fraud occurs as the result of an intentional act by an individual or by individuals to misrepresent financial results and positions. It should be distinguished from errors by the fact that errors normally refer to *unintentional* mistakes in the financial statements (SAICA 2000).

The responsibility for the prevention and detection of fraud and error rests initially with management. Members of management have to ensure the implementation and continued operation of adequate accounting and internal control systems. Such measures reduce, but do not altogether eliminate, the possibility of fraud and error (SAICA 2000). The responsibilities of the auditors regarding financial statements in South Africa are determined by the Companies Act, no 61 of 1973, The Public Accountants and Auditors Act, no 80 of 1991, case law and the standards and guidelines issued by the South African Institute of Chartered Accountants. Section 300 of the Companies Act imposes several duties on a company's auditor. One of the duties is to examine the accounting records of the company, and to carry out tests in respect of these records and other auditing procedures to the extent that he considers necessary to satisfy himself that the annual financial

statements are a fair reflection of the financial position of the company and its subsidiaries.

The detection of financial statement fraud and the proving of such fraud remains an elusive goal. There is also an expectation gap regarding fraud between the responsibilities of auditors and the expectations of users of financial statements. Red flags can be used as an early warning system by both auditors and other stakeholders to assess the risk of financial statement fraud.

4 The value of red flags

As stated above, red flags are those events, conditions, situations, pressures, opportunities, threats or personal characteristics that may increase the risk of management fraud. Although red flags may not necessarily indicate the presence of fraud, they are conditions believed to be commonly present in events of fraud and may therefore suggest that concern may be warranted (Elliot & Willingham 1980).

Robertson (1997) contends that where red flags indicate that situational pressures such as sudden decreases in revenue or market share, or unrealistic budget pressures, are present, the risk of financial statement fraud increases significantly. Kaplan & Reckers (1995) suggest that variables and changes in management's life style, bonus compensation programs and weaknesses in the internal audit department may be indicators of financial statement fraud. These are only some of the red flags that may be considered in assessing the probability of financial statement fraud.

Red flags is therefore a useful mechanism in detecting or signaling the possibility of financial statement fraud in the early stages. It is important to emphasize that all red flags may not be appropriate to all the stakeholders of an enterprise. The access that auditors have to the financial records and the management of an enterprise allow them to use a broad spectrum of red flag indicators. Investors and lenders will probably have restricted access to financial information (usually the financial statements) and to management. Consequently a number of red flags that may be useful to auditors may not be appropriate for use by other stakeholders such as investors and lenders.

As an early warning system, red flags indicate the probability of financial statement fraud. Fraud can, however, only be established through further investigation of identified risk areas. The probability of fraud should be evaluated on a combination of red flags rather than being limited to one or two indicators. It may also be necessary to combine red flags with other analytical instruments such as ratio analysis, corporate failure prediction models or behavioral techniques to achieve a more reliable assessment. Pincus (1989) confirms that although red flags are associated with fraud, this association is imperfect as red flags can occur in both fraud and non-fraud situations. Empirical models that were used in the literature to identify fraud versus non-fraud enterprises based solely on red flags did not have a good predictive ability. The relative importance that should be attached to certain red flags or groups of red flags has not yet been resolved, Albrecht *et al.* (1995) suggest that the weight allocated to each relevant fraud indicator should remain a complex problem to be addressed further in research.

Sorenson & Sorenson (1980) confirm that red flags is a cost-effective early warning system that may be used to detect management fraud. They suggest the use of a general analysis model based on the work of Jessar, Graves, Horson and Jesson (in Sorenson & Sorenson 1980) that may be used to develop a high/low fraud prone score for companies. The approach commences by observing the relationship between predictors, such as economic or organisational measures to a series of irregularity criteria. Combinations and groups of predictors could be compared to individual measures to establish predictive ability. Interaction between types should also be tested. Finally, the combination of predictors with the best predictive ability to identify fraud should be compiled. A multivariate approach may then be used to identify high/low fraud prone companies. The model has not been tested empirically.

The need for an interdisciplinary approach to the study of management fraud is suggested by Uretsky (1980). He contends that the detection of fraud cannot be limited to one discipline, but that a interdisciplinary body of knowledge of the socio-economic problem is required to address the problem effectively. He also supports the use of red flags by auditors as

situational indicators. Red flags may indicate to auditors that they should be more alert than usual. In combinations, red flags may indicate that the auditors should be suspicious and adjust their audit risk assessment and audit program accordingly.

Research on red flags have tended to focus on their use by the auditing profession. Heiman-Hoffman, Morgan & Patton (1996) completed a survey of a group of 130 practicing auditors to identify their perception on 30 red flags. The auditors identified client dishonesty as the single most important red flag. Attitude factors such as dishonesty, hostility, aggressiveness and unreasonableness were deemed to be more significant than situational factors such as economic conditions and adverse industry conditions.

Albrecht & Romney (1986) assessed the use of red flags in the auditing profession. They developed two questionnaires, each with 87 red flags. One questionnaire was sent to partners of fraud-free audits (the control group) while the other was sent to partners whose clients had committed fraud. The authors contended that only those red flags that were present when there was a fraud and absent when there was no fraud were really helpful. The results of the survey was that three groupings of red flags were identified: significant red flags which may have predictive value; red flags that were not significant and had little value for predicting fraud; and untestable red flags. The best predictors of fraud appeared to be the attitudes of and situational pressures on management. The red flags that had the highest predictive value included key executives that had high personal debts, perceived inadequate income, lived beyond their means and exhibited greed.

In 1989 Pincus recorded the growing interest of auditors to use red flags as potential indicators of fraud. She investigated the efficiency of the red flag checklists used by auditors. The sample consisted of 137 mid-level accountants in a large CPA firm. They were divided into two groups; one using a checklists and the other not using a checklist. The subjects evaluated the possibility of fraud at the planning stage of an ordinary audit and were presented with case studies. In the first case study the financial statements were materially misstated while in the second they were not. The results of the research was that the use of checklists had no significant impact on fraud risk assessment and that the difference in assessment of users and non-users in the non-fraud case was not significant. For the fraud case, however, non-checklists users outperformed checklists users. There is therefore no conclusive evidence that the use of red flag checklists increases the ability to predict fraud.

Kaplan & Reckers (1995) investigated the use of red flags in auditing accounting estimates in financial statements. Accounting estimates are a

particularly high risk area for auditors as a result of the significant discretion required of management. In their study they examined the reporting decisions of audit seniors and audit managers related to a client's decision to change four accounting estimates in relation to previous years. Red flags related to management lifestyle, bonus compensation schemes and that the strength of the internal audit department was unanswered between the subjects. The findings of their study indicated that the direct impact of red flags on reporting decisions is limited.

Weisenborn & Norris (1997) applied the 87 red flags compiled by Albrecht & Romney to 30 well-known cases of fraud. The objective was to identify the red flags that were present in fraud cases and could therefore be good indicators of management fraud. They identified that the leading red flag indicators included dishonest or unethical management, too much trust placed in key executives and domination of the company by one or two strong individuals. The research findings emphasise, as does other research (Albrecht & Romney 1986), the importance of considering the personal characteristics and behavior of situational stress on management.

The relationship between the new audit report format, issued by the USA Auditing Standards Board in 1988, "Perceived auditor responsibility in instances of alleged audit failure and the presence of red flags" was addressed by Kneer, Reckers & Jennings (1996). The new format of the audit report should clarify the position of auditor liability. To test this relationship, the authors used 81 investors who were members of investor clubs. Red flags were used/not used in the condensed sets of financial statements presented to the investors. If the investors considered the red flags to be indicators of fraudulent financial reporting practices, they could attribute greater responsibility to the auditor. The study found that the investing public was sensitive to environmental red flags that may suggest an opportunity for fraudulent financial reporting. In the presence of such red flags the investors revealed increased expectations of auditors to identify fraud. These expectations were supported by the USA standard (SAS 53: 46) which stated that it is the auditor's responsibility to adopt strengthened skepticism in planning, conducting and reviewing an audit under circumstances of heightened environmental risk.

The purpose of this research project was to introduce a different perspective to research on red flags by surveying investors and lenders in South Africa. Uretsky (1980) contends that if we are to identify new red flags and refine old ones we must approach the research questions from different perspectives.

5 Research method

A questionnaire was developed to canvass the opinion of investors and lenders in SA. It was sent to a selected sample of investors and lenders. The survey addressed the use of red flags by lenders and investors, their opinion on the relative importance of individual red flags as well as the identification of new red flags.

The survey assumed that banks are representative of the lending institutions while portfolio managers are representative of the investing community in South Africa. A list of domestic and international banks registered with the Registrar of Banks was obtained. Because of the limited number of registered banks (78), the four largest banking institutions were requested to complete ten copies of the questionnaire, while all other banks were requested to complete 5 copies. A total of 410 questionnaires were sent to the chief executive officers of the local banks and branches of international banks with the request to hand a copy to officials responsible for lending decisions in their institutions.

A list of portfolio managers registered with the Financial Services Board was obtained. The list contained 221 portfolio managers and only one questionnaire was sent to each member. The registered portfolio managers ranged from major financial institutions to small businesses, and the questionnaire was sent to the contact person indicated on the list.

The questionnaire was derived from the red flags identified in the research of Albrecht & Romney (1986) and from the South African auditing standards SAAS 240 (SAICA 1997) and ED 137 (SAICA 2000). These red flags were, however, developed for use by auditors. Consequently, the researchers screened the red flags and eliminated those in respect of which the information would normally only be available to auditors. Any red flags that were duplicated, were also omitted. No new or additional red flags were added to the questionnaire, but the surveyed target group was asked to identify new red flags. The nature of the red flags in the questionnaire tended to be subjective and therefore the purpose of the survey was to obtain the *opinions* of investors and lenders concerning the relative importance of the red flags to them. In total, 65 red flags were identified in the questionnaire. A Likert Scale was used to measure the perceived importance of the red flags, ranging from negligible (1) to important (5). The questionnaire also asked participants in the survey to indicate whether they were familiar with the concept of red flags, had previously used red flags in decision making, had used formalised checklists of red flags and whether they believed such checklists could be useful.

Before the questionnaire was mailed, it was tested in a pilot study. The questionnaire was discussed with two lenders and two investors, where after it was finalised. Two weeks after the return date, the banks and portfolio managers were telephoned to request a response to the survey. Additional copies of the questionnaire were e-mailed to respondents who requested such copies.

6 Findings

The response to the survey was disappointing, despite extensive follow up. Only 46 questionnaires were returned of which 29 were from lenders and 17 from investors. Ten portfolio managers indicated that they were unable to participate in the survey as they were advisors rather than active investors.

Of the responses received to the survey, 28 (60,9%) of the respondents were familiar with the term red flagging while 16 (34,8%) were not. Two respondents (4,3%) gave no response. The respondents that were familiar with the term red flags consisted of 22 (78,6%) who had previously used red flagging in decision making, while the other 6 had not.

With regard to the respondents (22) that had used red flagging in decision making, 7 had used formalised questionnaires and checklists while 15 had not. It would therefore appear that the use of formalised questionnaires and checklists in South Africa is fairly limited. In response to the question whether the use of questionnaires and checklists could be helpful in assessing the risk of fraud in financial statements, 36 (78%) of the respondents agreed. The same respondents also indicated that such questionnaires and checklists could also be helpful in collecting relevant information.

The data collected in the survey was analysed in the following groups:

- In total,
- investors versus lenders,
- respondents that had used red flagging in decision making versus those that had not.

As the response rate was very low, it was not possible to use factor analysis. Priority lists were therefore compiled, ranking the red flags for these three groups with the use of averages. The Mann-Whitney test was

used to compare the median of each question put to the two groups of investors and lenders and respondents that had used red flagging in decision making or had not done so. No significant differences were found between the groups as all the respondents considered the red flags in the questionnaire to be important.

The total group of respondents ranked the ten most important and ten least important red flags as follows:

Table 1 (a)

Ranking most important	Total Group
1.	Dishonest or unethical management.
2.	Frequent changes of legal counsel, auditors or external board members
3.	Management is dominated by one person (or a small group) and there is no effective overseeing board or committee.
4.	Suspension or delisting from stock exchange.
5.	Management's reputation in the business community is poor.
6.	Continuous problems with regulatory agencies.
7.	Internal or external factors raise substantial doubt about the entity's ability to continue as a going concern.
8.	Inability to generate cash flows from operations while reporting earnings and earnings growth.
9.	There has been a breakdown in accounting and control systems as reflected by the late issuing of financial statements or a qualified audit report.
10	There is a high turnover rate of key top management, particularly financial executives.

Table 1 (b)

Ranking least important	Total Group
1.	Pressure is exerted on accounting personnel to complete financial statements in an unusually short period as reflected by approval date of financial statements.
2.	Rapid expansion into new product lines.
3.	Unusually long business cycle.
4.	Key executives feel undue family, peer, or community pressure to succeed.
5.	The entity has a significant investment in an industry or product line noted for rapid change.
6.	Key executives with perceived inadequate incomes relative to industry.
7.	Limited collateral available.
8.	Adverse political, social or environmental impact.
9.	Declining demand for products.
10.	The entity is heavily dependent on one or a few products, customers or suppliers.

The most important red flags indicated by the respondents appear to involve around management characteristics and their influence on the

enterprise. The least important red flags include several operating aspects of the company such as product lines, business cycles and customers.

If the total group is subdivided into lender and investors groups, the following red flags are identified as the ten most important and ten least important:

Table 2 (a)

Ranking most important	Lenders	Investors
1.	Dishonest or unethical management.	Dishonest or unethical management.
2.	Frequent changes of legal counsel, auditors or external board members	There has been a breakdown in accounting and control systems as reflected by the late issuing of financial statements or a qualified audit report.
3.	Management is dominated by one person (or a small group) and there is no effective overseeing board or committee.	Suspension or delisting from stock exchange.
4.	Suspension or delisting from stock exchange.	Management's reputation in the business community is poor.
5.	Inability to generate cash flows from operations while reporting earnings and earnings growth.	Management is dominated by one person (or a small group) and there is no effective overseeing board or committee.
6.	Continuous problems with regulatory agencies.	There are frequent changes of legal counsel, auditors or external board members
7.	There is a high turnover rate of key top management, particularly financial executives.	Internal or external factors exist that raise substantial doubt about the entity's ability to continue as a going concern.
8.	Internal or external factors raise substantial doubt about the entity's ability to continue as a going concern.	Continuous problems with regulatory agencies.
9.	Management's reputation in the business community is poor.	Identification of important matters not previously disclosed by management.
10.	Reluctance to provide investors/bankers with requested data.	Inability to generate cash flows from operations while reporting earnings and earnings growth.

Table 2 (b)

Ranking least important	Lenders	Investors
1.	Pressure is exerted on accounting personnel to complete financial statements in an unusually short time period as reflected by approval date of financial statements.	Rapid expansion into new product lines.
2.	Unusually long business cycle.	Pressure is exerted on accounting personnel to complete financial statements in an unusually short period as reflected by approval date of financial statements.
3.	Rapid expansion into new product lines.	Unusually long business cycle.
4.	Limited collateral available.	Key executives feel undue family, peer, or community pressure to succeed.
5.	The entity has a significant investment in an industry or product line noted for rapid change.	Key executives with perceived inadequate incomes relative to industry.
6.	Poor interpersonal relationships among executives.	Adverse political, social, or environmental impact.
7.	The entity is heavily dependent on one or a few products, customers or suppliers.	Insufficient internal audit personnel.
8.	Declining demand for products.	The entity has a significant investment in an industry or product line noted for rapid change.
9.	Key executives feel undue family, peer, or community pressure to succeed.	Limited collateral available.
10.	Adverse political, social, or environmental impact.	Failure to inform investors about code of conduct and good corporate governance.

The averages for the perceived importance of individual red flags for lenders ranged from 4,620 to 2,758 and for investors it ranged from 4,823 to 2,525. Both lenders and investors identified the red flag “dishonest or unethical management” as being the most important. However, they did not rank the same red flags as being the least important, although there was consensus on the three least important red flags.

It is noteworthy that the three least important red flags again relate to the operating characteristics of the business. The most important red flags relate to management characteristics and influence over the control

environment. This supports the findings of Albrecht & Romney (1986) that the best predictive red flags appear to concern the attitudes of and situational pressures on management.

The finding with regard to respondents that had previously used red flags in decision making as opposed to those that had not, are as follows:

Table 3 (a)

Ranking	Red flags used in decision making	Red flags not previously used in decision making
1.	Dishonest or unethical management.	Dishonest or unethical management.
2.	Suspension or delisting from stock exchange.	Management is dominated by one person (or a small group) and there is no effective overseeing or supervisory board or committee.
3.	Management's reputation in the business community is poor.	There are frequent changes of legal counsel, auditors or external board members
4.	There are frequent changes of legal counsel, auditors or external board members	Inability to generate cash flows from operations while reporting earnings and earnings growth.
5.	Management is dominated by one person (or a small group) and there is no effective overseeing board or committee.	There is a high turnover rate of key top management specifically financial executives.
6.	There has been a breakdown in accounting and control systems as reflected by the late issuing of financial statements or a qualified audit report.	Internal or external factors raise substantial doubt about the entity's ability to continue as a going concern.
7.	Internal or external factors raise substantial doubt about the entity's ability to continue as a going concern.	Suspension or delisting from stock exchange.
8.	Continuous problems with regulatory agencies.	Continuous problems with regulatory agencies.
9.	Reluctance to provide investors/bankers with requested data.	Management's reputation in the business community is poor.
10.	Inability to generate cash flows from operations while reporting earnings and earnings growth.	The entity operates within an industry in which corruption is prevalent.

Table 3 (b)

Ranking	Red flags used in decision making	Red flags not previously used in decision making
1.	Rapid expansion into new product lines.	Pressure is exerted on accounting personnel to complete financial statements in an unusually short period as reflected by approval date of financial statements.
2.	Unusually long business cycle.	Key executives with perceived inadequate incomes relative to industry.
3.	Pressure is exerted on accounting personnel to complete financial statements in an unusually short period as reflected by approval date of financial statements.	Key executives feel undue family, peer or community pressure to succeed.
4.	The entity is heavily dependent on one or a few products, customers or suppliers.	The entity has a significant investment in an industry or product line noted for rapid change.
5.	Failure to inform investors about code of conduct and good corporate governance.	Unusually long business cycle.
6.	The entity has a significant investment in an industry or product line noted for rapid change.	Rapid expansion into new product lines.
7.	Limited collateral available.	Adverse political, social or environmental impact.
8.	Adverse political, social or environmental impact.	Limited collateral available.
9.	Key executives feeling undue family, peer or community pressure to succeed.	A significant portion of top management's remuneration depends on operating results.
10.	Declining demand for products.	Poor interpersonal relations among executives.

Once again the red flag “dishonest and unethical management” has been identified as being the most important by both groups of respondents. The red flags (management is dominated by one person and there is no effective overseeing board or committee and there are frequent changes of legal counsel, auditors or external board members) also received a high ranking by both groups. There does not appear to be any consensus regarding the least important red flags. The experienced users of red flags, however, deemed operating indicators (rapid expansion into new product lines and unusually long business cycle) as being very significant for detecting financial statement fraud.

The data was analysed in terms of the nature of the red flags. The purpose of this analysis was to determine whether the group of red flags related to management characteristics was considered to be more important indicators of fraud (as indicated in the literature see Heiman-Hoffman *et al* 1996; Albrecht & Romeny 1986) than other types of red flags.

The categories identified in ED 137 (SAICA 2000) were used to classify the red flags in terms of their nature:

- Risk factors that relate to management’s characteristics and influence of the control environment: the risk factors that pertain to management’s abilities, pressures, style and attitude relating to internal control and the financial reporting system.
- Risk factors that relate to industry conditions: the risk factors that involve the economic and regulatory environment in which the entity operates.
- Risk factors that relate to operating characteristics and financial stability: the risk factors that pertain to the nature and complexity of the entity and its transactions, the entity’s financial conditions and its profitability.

The individual red flags in the questionnaire were allocated to each of the three categories. An item analysis of the three categories revealed that the items in each category had a high correlation with the total of each category. The total for the three categories also had a high correlation, indicating that an analysis for the three categories would not be meaningful. The research therefore did not reveal a marked distinction between the red flags related to management characteristics, industry conditions and operating characteristics. This finding does not support the conclusion reached in prior research that management characteristics are considered to be the most important indicator of management fraud (Heimann-Hoffman *et al* 1996).

Finally, respondents were also asked to identify any additional red flags not specifically covered by the questionnaire. The following additional red flags were suggested:

- Merger and de-merger of group companies.
- Significant presence of financial executives in the top management echelon.
- A change in financial year-ends (making accounting results incomparable).
- Size of the auditing firm in relation to the client.
- Limited management overseeing of remote operations.
- Unskilled, inexperienced executives promoted into positions prematurely.
- Frequent corporate restructuring.
- Significant changes in the structure of the income, fees and interest.
- Good news that is too good to be true.
- Wide fluctuations in financial ratios from year to year.
- Share options being re-priced.

The findings of this research project should be interpreted with circumspection. Because of the low response rate, the findings have limited external validity. Similar problems in gathering data on red flags, management fraud and financial statement fraud have been encountered by other researchers in this field (see for example Albrecht & Romney 1986). The non-response may be attributable to apathy and work pressure, but also to a lack of knowledge of red flags or a view that red flags are not an important tool in decision making. There is also a possibility that the completion of the questionnaire was delegated to staff at lower levels in the organisation. The respondents may or may not have interpreted the questions as they were intended. This may affect the quality of the responses received as well as the decision not to respond. Another view is that financial statement fraud and the use of red flags is not considered to be a priority in South Africa, as a result of the high levels of violent crime. As a result of these limitations, further study is required into the views of investors and lenders on the use of red flags.

7 Conclusion

The escalating level of fraud, and particularly financial statement fraud, is an issue that has in recent years been highlighted in international research and the public media. Uretsky (1980) contends that it is necessary to understand how and why management fraud is perpetrated. This will include the identification of whether behavioral patterns that suggest proneness to fraud. He concludes that research on fraud should be extended to include the behavioral patterns of individuals and groups.

To manage the risk of fraud, including financial statement fraud, an entity should address the problem holistically. Measures to prevent, detect and investigate fraud should be in place. The risk of financial statement fraud is clearly a responsibility of the board of directors, or its equivalent in other organisational structures, especially the non-executive members. The audit committee is ideally positioned to assist the board in discharging this responsibility. If, however, the management's previous measures, in terms of the overall control environment and good corporate governance, fails, red flagging can be an important mechanism that can act as an early warning system to sensitise stakeholders, especially lenders and investors, of possible fraud.

The aim of the article is to consider the importance of red flags to lenders and investors in South Africa. To approach red flags from the perspective of lenders and investors is a relatively under-researched area in comparison with research done from an auditor's perspective.

The research objective as stated earlier, was to identify important red flag indicators for lenders and investors in South Africa and more specifically:

- To establish whether investors and lenders are familiar with the term *red flags*;
- to determine whether they have used red flags in their investment decisions;
- to establish whether they use formalised questionnaires/checklists on red flags;
- to determine their opinions on the relative importance of red flags in the questionnaire;
- to identify additional red flags that they perceive to be important.

The findings reveal that 63% of respondents were familiar with the term. Of this group, 78% had previously used red flagging in decision making. Few respondents used checklists of red flags, yet most respondents agreed that red flags checklists may be valuable in assessing the risk of fraud and collecting information on potential fraud. However the research of Pincus

(1989) reveals that the use of checklists had no significant impact on fraud risk assessments and that the difference between assessment of users and non-users of checklists was not significant.

The findings of the survey indicate that respondents view all red flags in the questionnaire as being important with the lowest average at 2,69 and the highest at 4,69 on the Likert Scale of 1 (negligible) to 5 (critical). The analysis of data in terms of the nature of red flags indicated that none of the three groups (management characteristics, industry conditions and operating characteristics and financial stability) was significantly more important than the others. A few additional red flags were suggested by respondents.

The low response rate to the survey and the possibility of bias being introduced into the data, makes it hazardous to draw general conclusions. However, the following were apparent from the study:

- In the majority of cases, lenders and investors in South Africa were aware of red flags;
- respondents did not tend to use red flag checklists/questionnaires;
- Lenders and investors rated the red flags as being very important;
- no distinction was discernable between the relative importance of different categories of the nature of red flags.

The study concentrated on the use of red flags. It may well be that the strength of red flags as an early warning system does not lie in using them in isolation, but rather in combining them with other indicators such as ratio analyses, corporate failure predictions, analyses of creative accounting practices and behavioral predictive models. This area warrants further research.

Bibliography

Albrecht, W.S. & Romney, M.B. 1986. *Red-flagging management fraud: A validation*, Advances in Accounting, Vol. 3, pp.323-333.

Albrecht, W.S., Wernz, G.W. & Williams, T.L. 1995. *Fraud: bringing light to the dark side of business*, Irwin, New York.

Beasley, M.S., Carcello, J.V. & Hermanson, D.R. 1999. *Fraudulent financial reporting: 1987-1997: An analysis of US public companies* research commissioned by the Committee of sponsoring organizations of the Treadway Commission. [<http://www.aicpa.org/news/p032699b.htm>].

Business Day. 7 September 1999. *Beige Holdings Ltd*, Comments by Belinda Anderson.

Business Day. 1 October 2000. *Macmed Health Care Limited*, Comments by Belinda Anderson.

Elliot, R. & Willingham, J.J. 1980. *Management fraud: Detection and deterrence*, Petrocelli Books, Princeton, New Jersey.

Fourie, J.S.A. 1994. *Auditors and corporate illegality and fraud*, SA Mercantile Law Journal, Vol. 6, No.2, pp.178-197.

Griffiths, I. 1995. *New creative accounting: How to make your profits what you want them to be*, Macmillan, London.

Herman-Hoffman, V.B., Morgan, K.P. & Patton, J.M. 1996. *The warning signs of fraudulent financial reporting*, Journal of Accountancy, October, pp.75-76.

International Federation of Accountants. ISA 240. International Auditing Practice Committee.

Kapardis, M. & Anderson, R. 1995. *What investors expect from an audit*, Charter, Vol. 66, No.3, pp.38-39.

Kaplan, S. & Reckers, P.M.J. 1995. *Auditors' reporting decisions for accounting estimates: The effect of assessments of the risk of fraudulent financial reporting*, Managerial Auditing Journal, Vol.10, no.5, pp.27-36.

Kneer, D.C., Reckers, P.M.J. & Jennings, M.M. 1996. *An empirical examination of the influence of the "new" US audit report and fraud red flags on perceptions of auditor culpability*, Managerial Auditing Journal, Vol.11, No.6, pp.18-30.

Lee, T.A. 1987. *Corporate finance reporting at the cross-roads*, The Accountant's Magazine, Vol.91, No. 973, pp.20-22.

Mathews, M.R. & Pereira, M.H.B. 1996. *Accounting theory and development*, Thomas Nelson, Melbourne.

Merchant, K.A. 1987. *Fraudulent and questionable financial reporting: A corporate perspective*, Financial Executives Research Foundation, Morristown, New Jersey.

National Commission on Fraudulent Financial Reporting. 1978. Report of Treadway Commission, Washington.

Pincus, K.V. 1989. *The efficacy of a red flag questionnaire for assessing the possibility of fraud*, Accounting, Organisations and Society, Vol. 14, No.1/2, pp.153-163.

Public Accountant and Auditors Act, 1991, Number 80, South African Gazette, Cape Town.

Robertson, J.C. 1997. *Fraud examination for managers and auditors*, Viesca Books, Austin.

Romney, M.B., Albrecht, W.S. & Cherrington, D.J. 1980. *Red-flagging the white collar criminal*, Management Accounting, May 1980, pp.51-57.

Sorensen, J.E. & Sorensen, T.L. 1980. *Detecting management fraud: Some organisational strategy for the independent auditor*, In: Elliott, R.K. and Willingham, J.J. (eds.), Management fraud: Detection and deterrence, Petrocelli Books, Princeton.

South African Companies Act, 1973, Number 61, as amended, South African Gazette, Cape Town.

South African Institute of Chartered Accountants. 1997. *Fraud and Error*, South African Auditing Standard no 240, April 1997, Kengray, Johannesburg.

South African Institute of Chartered Accountants. 2000. *Auditor responsibility to consider fraud and error, the audit of financial statements*, May 2000, Exposure Draft 137, Kengray, Johannesburg.

Searfoss, J. 1999. *Is integrity losing out to illusion?* Accounting and Business, May 1999, pp.34-36.

Uretsky, M. 1980. *An interdisciplinary approach to the study of management fraud*, in Elliott, R.K. and Willingham, J.J. (eds.), *Management fraud: Detection and Deterrence*, Petrocelli Books. Princeton.

Weisenborn, D. & Norris, D.M. 1997. *Red flags of management fraud*, National Public Accountant, Vol.42, No.2, pp.29-33.

Wells, J.T. 1997. *Occupational fraud and abuse*, Obsidian, Austin.

Wells, J.T. 1990. *Six common myths about fraud*, Journal of Accountancy, February, pp.82-88.

Wenzelburger, N.R. 1999. *The failure of the audit function in managing risk*, Speech delivered at the National Conference of the Institute of Internal Auditors, 31 August 1999 at Sandton Sun Hotel, Sandton, Jhb.

Wolk, H.I., Francis, J.R. and Tearney, M.G. 1984. *Accounting Theory*, second edition, PWS Kent, Boston, Mass.