CORPORATE FRAUD AND MANAGERS' BEHAVIOR: EVIDENCE FROM THE PRESS

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ABSTRACT. Based on evidence from press articles covering 39 corporate fraud cases that went public during the period 1992-2005, the objective of this paper is to examine the role of managers' behavior in the commitment of the fraud. This study integrates the fraud triangle (FT) and the theory of planned behavior (TPB) to gain a better understanding of fraud cases. The results of the analysis suggest that personality traits appear to be a major fraud risk factor. The analysis was further validated through a quantitative analysis of key words which confirmed that key words associated with the attitudes/rationalizations component of the integrated theory were predominately found in fraud firms as opposed to a sample of control firms. The results of the study suggest that auditors should evaluate the ethics of management through the components of the theory of planned behavior: the assessment of attitude, subjective norms, perceived behavioral control and moral obligation. Therefore, it is potentially important that the professional standards that are related to fraud detection strengthen the emphasis on managers' behavior that may be associated with unethical behavior.

KEY WORDS: Corporate fraud, fraud triangle, theory of planned behavior, managerial ethics, personality traits, fraud-related professional standards

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Introduction

Starting in the late 1990s, a wave of corporate frauds in the United States occurred with Enron's failure perhaps being the emblematic example. The objective of this study is to explore fraud cases as documented in the press, to determine if managers' behavior may be associated with unethical behavior that plays a role in this fraud and, finally, to study how current fraud-related auditing standards incorporate managers' behavior as a potential signal for unethical behavior.

An examination of prior literature reveals that the likelihood of committing fraud has typically been investigated using financial and/or governance variables (e.g., Beasley, 1996; Abbott et al., 2004; Kinney et al., 2004; Agrawal and Chadha, 2005; Farber, 2005; Srinivasan, 2005; Erickson et al., 2006).[1] The moral, ethical, psychological and sociological aspects of fraud have also been covered by the literature. Albrecht et al. (1982, p. 31-37) suggest that there are three explanations for crime: psychological, sociological and moral development. The ethical component of several corporate scandals has been documented. For example, Zandstra (2002, p. 16) posits that the central reason for Enron's demise was a failure of the board of directors to function in a morally and ethically responsible manner.[2]

Rezaee (2002, 2005) finds five interactive factors that explain several high-profile financial statement frauds. These factors are: cooks, recipes, incentives, monitoring and end results (CRIME). Choo and Tan (2007) explain corporate fraud by relating the fraud triangle to the "broken trust theory" introduced by Albrecht et al. (2004) and to an "American Dream" theory[3] which originates from the sociological literature while Schrand and Zechman (2007) relate executive overconfidence to the commitment of fraud. Collectively, these studies suggest that psychological and moral components are important for gaining an understanding of what causes unethical behavior to occur that could eventually lead to fraud.

However, the manager's behavior in fraud commitment has been relatively unexplored.[4] Accordingly, the overarching objective of this paper is to examine managers' unethical behaviors in documented corporate fraud cases on the basis of press articles, which constitute an ex-post evaluation of alleged or acknowledged fraud cases.

To evaluate potential influences on committing corporate fraud, this paper integrates the theory of the fraud triangle, which states that corporate fraud is a function of incentives, opportunities and attitudes/rationalizations, and the theory of planned behavior (Ajzen, 1985, 1988, 1991) (hereafter TPB), which incorporates attitude, subjective norms, perceived behavioral

control, and moral obligation (Beck and Ajzen, 1991). We then apply the combined theories to a large number of high-profile corporate frauds based on publicly available press articles containing managers' quotes and journalists' analyses. The results of our analysis confirm that attitudes/rationalization appear to be a key risk factor for corporate frauds and that the fraud triangle, integrated with the TPB, is a useful framework for analyzing unethical behavior by managers that are associated with corporate fraud.

The analysis was further validated through a quantitative analysis of key words which confirmed that key words associated with the attitudes/rationalizations component of the integrated theory were predominately found in fraud firms as opposed to a sample of control firms.

A close analysis of existing professional standards in auditing reveals that managers' personality traits and ethics are not sufficiently emphasized. In the relevant fraud detection standards in the U.S. (SAS 99) (AICPA, 2002) and internationally (ISA 240) (IFAC (International Federation of Accountants), 2005, 2009), personality traits and ethics are mostly covered under the rubric of "attitude". In SAS 99, for example, this concept is not defined with an emphasis on attitudinal factors. The standard only refers to "some individuals [who] possess an *attitude*, character, or set of ethical values" (Para. 7) [emphasis in the original text]. Therefore, our paper suggests that regulators should place greater consideration on ethics in the officially promulgated auditing standards in order to enhance the ability of auditors to be more effective in detecting corporate fraud.

We contribute to the existing literature on corporate fraud in the following ways: (1) from a theoretical perspective, we demonstrate a complementarity between the fraud triangle and the TPB as they are applied to unethical behavior as manifested in fraud cases; (2) from a methodological perspective, we examine *documented* behaviors—not, as in prior studies, *intended* behaviors—of corporate fraud cases, as identified by the press[5], and (3), from a regulatory perspective, we highlight some room for improvement in fraud-related professional standards.

The remainder of this paper is organized as follows. The next section presents our theoretical framework, which is based on the fraud triangle and the TPB. The following sections discuss the research methodology, our results and a robustness analysis. The last two sections present a discussion (with limitations) and some directions for future research.

Corporate fraud: the theoretical framework

Several conceptual frameworks have been put forward to investigate why managers engage in unethical behavior that leads to corporate fraud. In this section, we define the concepts of fraud and the "fraud triangle"[6] that led to the relevant professional auditing standards regulation. We then highlight two complementary perspectives, the fraud triangle and the TPB: both are of potential use to understand managers' unethical behaviors as observed in fraud.

Fraud and behavior in auditing regulation

We are interested in accounting or corporate "fraud", as defined in SAS No. 99 (AICPA, 2002, Para. 5): "fraud is an intentional act that results in a material misstatement in financial statements that are the subject of an audit". Two types of misstatements are relevant to the auditor's consideration of fraud—misstatements arising from fraudulent financial reporting and misstatements arising from misappropriation of assets (AICPA, 2002, Para. 6). All of the cases examined in this paper are documented examples of fraudulent financial reporting, and some also include misappropriation of assets, as indicated in Table 1 and Appendix 2.

In the previous literature, breaking down overall fraud-risk assessments into separate assessments for management's (1) incentives/pressures, (2) opportunities and (3) attitudes/rationalizations/ is often referred to as the fraud-triangle decomposition (Wilks and Zimbelman, 2004) or, in short, the fraud triangle. These elements were first identified by Sutherland (1949), and developed by Cressey (1953, p. 30).[7] Albrecht et al. (1982, p. 37) adapted the concept from criminology to accounting and reinforced the decomposition with a review of over 1,500 references on fraud. They identified 82 fraud-related variables, which are combined into three categories: situational pressures, opportunities to commit fraud and personal integrity (character).

Auditing regulation (AICPA, 1988, 1997, 2002) has outlined numerous fraud-risk factors. These indicators are also called "red flags" and represent "potential symptoms existing within the company's business environment that would indicate a higher risk of an intentional misstatement of the financial statements" (Price Waterhouse, 1985, p. 31; Pincus, 1989, p. 154). Compared to its predecessors, the most recent standard, SAS No. 99 (AICPA, 2002, Para. 7) has organized risk factors by reference to three conditions generally present when fraud occurs. "First, management or other employees have an *incentive* or are under *pressure*, which provides a reason to commit

fraud. Second, circumstances exist—for example, the absence of controls, ineffective controls, or the ability of management to override controls—that provide an *opportunity* for a fraud to be perpetrated. Third, those involved are able to *rationalize* committing a fraudulent act. Some individuals possess an *attitude*, character, or set of ethical values that allow them to knowingly and intentionally commit a dishonest act" (italics in the original text). These definitions are directly linked to the fraud triangle. Thus, the fraud triangle can help predict the context in which managers may act unethically and help perpetuate fraud.

Empirical research has been carried out to demonstrate the importance of the "incentives" factor in the commitment of the fraud, such as the need to meet an aggressive earnings target (Albrecht and Romney, 1986; Loebbecke et al., 1989; Bell and Carcello, 2000). However, when we look closer at the evolution of the auditing regulation, we observe that there is an increasing concern for fraud in auditing regulation since the 1980s and an increasing integration of the attitudes/rationalizations factor. The individualization of this concept constitutes an improvement in the evolution of the auditing standards (from SAS 53 to SAS 99[8]). However, if we pay more attention to the relevant section of SAS 99 quoted above, "attitude", although highlighted with the italicized characters, is one of the individual's characteristics: as mentioned earlier, the text also mentions the "character and set of ethical values" of the individual. The text does not explicitly define the concept of "attitude." Further, in the "examples of fraud risk factors" relating to fraudulent financial reporting (AICPA, 2002, p. 44, Appendix), section "Attitudes/Rationalizations", the first example concerns the "*Ineffective communication, implementation, support, or enforcement of the entity's values or ethical standards by management or the communication of inappropriate values or ethical standards*". This item is mostly related to the firm's ethics. No other item focuses directly on individual ethics or managers' personality traits.[9]

Very important information regarding the detection of fraud is located in the "attitudes/rationalizations" corner of the fraud triangle. Of the three points of the fraud triangle, this corner is arguably the most difficult for the auditor to assess. Attitudes and rationalizations are cognitive and therefore internal by nature. They may be hidden or suppressed in order to deceive. Often, the best the auditor can do is to make inferences as to the attitudes that managers may possess. An effort to better understand this corner of the fraud triangle can potentially help provide insights that may help the auditors improve their ability to understand when the threat of

fraud is heightened. Moreover, a list of risk-fraud factors (even non-comprehensive) drawn from previous fraud cases can be very helpful for guiding auditors in their task.

This discussion leads us to a preliminary conclusion: the question of the comprehensiveness of auditing guidelines in relation to this factor remains open to further investigation. Thus, since the concept of *attitude*, which proxies for the manager's behavior, is not defined as such in the auditing standards, it becomes necessary to refer to a second theory, the theory of planned behavior, to understand this concept.

Theory of planned behavior (TPB)

In social psychology, Ajzen (1991, p. 179, 2001) emphasizes the role of intentions in explaining behaviors and posits that intentions to perform behaviors of different kinds can be predicted with high accuracy from (1) attitudes toward the behavior, (2) subjective norms and (3) perceived behavioral control. This is known as the theory of planned behavior (TPB).

According to Ajzen (1991, p. 188), the "attitude toward the behavior … refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question". Bailey (2006, p. 804-805) adds that the "attitude" toward the behavior is determined by a person's beliefs that the behavior leads to certain outcomes and the person's evaluation of those outcomes as favorable or unfavorable.

Fishbein and Ajzen (1975, p. 302) define the subjective norm as "the person's perception that most people who are important to him think he should or should not perform the behavior in question". Ajzen and Fishbein (1974, p. 2) refer to the "perception of the expectations of relevant other people". Ajzen and Driver (1992, p. 304) who study the willingness to pay a user fee define the subjective norms as the "perceived influence of significant others". Beck and Ajzen (1991, p. 286) define this concept as the "perceived social pressure to perform or not to perform the behavior".[10] Ajzen and Driver (1992, p. 304) measure the subjective norms by the following question: "Most people who are important to me approve/disapprove of my engaging in this activity". They also ask: "Most people who are important in my life think I should engage on this activity". In a research based on the prediction of dishonest actions, Beck and Ajzen (1991, p. 292-293) ask the following questions: "If I cheated on a test or exam, most of the people who are important to me would *not care-disapprove*". (2) "No one who is important to me think it is OK to cheat on a test or exam. *agree-disagree*". (3) "Most people who are important to me will look down on me if I cheat on a test or exam. *likely-unlikely*". In a study on the choice-of-travel mode,

Bamberg et al. (2003, p. 178) ask the same type of questions. Finally, in an experiment on game playing, Doll and Ajzen (1992, p. 758) refer to the perceived expectations of the experimenter, because this seemed to be the most relevant referent in the experimental situation.

It appears from these definitions and questions that the subjective norms are unrelated to any form of economic incentive or even a "social incentive", but refer to the participant's perceptions of the opinion of a few persons who are important to him. In short, they are related to the participant's own attitudes and rationalizations, derived from his understanding of others' opinions.

Finally, Ajzen (1988, p. 132) defines perceived behavioral control as "the perceived ease or difficulty of performing the behavior and it is assumed to reflect past experience as well as anticipated impediments and obstacles" (see also Ajzen, 1991; Beck and Ajzen, 1991, p. 286). Ajzen and Driver (1992, p. 304) define the same concept as the "perceived facilitation or constraints with respect to performance of the behavior". To measure the perceived behavioral control, the authors ask the following questions: "For me to engage in this activity is difficult/easy" and "I believe I have the resources required to perform this activity". Working on the prediction of dishonest actions, Beck and Ajzen (1991, p. 293) ask the following questions: "For me to cheat on a test or exam is *easy-difficult*", "If I want to, I can cheat on a test or exam. *true-false*", "I can imagine times when I might cheat on a test or exam even if I hadn't planned to. *likely-unlikely*" and "Even if I had a good reason, I could not bring myself to cheat on a test or exam. *likely-unlikely*". In other words, perceived behavioral control represents the person's perceived ability to perform the behavior, based on their past experience, competence and any expected obstacles they may face (Hess, 2007, p. 1785). Perceived behavioral control represents "self-efficacy beliefs" (Ajzen, 1991, p. 184).

The TPB is an extension of the "Theory of Reasoned Action" (TRA hereafter) (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980) which only included the first two components of the model (attitude and subjective norms). As noted by Hess (2007, p. 1784), the TPB is a "parsimonious model but has significant power in explaining variations in intentions. The simplicity of the model also makes it useful for understanding and explaining the various studies that have been conducted on ethical behavior in organizations".

TPB and TRA have already been used to explain the intentions underlying fraudulent financial reporting. Beck and Ajzen (1991) apply the TPB to prediction of dishonest actions[11],

adding a fourth concept: personal feelings of moral obligation, i.e., the responsibility to perform or refuse to perform a certain behavior. "Moral norms" (or "moral obligation") can be considered as an additional determinant of intentions in situations where ethical behavior is involved (Ajzen, 1991, p. 199; Hess, 2007, p. 1785-1786). In addition to the individual's own moral belief system, these moral obligations can be derived from laws, professional codes of ethics, and other similar sources.

Gillett and Uddin (2005) test a structural model based on TRA, including attitude, company size, and compensation structure. Based on responses from 139 CFOs they find that the model globally explains the intentions of fraudulent reporting and that attitude and size are the main drivers of fraud. Further, Carpenter and Reimers (2005) find, with a survey analysis and an experiment, that the TPB can help explain unethical and fraudulent financial reporting.

Combining the fraud triangle and the theory of planned behavior (TPB)

The two theoretical frameworks (fraud triangle and the TPB) have already been used by researchers to analyze fraud and unethical behavior, but until now in a separate way. Before analyzing the fraud cases we identified, we combine the fraud triangle and the TPB to explain fraud behavior. Figure 1 details the combined theories. These two theories do not share the same concept of "attitude." The attitude concept, in the fraud triangle, is a broad concept that encompasses the three traditional dimensions of the TPB: attitude, subjective norms and perceived behavioral control. It can also include the fourth dimension mentioned above: moral obligation because "it seems likely that moral issues are salient in the case of … dishonest behaviors" (Beck and Ajzen, 1991, p. 289). We then use the concept of "extended TPB" in Figure 1, because of the inclusion of the fourth component.

The second and third components of the fraud triangle, the "incentives/pressures" and "opportunities" are not covered by the TPB because they represent external stimuli for the fraud behavior. For instance, opportunities could be considered as an actual behavioral control, while perceived behavioral control, as indicated by its name, reflects the person's perception of how easy or difficult it is to engage in the particular behavior (Bailey, 2006, p. 804-805). However, the concept of opportunities is familiar to Beck and Ajzen (1991, p. 286-287) who explain that "the degree of success will depend not only on one's desire or intention, but also on such partly non-motivational factors as availability of requisite opportunities and resources (e.g., time, money, skills, cooperation of others, etc.)" (see also Ajzen, 1991, p. 182). This statement is

important as it suggests that perceived behavioral control is related to intentions and is not assimilated within "opportunities" and "resources" which are considered "non-motivational" factors. These authors add that the TPB "deals with perceived, rather than actual, behavior[al] control" (1991, p. 287). However, Bamberg et al. (2003, p. 176) write that "to the extent that people are realistic in their judgments of a behavior's difficulty, a measure of perceived behavioral control can serve as a proxy for actual control and can contribute to the prediction of the behavior in question". Consequently, our framework includes an arrow representing a "possible influence" between opportunities and perceived behavioral control.

In summary, the TPB allows detailing the broad and undefined concept of attitudes in the fraud triangle that influences managers to commit unethical actions. The intention to engage in fraud is then the aggregation of the extended TPB (attitude, subjective norms, perceived behavioral control and moral obligation) as well as incentives/pressures and opportunities.

Insert Figure 1 About Here

Given that the fraud triangle and the TPB, as shown in Figure 1, are complementary theories, we combine them for use in the rest of this article. We label this association "FT/TPB" (for "fraud triangle/theory of planned behavior applied to fraud"). Our focus is on behavior (including personality traits and ethics), mainly at the individual level. The individual's role is relevant because as noted by Sauer (2002, p. 956), a company engages in financial fraud only if its reasons for doing so are consistent with the specific motivations of the individuals who control its reporting process. Further, Hess (2007, p. 1787) argues that the studies which have used the TPB to explain unethical behavior have found that the determinant that has the greatest impact on individual intentions is attitude (see, e.g., Carpenter and Reimers, 2005). Previous studies also demonstrate that auditors generally perceive "attitude" factors to be more important warning signs of fraud than "situational" factors (Heiman-Hoffman et al., 1996).

Research methodology

Research question

Based on the above literature review and the potential of incorporating behavioral factors more strongly into the corporate fraud detection auditing guidelines, we will examine the following research question (RQ):

RQ: Do managers' personality traits explain ex-post alleged or acknowledged fraud cases?

In other words, are the actual reasons behind fraud, as presented in the press articles, in line with the categories of the FT/TPB? The research findings to the RQ will be used to make recommendations to policy makers and standard setters on how standards might be enhanced in the future.

Sampling

To complement prior literature (Carpenter and Reimers, 2005; Gillett and Uddin, 2005), we examine documented behaviors in 39 cases of corporate scandals, using evidence taken from press articles such as managers' quotes and journalists' analyses. Johnson et al. (2005) state that the academic community has proposed a variety of roles for the financial press, which they classify into two general, not necessarily incompatible, categories. The first category contains those perspectives that treat the press primarily as an information broker, recording and disseminating information about business activities. The second category regards the press as an active participant in the development of society's awareness, understanding, and evaluation of businesses and business practices. Johnson et al. (2005) have used newspapers as a data source and fall into this second category by studying the influence of the financial press on stockholder wealth.

Media's role as a monitor for accounting fraud has been recently studied (Miller, 2006; Dyck et al., 2010) and has been shown to be important due to the pressure it places on management (Dyck et al., 2008). While we recognize that the media may have incentives to highlight fraudulent behavior to increase circulation, the press still fulfills two key roles. First, in relaying information from other intermediaries (auditors, analysts, lawsuits), the press attracts the attention of institutions that may take action (e.g., regulatory bodies, consumer groups, investment funds) (Dyck et al., 2008). Second, the press can produce new information through its own investigations and analysis. Miller (2006) has documented a negative market reaction after an investigative report is published, which suggests that the press plays an important role as a monitor or information intermediary in financial markets.[12]

To design our sample, we started from the Corporate Scandal Fact Sheet[13], which includes a list of 61 short vignettes on companies. Compared to a similar list maintained by Forbes[14], this list's main advantage is that it includes the names of the main characters involved in the scandals. We deleted from this list several companies that are linked to other companies involved in different scandals: accounting firms (e.g., Andersen, KPMG) and banks (e.g., Citigroup, Morgan

Stanley). We also deleted companies that had no data available on the personality of the managers (e.g., Cornell). Finally, we added three companies that do not appear in the Corporate Scandal Fact Sheet but which had received a lot of adverse publicity and for which press articles were available (AIG, Delphi and Freddie Mac).[15] The resulting sample includes 39 fraud companies for the period 1998-2005. For the sake of comparability and consistency in interpretation, we only used U.S. cases. Because the corporate scandal was mainly based in its U.S. subsidiary – U.S. Food Service, Royal Ahold is also included, although it is a Dutch group.

Content analysis

To evaluate the research question, we applied a content analysis to our press articles. Content analysis is a "research method which draws inferences from data by systematically identifying characteristics within the data" (Jones and Shoemaker, 1994). It presents the following advantages (Kabanoff et al., 1995): (1) non obtrusive characteristic (documents can be evaluated without the knowledge of the communicator), (2) use of a natural verbal expression as data base, (3) adaptability in longitudinal studies if texts are presented over long periods, (4) systematic and quantitative approach applied to qualitative data. A thematic analysis (the approach applied here) enables the researchers to identify content categories and trends from the text, and then draw inferences from them (Jones and Shoemaker, 1994).

In terms of data analyzed, we searched for evidence from the U.S. press coverage contained in the Factiva database. Factiva (also called Dow Jones Factiva) is a non-academic database of international news containing 20,000 worldwide full-text publications including *The Financial Times*, *The Wall Street Journal*, as well as the continuous information from Reuters, Dow Jones, and the Associated Press (see http://factiva.com/index_i7_w.asp). We also used SEC documents, to understand the technical and accounting aspects of the corporate fraud. For some companies (Adelphia Communications, Enron, MicroStrategy, Rite Aid, Sunbeam, Waste Management, and Xerox), we also used the GAO report (United States General Accounting Office, 2002) on restatements.

In order to identify the relevant press articles, we applied the following methodology. For each case study, we first found the name of the managers involved in the fraud with the help of the Corporate Scandal Fact Sheet or a search in Factiva on the company itself. The following step was a search in Factiva with the name of the company and the company's managers as keywords.

Keeping in mind that our objective was to examine managers' personality traits and motivations, we selected articles that included details about the personality of the managers.

The next step concerned identification in each article of the paragraphs dealing with the topics of interest for us. Once these sections were identified, a coding sheet was applied to the content analyzed. This sheet has the same format as Table 1 and Appendix 2, which isolate the three main influences known to be indicators of corporate fraud according to the fraud triangle and the TPB:

- Incentives
- Opportunities
- Attitudes/rationalizations (split into four sub-columns: attitude, subjective norms, perceived behavioral control and moral obligation).

To enhance inter-coder reliability, two different researchers analyzed the same press articles separately on a sample of 10 cases. The major issue was the extraction of the relevant pieces of information from the articles and the allocation of these pieces of information to the columns of Table 1 and Appendix 2. The result was a 95% rate of convergence, which indicates that the coding showed strong signs of reliability. The only source of divergence arose because the pressure from analysts is mentioned in two different examples of the appendices of SAS 99: in the incentives/pressures section, SAS 99 mentions the "Excessive pressure … to meet the requirements or expectations of third parties due to … trend level expectations of … analysts" while in the "attitudes/rationalizations" section, SAS 99 refers to "a practice by management of committing to analysts … to achieve aggressive or unrealistic forecasts". An examination of the two paragraphs suggests that the first one refers to the pressure exerted by analysts while the second one deals with the attitude of the managers to commit to or to accept this pressure. In other words, an "external incentive" becomes an "internal incentive" only when internalized by the individual. Internalization is based on attitudes, values and beliefs. This discussion illustrates the difficulty to classify some elements of the fraud cases between "incentives" and "attitudes/rationalizations". For example, the "reputation at stake" may both refer to external pressures (social expectations) and to internal commitment to these pressures (fear of loss of reputation). In this case, we have decided to allocate the element to the "attitudes" column (sub-column "attitude toward the fraud") because we concluded that the internalization of this pressure is the cause of the fraudulent behavior. The same difficulty applied to the maintenance of a high

living standard which could be considered as an incentive or an attitude toward the fraud. We favored the second interpretation because the search for a high living standard is, in part, the consequence of an individual decision. We also recorded the meeting of analysts' expectations in both columns "incentives" and "attitude (toward the fraud)". After resolving this issue, all the other cases were coded by two researchers, with no significant disagreements.

Managers' behavior in cases of corporate scandals: Analysis of the results

Appendix 1, Panel A, presents a table disclosing years when the scandal went public and the number of articles used in each case study. Panel B lists all the references used. Panel A shows that there is no apparent discrepancy between the cases in terms of number of articles used (average 3.7 articles, minimum = 2, maximum = 6). Appendix 2 presents a detailed analysis of the underlying behavioral motivation in the 39 corporate scandals examined. The components are classified according to the combined theory (FT/TPB): Incentives-pressures (col. 1), opportunities (col. 2), attitudes/rationalizations (subdivided into four separate components taken from the TPB: attitude (col. 3), subjective norms (col. 4), perceived behavioral control (col. 5) and moral obligation (col. 6). A numbering system is used after each component to refer to the "examples of risk factors" of SAS 99 and ISA 240: 1 = covered by both SAS 99 and ISA 240; 2= covered by SAS 99 but not ISA 240; 3=covered by ISA 240 but not SAS 99; and 4=covered by neither SAS 99 and ISA 240. We summarize these results by displaying frequencies in Table 1.[16]

Insert Table 1 About Here

As shown in Table 1, the first two "traditional" components of the fraud triangle (incentives/pressures and opportunities) are present in all cases with respectively a total of 106 and 49 occurrences. The last four components (which correspond to the third part of the fraud triangle and the four elements of the extended TPB), that are heavily related to managers' personality traits and ethics, are present in some cases but the number of occurrences varies greatly: 62 for attitude toward the fraud, 4 for subjective norms, 25 for perceived behavioral control and 14 for moral obligation. Thus, all the components of the FT/TPB are present in the press articles and therefore subject to analysis.

In Table 1, we split each dimension of FT/TPB into two columns to highlight the presence of each component identified in the auditing standards. The column P represents the components present in the "examples of risk factors" of SAS 99 and ISA 240, the column NP represents the components not present in auditing standards and the column T is the total of the two preceding

columns. The bottom line of Table 1 (total by component) documents that the split between Present/Not present items varies across the components of the FT/TPB. In the following discussion, we focus on each dimension and its presence in or absence from the auditing standards.

Incentives/pressures

Table 2 summarizes the content of columns 1 (incentives/pressures) and 2 (opportunities) from Appendix 2. The statistics provided by Table 1 show that almost all items identified from the press are present in auditing standards. From Table 2, we can conclude that the most frequent risk factors are: (1) the profitability or trend level expectations of investment analysts, institutional investors, significant creditors or other external parties; (2) the existence of significant financial interests in the entity; (3) a significant portion of the compensation being contingent upon achieving aggressive targets for stock price operating results, financial position or cash flow; (4) a high degree of competition or market saturation and (5) the need to obtain debt or equity financing to stay competitive.

Insert Table 2 About Here

Opportunities

In the same Table 1, the column "opportunities", which corresponds to a form of "actual behavioral control" (see above), is almost completely filled with components found in promulgated auditing standards (42 items over 49). Table 2 provides the list of risk factors mentioned in the auditing standards. In several instances, the managers benefited from the existence of complex transactions (e.g., AIG, Datek Online) and the possibility of "round-trip trades" (e.g., CMS Energy, Duke Energy, Dynegy, Enron, Homestore.com, Network Associates, reliant Energy). In other instances, the auditor's alleged failure perhaps made the fraud easier to perpetuate (e.g., Cendant, Delphi, Halliburton, HPL Technologies, Merck, Sunbeam, Tyco, Waste Management, Xerox).

Attitudes/rationalizations

The "attitudes/rationalizations" component is split into four columns, following the extended TPB: "attitude toward the fraud", "subjective norms", "perceived behavioral control" and "moral obligation". We explain below how each column is defined. Since the columns of Table 1 are generally filled, the actual reasons behind fraud, as mentioned in the press articles, appear to be in

accordance with the categories of the FT/TPB. However, it appears clearly from the frequencies displayed in Table 1 that for the four components of the extended TPB, the items not present in the auditing standards are more numerous than those present.

Interestingly, as shown in the last part of Table 2, our sample cases contain several examples noted in the auditing standards and corresponding to the "attitude toward the fraud" component of the TPB (column 3 of Table 1):

- "Excessive interest by management in maintaining or increasing the entity's stock price or earnings trend": represented by stock options (Ahold, AIG, AOL, Bristol-Myers Squibb, Computer Associates, Freddie Mac, Halliburton, Peregrine Systems, WorldCom and Xerox), and the fluctuations in the company's stock price (AIG). This evidence is in line with Coffee (2005) which states that "when one pays the CEO with stock options, one creates incentives for short-term financial manipulation and accounting gamesmanship" (p. 202). Several empirical studies have confirmed the role of stock options as incentives in cases of restatements (Efendi et al., 2007) or securities fraud allegations (Denis et al., 2006). In the same vein, Cheng and Warfield (2005) found that corporate managers with equity incentives engage more frequently in earnings management and Bergstresser and Philippon (2006) document that earnings management is more pronounced at firms where the CEO's potential total compensation is more closely tied to the value of stock and option holdings. Our finding is not surprising, given that the sample firms are from the U.S. (with one exception; see sample description above) and given Coffee (2005)'s explanation of the importance of stock options in compensation packages in the United States.
- "A practice by management of committing to analysts, creditors, and other third parties to achieve aggressive or unrealistic forecasts," was found in both Adelphia Communications and Network Associates.
- "The owner-manager makes no distinction between personal and business transactions". It should be noted that this example taken from ISA 240 could also be considered as a case of misappropriation of assets. Interestingly, we found several instances of personal expenses paid for by the company's resources (Cendant, Enron, Global Crossing, HealthSouth, K-Mart, Peregrine Systems, Phar-Mor, and Tyco). In Adelphia Communications, the fraud consisted of improper use of the company's funds for self-dealing by the Rigas family. The money was used to buy stock and luxury condominiums in Mexico, Colorado and New York City, to

construct a golf course, purchase timber rights to land in Pennsylvania and pay off margin loans.[17]

The examples provided in the auditing standards in relation to misappropriation of assets are difficult to find in press articles. For example, we were able to identify only one case of "changes in behavior or lifestyle that may indicate assets have been misappropriated": Charles Wang, CEO of Computer Associates, and Sanjay Kumar, COO, pocketed the money resulting from the increase in their stock options to buy expensive cars (Ferrari Maranello, Land Rover) and holiday homes.[18] However, the press mentions several cases of extremely high living standards, but not necessarily *changes* in lifestyles (see below).

Items not present in the auditing standards

We found that several elements explain the fraud-related behaviors and are related to "attitude toward the fraud" and the three other components of the TPB, but they are not present in the auditing standards. All of these elements are identified with the number 4 in Appendix 2 and are found in the column NP of Table 1. Table 3 summarizes these elements of fraud behavior not present in auditing standards.

Insert Table 3 About Here

Starting with the "attitude toward the fraud" component of the TPB (column 3 of Appendix 2 and Table 1), we found two categories of explanations not present in auditing standards: (1) To maintain a high living standard, sometimes linked to a passion for sports and (2) Reputation at stake. Using Ajzen's (1991) definition of "attitude toward the behavior", these elements can help explain why a person has a favorable attitude towards the consequences of the actions that lead to fraud.

Anecdotal evidence in the press highlights these two elements. For example, former Tyco CEO Dennis Kozlowski acquired a "$6,000 shower curtain for his highfalutin apartment" (Jennings, 2006b, p. 2-3). Martin Grass, CEO of Rite Aid Corporation, and Jeffrey Citron, CEO of Datek Online, both commuted to work by personal helicopter.[19]

Several CEOs had a real passion for sports that perhaps influenced them to commit fraud. Mickey Monus "borrowed" about ten million dollars of Phar-Mor's funds to cover the debts of the World Basketball League. As he controlled more than 60% of the teams, he was responsible for the WBL's expenses and losses - and whenever the league needed cash, he drew money from the company.[20] Philip Anschutz, Qwest's Chairman, wanted to finance his burgeoning sports and

entertainment empire. He liked to be seen as a "sports and entertainment mogul".[21] The need to prove themselves as "players" in the field of sports seems to have made at least some executives susceptible to lapses in moral judgment and behavior.

The "subjective norms" component of the TPB (column 4 of Table 1), which represents the opinion of "significant others", is less prevalent in the press, probably because it is more difficult to identify, even with the hindsight perspective of journalists. We found a few cases (only 4) where the managers were heavily influenced by other individuals in the firm to commit fraud (e.g., Phar-Mor and the importance of the CEO). In the WorldCom case, the personality of the CEO had an impact on the behavior of the CFO.

The "perceived behavioral control" (column 5 of Table 1), as explained earlier, represents the perceived ease or difficulty of performing the fraud. It can also be referred to as the "self-efficacy beliefs" of the fraud perpetrator. As we posit that praise/admiration from the press and certain personality traits contribute to these self-efficacy beliefs, we include in this column all factors reported in the press pertaining to these two explanations.

Several managers of the studied firms received glowing praise and admiration from the press. Prior to the scandals, Cal Turner, Dollar General's CEO, was considered a "marketing genius,"[22] while Jeffrey Citron (Datek Online) had been heralded as a "technology wizard" by Forbes magazine and "one of the 20 most important players on the financial Web" by Institutional Investor.[23] Corporate America treated Al Dunlap [Sunbeam's CEO, known as "Chainsaw Al"] as "a miracle worker" and he did everything possible to promote this image.[24] It appears that these managers believed in their own press and were willing to do almost anything to keep up the favorable image.

Several egregious personality traits are also found in the CEOs involved in the cases studied. Network Associates' CEO, Bill Larson, is a good example of tyrannical behavior. He was prone to bullying his employees, giving them unreachable targets to meet then berating them if they failed. He liked to remind managers that "suicide was sometimes an appropriate response to failure".[25] In the grand jury indictment, Martin Grass (Rite Aid Corporation) "emerged as an arrogant bully, pressuring underlings to endorse phony documents and bragging that cover-ups would never be discovered". Grass even threatened Rite Aid's accounting firm, KPMG, with retaliation if the Company suffered as a result of the audit.[26] In a different style, Michael Monus (Phar-Mor) fascinated his co-executives. He was the mastermind behind the fraudulent scheme

and encouraged a form of hero worship. Patrick B. Finn, for example, the CFO and Senior VP who orchestrated the fraud with Monus, called Monus "his god". This resulted in a blind loyalty to Monus, whose orders were followed without any substantive checks or balances.[27]

Finally, we identified the "moral obligation" component of the TPB (column 6 of Table 1) on the basis of Beck and Ajzen (1991, p. 293) who refer to feelings of guilt in one of the questions they used to evaluate this component of the behavior.[28] We identified one major argument put forward by managers to lessen their guilt: the fact that their actions helped other people or organizations via their work with charitable causes (Adelphia Communications, Computer Associates, Enron, Freddie Mac, HealthSouth, and WorldCom) or the fact that the managers felt that they were acting for the good of the company (Ahold). For example, at Computer Associates, Charles Wang was a "caring executive who reportedly ends every meeting by talking about the charities he's working on".[29] Richard Scrushy (HealthSouth) also used his money for seemingly good purposes: he donated to charities and gave money for a new church.[30]

Robustness analysis

In order to test whether the factors highlighted in the previous section truly capture a lot of what is going in fraudulent companies, we ran a quantitative analysis based on the "Bag-of-words" approach (Tetlock, 2007; Tetlock et al., 2008).[31] This quantification is done through the development of an index capturing the occurrence of keywords associated with the four dimensions of the "Attitudes/Rationalizations" component of the FT/TPB framework. We use it to back-test our approach. Hence our expectation is that the Attitudes/Rationalizations index is higher in firms becoming fraudulent than in non-fraudulent firms.

To implement this robustness analysis, we adopted the following procedure. First, on the basis of the detailed table of Appendix 2, we created a "dictionary". We identified all meaningful words for each of the six columns of the table. Then, we listed the different possible endings (singular, plural, feminine, masculine, etc.). For example, for the column (3) "Attitude towards the fraud", we used the words "ambition" (with added endings: "ambitions", ambitious"), "attitude" (and "attitudes"), "enrichment", "greed" (and "greedy"), etc. For the column (5) "Perceived behavioural control, we used the terms (and their respective endings) "award", "wizard", "arrogant", etc.[32] Then, for each column, we computed an index equal to the number of occurrences of these words, scaled by the total number of words in the selected relevant paragraphs. As we specifically focus on the input of the TPB, we computed the sum of the

indices corresponding to the four columns of the TPB (columns 3 to 6). We call this sum $Index_{Att/Rat}$ as it refers to the Attitudes/Rationalisations component of the fraud triangle.

Then we created our treatment and control samples. The treatment sample is composed of each of the 39 studied companies. First, for each of them we identified a peer ("control") company on the basis of the Infinancials database.[33] This database provides three categories of peers, on the basis of the sector classification and size: "international", "regional" and "domestic". Given the U.S. nature of our sample, we chose the closest domestic peer company.[34] For example, Adelphia Communications is matched with Comcast and AIG is paired with Harford Financial, etc.[35] When a peer company was itself a treatment (i.e., fraudulent) company, we chose the second closest peer. When the same peer was supposed to be matched to two different treatment firms, we also kept the second closest peer for one of the treatment firms. In a second step, we checked in the Edgar database of the SEC (www. sec.gov) that the control company had not been subject to an enforcement release from the SEC in any year. In a third step, we searched for the CEO of the control firms. In case of a change of CEO over the period of scrutiny we identified the different CEOs.

When the fraud is discovered, the treatment firms come under greater scrutiny and are probably "over" covered by the press. We therefore adopted a very conservative approach by selecting a larger range for the control firms (Year the scandal became public, i.e., Y0, plus Y-1, Y1, Y2 and Y3) than for the treatment firms (Y-2 and Y-1). In a fourth step, we searched for articles in the Factiva database on the studied period with the name of the company and the name of the CEO (or CEOs in case of a change of CEO over the period of scrutiny for the control firms, and we kept the CEO involved in the fraud for the treatment firms). Given the high number of articles retrieved, including news release concerning many other companies, we excluded the "Dow Jones News Service", the "Mutual Fund Prospectus Express" and all articles with less than 500 words. The number of articles varies between 51 (Zip Realty: Homestore.com peer) and 1500 (AT&T: Global Crossing peer).[36] Lastly, as our index focuses on the CEO's attitude, we extracted from the articles all the paragraphs where the name of the CEO was mentioned. We thus created a word file ("test file") for each sample company (treatment or control). We obtain 72 word files[37] that will be subject to our statistical treatment.

We then computed the occurrences of each term of our dictionary in the word file of relevant paragraphs (the "test file") corresponding to each firm. For each column, we computed the

following index: number of occurrences of the key terms of the column divided by the total number of words in the test file of firm. The Attitudes/Rationalizations index ($Index_{Att/Rat}$) is then computed as the sum of the four indices related to the Attitudes/Rationalizations components of the FT/TPB framework.

We find the following results:

- Treatment firms: mean ($Index_{Att/Rat}$) = 1.16‰; median (1.06‰)
- Control firms: mean ($Index_{Att/Rat}$) = 0.70‰; median (0.58‰).

As the $Index_{Att/Rat}$ does not follow a normal distribution, we tested the difference in medians between the two samples (Nonparametric equality-of-medians test) and also a Wilcoxon rank-sum test. In both cases, the difference is significant at the 0.01 level. In summary, even using a conservative approach (a period of two years [Y-2, Y-1] preceding the discovery of the fraud for the treatment firms compared to a period of five years [Y-1, Y+3] for control firms, the articles dealing with the treatment firms use significantly more often the key terms created from our theoretical framework.

Discussion and limitations

Relating back to the research question we posed, this study provides evidence that, in general, the theoretical framework we use (the FT/TPB) is relevant when matched with cases of unethical behavior by managers that are associated with corporate frauds. We must acknowledge that, in line with SAS 99, risk factors reflective of attitudes/rationalizations by board members, management, or employees, that allow them to engage in and/or justify fraudulent financial reporting and misappropriation of assets, may not be susceptible to observation by the auditor. However, we should recall that, as stated by SAS 99 (p. 47, 50), "the auditor who becomes aware of the existence of such information should consider it in identifying the risks of material misstatement arising from fraudulent financial reporting [or] misappropriation of assets".

Our results are consistent with and reinforce this statement from SAS 99: "Economic motivations ("incentives") exist in almost all companies." However, it is clearly evident that not all managers engage in fraud. The psychological aspects of the individual manager and the existence of opportunities to engage in fraud both play an important role in explaining the fraud. Consequently, the auditing regulation should be extended to better integrate the attitudes/rationalizations component (with the four sub-divisions related to the TPB). SAS 99 could include more examples of ethical behavior and ISA 240 could also be modified because

many examples we found are not covered properly by this standard. Moreover, the quasi-absence of the subjective norms, one of the components in the TPB, in our press analysis points to the apparent lack of interest in this concept by the press as well as not being sufficiently covered in the auditing standards. One explanation for this finding is that it may be difficult for the press to accurately ascertain the subjective norms of individuals.

Based on our results, we suggest adding the following (non-comprehensive) list to the fraud-risk factors displayed in the SAS 99 and ISA 240 appendices:

- The manager has a very high living standard that could lead him/her to take unethical/fraudulent decisions.
- The manager has a tyrannical or autocratic-type personality that does not foster a collective, healthy culture in the firm. This personality makes it difficult to promote honest dialogue between all levels of the hierarchy.
- The manager has been praised in press articles. While this is not problematic *per se,* it may have given the manager an inflated opinion of himself/herself that may at times lead to self-promotion at any cost. The manager has lost perspective on his/her authority and cannot tolerate his/her judgment being questioned.
- The manager has benefited from a dominant position *vis-à-vis* other employees. This situation is not problematic *per se*, but if employees have such a respect for their manager (or are so impressed) that checks and balances might disappear. The employees cannot critically assess whether what the manager requires of them is unethical or fraudulent.

In summary, the auditors should better integrate the attitudes component when evaluating the potential for unethical behavior associated with fraud, and the press is a potentially useful tool to understand managers' personalities. [38] Thus, our exploration of fraud cases reinforces the conclusion of Martin (2007) who addresses the demand for auditors to assess the integrity and ethical values of clients. This is already part of the control environment audit mandated by the Sarbanes-Oxley Act (2002) in section 404. The audit requires auditors to evaluate controls via a framework that lists management control philosophy as an important element of the control environment. One implication from the results of our study is that auditors should place a special emphasis on evaluating the ethics of individuals through the assessment of attitude, subjective norms, perceived behavioral control and moral obligation--the components of the TPB (see Figure 1).[39]

The advantage of the TPB is that it allows auditors, researchers and regulators to understand the role that the elements underlying the attitude (in a broad sense) play in perpetuating fraud. For example, using Ajzen's (1991) methodology, auditors can look at the perception managers have of the consequences of committing fraud and the perceived likelihood that managers have that these consequences will occur. Further, other elements of the TPB can be examined as well. For example, auditors may look at the role important referents (such as their spouse or colleagues) play on influencing a manager to commit or not commit fraud (importance of subjective norms).

Auditors must also place emphasis on evaluating the organizational culture. As explained by Carpenter and Reimers (2005, p. 118), managers' attitudes can be shaped by the firm's culture and the direction of top executives and the board of directors. The responsibility for ethical behavior rests upon the organization and the organizational values. Thus, a person may be more likely to behave unethically if the perceived consequences will not be punished but rewarded (Carpenter and Reimers, 2005, p. 118). Further, auditors should evaluate the fairness of the work climate (Cohen et al., 2007). For example, are some employees overworked or ill compensated? If so, this situation could lead to resentment and possible cheating. The presence or absence of an ethics committee on the board should also be highlighted and its role, in case of presence, should be investigated. Conversely, the absence of an ethics committee could be a signal that the board may not be doing enough to monitor the potential for fraud. Alternatively, a governance committee could have a mandate to monitor the ethical climate of the firm with a special emphasis on providing oversight and guidance to management on ethical issues. Further, with the increased attention that boards need to pay attention to enterprise risk management (Cohen et al., 2010) a risk management committee can explicitly consider personality traits when evaluating the risk of management committing fraud. Moreover, section 406 of SOX (U.S. Congress, 2002) requires public companies to either have a code of conduct or needing to explain why the company does not have one. Thus, the appropriate committee of the board (e.g., the ethics committee or the risk management committee), can be more explicit in relying on a strong and substantive code to monitor management for these indicators of fraud that could potentially lead to a violation of the code.

Finally, as in all studies, there are potential limitations that attenuate somewhat the generalizability of the results. First, we do not mean to imply that the red flags identified from the press will always lead to corporate fraud: of course, the vast majority of managers who have a

high standard of living and are identified as high-profile leaders will not engage in fraudulent acts. However, we believe that the existence of these red flags is a relevant indicator of potential fraud. Cooper (2008), in the book telling her story as the WorldCom whistleblower, explains that the accountants who were willing to obey the order to record the fraudulent entries rationalize their behavior by reference to the personality of the managers: "Troy [one of the accountants involved] wonders if maybe he's making too much out of this. After all, Scott [the CFO]'s very smart and highly regarded. He must know what he's doing" (p. 7). In this example, the fact that the CFO was considered a "financial wizard", while it may not *per se* explain the fraudulent behavior, at a minimum played a major role in the "rationalization" phenomenon by the accountants being urged to behave fraudulently.

Second, another limitation is related to the ex-post rationalization phenomenon and to press coverage. Newspapers do shape people's worldviews but news itself is managed, manufactured and selectively produced. We do not underestimate the desire of newspapers to glamorize fraud cases and to establish lively stories that contain colorful motives and are populated with dramatic personalities. However, the press articles are generally based on facts and actual testimonies, which work to reduce the weight of the rationalization. For example, Choo and Tan (2007) also used anecdotal elements in their research mentioned earlier.

Third, if we do not question the construction of official pronouncements, we are aware that, given the politics of rulemaking, standard setters are obliged to accommodate some demands and proceed in an incremental way. In addition, we must acknowledge standard setters realize the inherent difficulty (and sometime impossibility) of assessing the personality and ethics of client personnel. Unless dysfunctional personality and ethics are accompanied by behavior, there is a risk that these traits will go largely un-assessed and un-addressed.

Fourth, it is important to remember that the lists of risk factors presented in auditing standards are not meant to be exhaustive, merely representative of situations and circumstances that have been associated with fraud in the past. The risk factors are illustrative, and are there to stimulate, not limit, thinking about fraud risk, which does not prohibit, in our view, an extension of this list.

Finally, in the case of attributes, there may be a "fundamental attribution error" (or "correspondence bias"). For example, individuals have a tendency to assume that a person's actions depend on what "kind" of person that person is rather than on the social and

environmental forces influencing the person (Gilbert and Malone, 1995) and the bias is reinforced when explaining someone else's failures.

Future research

In the field of social sciences, evidence is not always easily obtained, or is verifiable especially if we consider the main topic of our study: corporate fraud. However, our analysis is based on quotes from the involved managers, which represent a first level of evidence and, more generally, on press articles which constitute a second level of evidence. We found an extensive number of press articles on the studied cases, and no case of inconsistency among the articles, which is an indication of the reliability of the sources. A future study can explore different qualitative methods to ascertain the reliability and objectivity of these sources.

In our analysis, we assigned an equal weight to the three major components of the combined FT/TPB: incentives, opportunities and attitudes. In actuality, the weights of the three components can vary from situation to situation. When the weight of the economic motivations is too high, the ethical threshold potentially decreases, and vice versa. When there are numerous opportunities, the probability to commit a fraud is high. One area of future research would be to investigate the relative weight of each component for different types of fraud.

For the sake of simplicity and consistency, we focused on U.S. cases of alleged or acknowledged corporate frauds. However, fraud is of course not limited to the U.S. and many countries have faced similar situations. It would be interesting to extend the scope of study to non-U.S. companies (e.g., Parmalat[40] – Italy –, Shell[41] – U.K./Netherlands, Marionnaud[42] – France, etc.) to investigate the robustness of our results in different cultural and institutional contexts.

Another area that could be explored is whether a contingency ethics model can be associated with predicting unethical behavior that could lead to fraud. For example, Cohen and Martinov-Bennie (2006) demonstrated how Jones's (1991) contingency model could be applied within an auditing context. A future study could explore if elements of the contingency model that Cohen and Martinov Bennie employ (e.g., magnitude of consequences, social consensus) can be related to elements of the fraud triangle such as incentives/pressures or to the attitude towards consequences component of the TPB. Finally, our results could be useful in two other contexts. First, forensic auditing[43] could benefit from the combined fraud triangle/TPB theories in order to develop new red flags for forensic auditors. Second, the decision taken by auditors to accept new

clients or to discontinue the service provided to a current client could also include a risk assessment based on these combined theories.

Notes

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[1] For other studies that have looked at fraud or error cases see Eilifsen and Messier (2000), Nieschwietz et al. (2000), Caster et al. (2000) and Rezaee (2005).

[2] Shafer (2002) examines fraudulent financial reporting within the context of Jones' (1991) ethical decision making model. He finds that quantitative materiality did not influence ethical judgments. Thorne et al. (2003) study the auditor's moral reasoning, applying the cognitive developmental theory of Kohlberg (1958, 1979) and the measurement tools proposed by Rest (1979). They find that national institutional context is associated with differences in auditors' moral reasoning. Elias (2002) examines the ethics of the earnings management practice. His results indicate a positive relationship between social responsibility, focus on long-term gains, idealism and the ethical perception of earnings management and a negative relationship between focus on short-term gains, relativism and the ethical perception of this practice.

[3] This theory states that "an intense emphasis on monetary success induces corporate executive Fraud", "corporate executives exploit/disregard regulatory controls to commit Fraud", and "a corporate environment that is preoccupied with monetary success provides justification/rationalization for success by deviant means such as Fraud".

[4] For instance, Brennan and McGrath (2007), on the basis of 14 fraud cases, focus on incentives and opportunities.

[5] Uzun et al. (2004) also used cases as identified in the financial press, but with a focus on governance mechanisms.

[6] Loebbecke et al. (1989) use a reasoning equivalent to the "fraud triangle" and call it a "model".

[7] Albrecht et al. (1982, p. 34) and Comer (1977, p. 10-11) present Cressey's theory.

[8] See Ramos (2003), Eilifsen and Messier (2006, p. 87) and Soltani (2007, p. 538-542).

[9] The international auditing standard ISA 240 (IFAC (International Federation of Accountants), 2005, 2009), treats ethics in a similar manner as SAS 99. However, the individual "morale" (and not morals) is mentioned. We carried out a line-by-line comparison of SAS 99 and ISA 240 with regard to the "examples of risk factors" provided in the appendix of each standard (available from the authors upon request). Apart from a few wording differences, we noticed that a few items are present in ISA 240 and absent in SAS 99 (see Appendix 2).

[10] A good example of subjective norms and "significant others" is provided by Abernethy and Vagnoni (2004, p. 211) who focus on the power of physicians in hospitals, as this group has traditionally been the dominant power in hospitals.

[11] They showed that the TPB predicted intentions with a high degree of accuracy, and that it was moderately successful in the prediction of actual behavior.

[12] We mention at the end of the article some limitations of press coverage.

[13] Available at the following address: http://www.citizenworks.org/corp/corp-scandal.php.

[14] Available at the following address: http://www.forbes.com/2002/07/25/accountingtracker.html.

[15] We recognize that the inclusion of these three companies represents a mixed approach to the nature of the sample. However, the qualitative nature of the results does not change when we exclude these three companies from the analysis.

[16] There is no occurrence of 2 (covered by SAS 99 but not ISA 240).

[17] Caruso, D.B. (2002). 'For years, Rigas treated Adelphia like a family business'. *Associated Press Newswires*, May 25. Anonymous (2002). 'Adelphia Founder Reports Health Woes'. *AP Online*, June 30.

[18] Anonymous (2000). 'Accept tech as a part of business'. *Business Times Singapore*, April 24.

[19] Ahrens, F. (2002). 'History of conflict for ex-Rite Aid chief; Indictment paints picture of grass as an arrogant bully'. *The Washington Post,* June 22. E1. Barboza, D. (1998). 'He's dazzled Wall Street, but the ghosts of his company may haunt his future'. *The New York Times*, May 10, 1.

[20] McCarty, J.F. & Schneider, R. (1992). 'Team owner accused in $350 million fraud case'. *The Plain Dealer Cleveland*, August 05.

[21] Smith, J. (2002). 'Is troubled Qwest missing Anschutz's golden touch? Ailing stock, SEC probe and management questions are pulling Qwest's billionaire founder away from his sports and entertainment empire'. *Rocky Mountain News*, April 27, 1C.

[22] Chad Terhune, C. & Lublin J.S. (2002). 'Unlike others, Dollar General issues a mea culpa --- Amid Enron, other

scandals, discount retailer apologizes for its accounting problems'. *The Wall Street Journal*, January 17, B1.
[23] Ahrens, F. (2002). 'History of conflict for ex-Rite Aid chief; Indictment paints picture of grass as an arrogant bully'. *The Washington Post*, June 22, E1. Barboza, D. (1998). 'He's dazzled Wall Street, but the ghosts of his company may haunt his future'. *The New York Times*, May 10, 1.
[24] Stewart, C. (1998). 'Live by Chainsaw, die by Chainsaw'. *The Australian*, June 20, 1.
[25] Ackerman; E. and Kang, C. 2001, 'Silicon Valley software company sinks under its own ambition'. *Knight Ridder Tribune Business News*, February 15.
[26] Ahrens, F. (2002). 'History of conflict for ex-Rite Aid chief; Indictment paints picture of grass as an arrogant bully'. *The Washington Post*, June 22, E1.
[27] Wood, A. (1993). 'Monus confidant: everyone knew everything'. *Business Journal of the Five-County Region*, August 15, 3.
[28] The addition of "perceived moral obligations" to the prediction equation improved prediction of reported lying behavior, but did not help to account for much variance in cheating and shoplifting.
[29] Alphonso C. (2000). 'A man of apparent contradictions - Software tycoon devoted to charities'. *The Globe and Mail*, August 8, B9.
[30] Tomberlin, M. (2003). 'Trappings of wealth - CEO may have wanted the good life a little too much'. *The Star-Ledger*, March 27, 57. Schneider, G. (2003). 'Scrushy's sterling image tarnished; Community's faith in HealthSouth CEO tested'. *The Washington Post*, April 9, April 18, E01.
[31] We thank an anonymous reviewer for the EFE-JBE Special Issues Conference for having suggested this approach to strengthen our results.
[32] The different connotation (positive or negative) of words is not related to our research question which concerns the different components of the fraud behavior. Consequently, in the use of a "positive" word, such as "award", and a "negative" word, such as "arrogant", to describe a fraudulent behavior, these words will not offset each other but, conversely, will sum up to increase the perceived behavioral control. A future study may explore if the press tends to use more positive or more negative descriptions of managers who end up committing fraud. The detailed content of the dictionary is available from the authors upon request.
[33] Available by subscription at www.infinancials.com.
[34] There is only one exception to this rule: given that Ahold is a Dutch group, we chose the closest U.S. peer, Kroger in this case.
[35] The detailed list of control firms is available from the authors upon request.
[36] In a few instances, for very large control companies such as AT&T and Yahoo, the number of articles retrieved was so big that we restrained the period under survey to [Y-1, Y+1].
[37] In three instances, the CEO has not been involved in the fraud (another senior executive being involved). We have withdrawn these three firms and their peers from our statistical treatment. Our final sample includes 36 treatment and 36 control firms, which generates 72 files.
[38] In some situations, such as when employees exhibit perhaps excessive respect and blind loyalty towards their managers, it is imperative to have appropriate checks and balances as manifested in the existence of a strong internal control system.
[39] Our study is also in line with past research (Gillett and Uddin, 2005) which highlighted the importance of red flags questionnaires, although Pincus (1989) found mixed results concerning the efficacy of these red flags, and automated decision aids to improve the auditor's ability to detect fraud. Further, this study is in line with Jennings (2006b, 2006a) who identifies "seven signs of ethical collapse", which we can assign to the three dimensions of the fraud triangle and the TPB: (1) incentives ("sign 1: Pressure to meet numbers"), (2) opportunities ("sign 4: A weak board", "sign 5: Conflicts of interest") and (3) incentives/rationalizations ("sign 2: Fear and silence", "sign 3: Sycophantic executives and an iconic CEO", "sign 6: Over-confidence", "sign 7: Social responsibility is the only measure of goodness").
[40] Money shifted from Parmalat's coffers to loss-making travel businesses controlled by the founder's family.
[41] Overestimation of oil reserves.
[42] Underestimation of the accrual for gift certificates.
[43] Definition of the Institute of Forensic Auditors: "Forensic audit is the activity that consists of gathering, verifying, processing, analyzing of and reporting on data in order to obtain facts and/or evidence - in a predefined context - in the area of legal/financial disputes and or irregularities (including fraud) and giving preventative advice" (http://www.ifa-iaf.be/v1/frontEnd/presentation/introduction.html).

Appendix one: Press articles and SEC documents used for the case studies: statistics and references

Panel A

Company	When scandal went public	Number		
		Press articles	SEC documents	Total
Adelphia Communications	2002	5	1	6
Ahold	2003	3	1	4
AIG	2005	4	1	5
AOL	2002	3	1	4
Bristol-Myers Squibb	2002	6	1	7
Cendant	1998	4	1	5
Computer Associates	2002	4	1	5
CMS Energy	2002	2	1	3
Datek Online	1998	3	1	4
Delphi	2004	4	1	5
Dollar General	2002	3	0	3
Duke Energy	2002	3	1	4
Dynegy	2002	3	1	4
El Paso Corporation	2002	4	1	5
Enron	2001	3	1	4
Freddie Mac	2003	6	1	7
Global crossing	2002	3	1	4
Halliburton	2002	4	2	6
Harken Energy	2002	4	0	4
HealthSouth	2002	5	1	6
Homestore.com	2002	3	2	5
HPL Technologies	2002	3	1	4
ImClone Systems	2002	4	1	5
K-Mart	2002	3	1	4
Lucent	2004	3	1	4
Merck	2002	3	0	3
MicroStrategy	2000	6	2	8
Network Associates	2000	2	1	3
Peregrine Systems	2002	4	1	5
Phar-Mor	1992	6	2	8
Qwest	2002	4	2	6
Reliant Energy	2002	2	2	4
Rite Aid Corporation	2002	4	1	5
Sunbeam	1998	5	1	6
Tyco	2002	3	2	5
Ullico	2002	4	0	4
Waste management	1999	2	2	4
WorldCom	2002	6	4	10
Xerox	2000	3	4	7
Total		146	49	195
Average		3.7	1.3	5.0
Standard deviation		1.2	0.8	1.5
Minimum		2	0	3
Maximum		6	4	10
SEC documents listed in this Appendix were not directly used to fill Table 1 but only to understand the technical and accounting aspects of the corporate fraud				

Panel B

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Appendix two: Case studies of corporate scandals

This appendix presents a detailed analysis of the behavioral motivations of 39 corporate scandals. The components are classified according to the combined theory (FT/TPB): Incentives-pressures (col. 1), opportunities (col. 2), attitudes/rationalizations (this latter component being subdivided into four separate components taken from the TPB: attitude (col. 3), subjective norms (col. 4), perceived behavioral control (col. 5) and moral obligation (col. 6)). A numbering system is used after each component to refer to SAS 99 and ISA 240: 1 = covered by both SAS 99 and ISA 240, 2= covered by SAS 99 but not ISA 240, 3=covered by ISA 240 but not SAS 99 and 4=covered by neither SAS 99 and ISA 240. FFR stands for "Fraudulent Financial Reporting" while "MA" represents a "Misappropriation of Assets". We mention the type of fraud after the company name. FFR is present in all the cases under study.

#	Companies	Incentives/Pressures (col. 1)	Opportunities (col. 2)	Attitudes/Rationalizations			
				Attitude (toward the fraud) (col. 3)	Subjective norms (col. 4)	Perceived behavioral control (col. 5)	Moral obligation (col. 6)
1.	Adelphia Communications (FFR – MA)	To meet Wall Street expectations (1).	Family link (1).	To meet Wall Street expectations (1). Personal enrichment (3). To maintain a high living standard, greed, "To have the funds to support his lifestyle" (4).			Sees himself as someone very generous and helpful. Money used to help people (4).
2.	Ahold (FFR)	Ambition for the group: to build an empire (1). Fixation on growth (1). Compete with Wal Mart (1). Launched mergers => debts => to hide (1) Stock options (1)	Relationship with the distributors (1).	Stock options (1) Greed (4). Company's success and CEO's personal success: reputation at stake (4).		Managers' personality ("Mass market retailer of the year 2001"…) (4).	According to him, he acted for the good of the company, and the good of the Company was also his good (4).
3.	AIG (American International Group) (FFR)	Pressure from the financial market which was criticizing the decline in AIG's reserves (1) Important shareholder and share price (1) Stock options (2)	Complex transactions (1).	Stock options (1) Obsessed by the daily fluctuations in the company's stock price (1) Company's success = CEO's personal success - Reputation – Pride - "Imperial chief executive" - The market would lose faith in the company without him (4).		Managers' personality: tyrannical, nobody dared to oppose him (4).	

4.	AOL (FFR)	Growth. To be able to buy the "giant" Time Warner (1) Pressure of the financial market: considered advertising revenues as important to measure the performance (1.) Share price (1) Stock options (1)	Use of estimates (1)	Stock options (1).		Chairman: Narcissist person (4).	
5.	Bristol-Myers Squibb (FFR)	To keep pace with rivals by reporting double-digit profit growth (1) To meet internal sales and earnings targets and analysts' earnings estimates (1) Share price (1) Stock options, compensation bonus (1).	"Channel stuffing" (sales to wholesalers) (1)	Stock options (1).	Influence of the managers (4)..	Firm's culture of "making the numbers" (4). Managers' personality (youngest chief executive…) (4). Lack of experience (4).	
6.	Cendant (FFR - MA)	To make the merger with HFS possible (1). Stock options (1).	Auditor located far away (1). Manual accounting systems (1).	Personal enrichment: payment of their living expenses (planes, golf). Too high living expenses (3).			
7.	Computer associates (FFR)	Pressure to present strong growth figures (1). Stock options (1).	Domination of management by a small group (1).	Personal enrichment with sale of stock options (1). High standard of living (expensive cars) (4).		Awards received for the best managed company (4). "Software titan" (4).	Donation to and promotion of charitable causes (4). Built day-care centers for their children in CA offices (4).
8.	CMS Energy (FFR)	Performance-based compensation, year-end bonus (1). To be a credible marketer (4). Possible energy market manipulation. To follow Enron's example (4).	"Round-trip" trades (1).	Personal enrichment: boosting the revenues to increase year-end bonuses (4).			
9.	Datek Online (FFR)	Growth and creation of a group of companies (1).	Highly complex transactions (1).	High standard of living (personal plane) (4).		"Technology wizard". CEO appears in many rankings (4).	

10.	Delphi (FFR)	To hide the bad financial state (1). To fund pension obligations (1). To hide a dispute with General Motors (1). To meet analyst earnings expectations (1). Increase of stock price and sale of stocks (1). Performance-based salary (stock options, incentives (1).	Several executives involved (1). Auditor's failure (1).	Greed (performance-based salary) (4).			
11.	Dollar General (FFR)	Growth (1). Stock options (1).	Direct involvement of the CEO in preparing the company's financial results (1).			Image of "marketing genius" (4).	Donation to endow a program on moral leadership at a University (4).
12.	Duke Energy (FFR)	Performance-based compensation, year-end bonus (1)	"Round-trip" trades (1).	Personal enrichment: manipulation to maximize the size of the year-end bonuses and other performance-based compensation (4).			
13.	Dynegy (FFR)	Salaries based on performance (1).	"Round-trip" trades (1). Close relationship between executives (1).	To be a leading global energy company (4).			
14.	El Paso Corporation (FFR)	Success and profitability (4). Top-rank of energy traders (4). To complete a merger (1). Ownership and increase of stock price (1). Salaries based on performance (1).	"Round-trip" trades (1).	Personal enrichment (stock price) (1).			
15.	Enron (FFR - MA)	Growth (1). To enter the burgeoning deregulated energy markets without sacrificing the credit rating (4).	Personal relationship between executives (1). Audit failure (1).	Personal enrichment: off-balance sheet partnerships (3).	Influence of the CFO (4).	CFO: Image of financial genius, arrogant, self-confident (4). Threat towards analysts (4).	Donation to the city's art museum, fund-raiser for the local Holocaust Museum (4).

16.	Freddie Mac (FFR)	To meet analysts' expectations (reduction of earnings) - Appearance of sustained, predictable growth (1). Stock options (1).	Conflict of interest for the auditor (charity) (4). Corporate culture, which encourages fraud to approximate analysts' forecasts (4).	Stock options (1). Personnel ambition (to become the CEO) (4).			Donation to charities (4).
17.	Global crossing (FFR - MA)	Sustainability of the firm (1). To meet securities analysts estimates (1). Sale of shares (1).	Swap of network capacity (1).	Personal enrichment: Consulting and real estate fees. Confusion between company's assets and his own's. (3). Greed, ambition: to build an empire ("the Emperor of Greed" (4). Personal enrichment: sale of shares when the business was going bad (4).		Chairman is bright, aggressive and has a huge ego. "Roman emperor" (4).	
18.	Halliburton (FFR)	Bad state of the economy (1). Sales of shares (1).	Auditor's failure (1). Political link of the managers (4).	Greed (4). Stock options: sale of stock options (1).			
19.	Harken Energy (FFR)	Sales of shares (1).	Political link of the managers (4).	Insider trading (4). Passion for sports (purchase of a football team) (4).			
20.	HealthSouth (FFR)	Pressure from the market (1). Sales of shares (1). Salaries based on earnings (1).	Lack of experience of certain mid-level executives (4). Involvement of many executives (4).	Greed. Acquisition of planes, house and yacht (4). Wanted to be the "highest-paid CEO in the world" (4).		CEO "terrorizing his colleagues and employees" (and analysts and journalists) (4). Power and influence (network) (4).	Donation to charities (4). Creation of a church (4).
21.	Homestore.com (FFR)	Revenue growth (advertising revenue) (1). Contract with AOL (4). Sale of shares (1).	"Round-trip" transactions (1). Fraud hidden to auditors (4).	Greed (sale of shares) (4). CEO's power, ambition (the CEO embodied the company) (4).			
22.	HPL Technologies (FFR)	Growth in revenues (1). To be able to make an IPO (1). Collapsing markets of Silicon Valley and the world of high tech (1).	Auditor's failure (1).			Admired head of a fast-growing software company (4).	The CEO funneled his own money to the company accounts in an attempt to cover fake sales (4).

23.	Im Clone Systems (FFR)	Sales of shares (insider trading) (1).	Family link (1).	Personal enrichment (4). Standard of living to maintain (4). To pay debts (secured by the stocks) (4). Insider trading for himself and his family. Protect the wealth of his family and friends (4).			
24.	K-Mart (FFR - MA)	Competition with Wal-Mart (price war) (1). Survival (weight of debts) (1). Performance-based bonuses, stock options (1).	Junior executives were demoted or transferred when they refused to make unrealistic forecasts (1).	Personal enrichment (personal air travel), loans to themselves. (3).			
25.	Lucent (FFR)	Internal sales target. External sales target (1). Bonus on sales (1). Keep their job (1).	Deficient internal control (1).	Personal enrichment: bonuses on each sale they achieved (4). Career: So as to keep their jobs and/or to be promoted, by meeting the internal sales targets (4).			
26.	Merck (FFR)	To make the Company look successful (1). Growth in revenues (1). To ease the IPO of a subsidiary (1).	Auditor's failure (1).	No apparent personal interest.			
27.	MicroStrategy (FFR)	To boost the firm's share price (1).	Total control of the company (1).	Personal problems (alcohol) (4).		CEO's ego (4). Impressed by wealth (4).	
28.	Network Associates (FFR)	To become the world's leading provider of network security products (1). High growth rate targets (1). Sale of stock options (1). Performance based salary (1).	Round-trip trades (1).	Unreachable targets (1). Career, image of competence (4).		CEO bullying his employees ("suicide [is] sometimes an appropriate response to failure") (4).	

29.	Peregrine Systems (FFR - MA)	Peregrine's success and viability in the short-run (1). Insider trading (sale of shares) (1). Stock options (1).	Family link. Outside board member = brother-in-law of the chairman (1). Auditor's failure (the auditor even encouraged the fraud) (1).	Personal enrichment (stock options) (1). Acquisition of golf membership (3).			Donation to charities (4).
30.	Phar-Mor (FFR - MA)	To restore the Company's profitability (1).	Very little oversight inside the company (1). Auditor's failure (1).	Personal enrichment (home, jet, car…). (3). Passion for sports (funding of a basketball team) (4).	Influence of the CEO (4).	CEO fascinated his co-executives ("god") (4).	
31.	Qwest (FFR)	To meet earnings projections (1). Double-digit growth (1). Ambition: mergers needed (1). Insider trading (sale of shares) (1). Bonus based on the stock performance (1).	Collusion between several top executives (1).	Passion for burgeoning sports and entertainment empire (4). Ambition, thirst of power. To build an empire (4). Not to lose face (4).			
32.	Reliant Energy (FFR)	Ambition for the company: make the company one of the best energy traders (1). Enron's influence (energy market) (1).	Round-trip trades (1). New field, new market (4).	Executive's career and image of competence (4).			
33.	Rite Aid Corporation (FFR)	To do better than his father. => mergers => high debt (1). Rite Aid as a powerful retail company (1). Sale of shares (1). Salaries based on performance (1).	Family link (1).	High standard living (helicopter) (4). Real estate transaction with the family (4). Ambition and competence (4).		Martin Grass was bullying his employees and partners (4).	
34.	Sunbeam (FFR)	Growth in earnings (1). Sale of shares (1).	Auditor's failure (1).	Worldwide reputation, recognition (4).		CEO considered as a miracle worker, a genius by the business world (4). Tyrannical CEO (4).	

35.	Tyco (FFR - MA)	Ambition: image of a growth company (1). Many (expensive) acquisitions (1). Unauthorized bonuses (1).	Auditor's failure (1).	Personal enrichment (use of loans for luxury apartments, yachts, jewelry, parties) (3). Greed (4).			
36.	Ullico (FFR)	Stock options (insider trading) (1).	Many executives and directors involved (1).	Personal enrichment with sale of shares (4).			
37.	Waste Management (FFR)	Earnings target (1). Stock options (1). Bonus based on performance (1).	Auditor's failure (1).	Professional career (4).			
38.	WorldCom (FFR)	Company's performance (1). Ever growing revenue and income (1). To meet analysts' forecast (1). To maintain the share price (1).	Management hides the truth (1).	Personal enrichment (shares of the company) (1).	Complicity between the CEO and the CFO (4).	Autocratic boss (4).	Donation to charities (4). Fund raising for the local college (4). Scholarships, free telephone service for hurricane victims (4).
39.	Xerox (FFR)	Earnings target (1). To boost the firm's share price (1) Increase in compensation (including stock options) (1).	Auditor's failure (1). Opposition within the board (1).	Personal enrichment (shares of the company) (1).			

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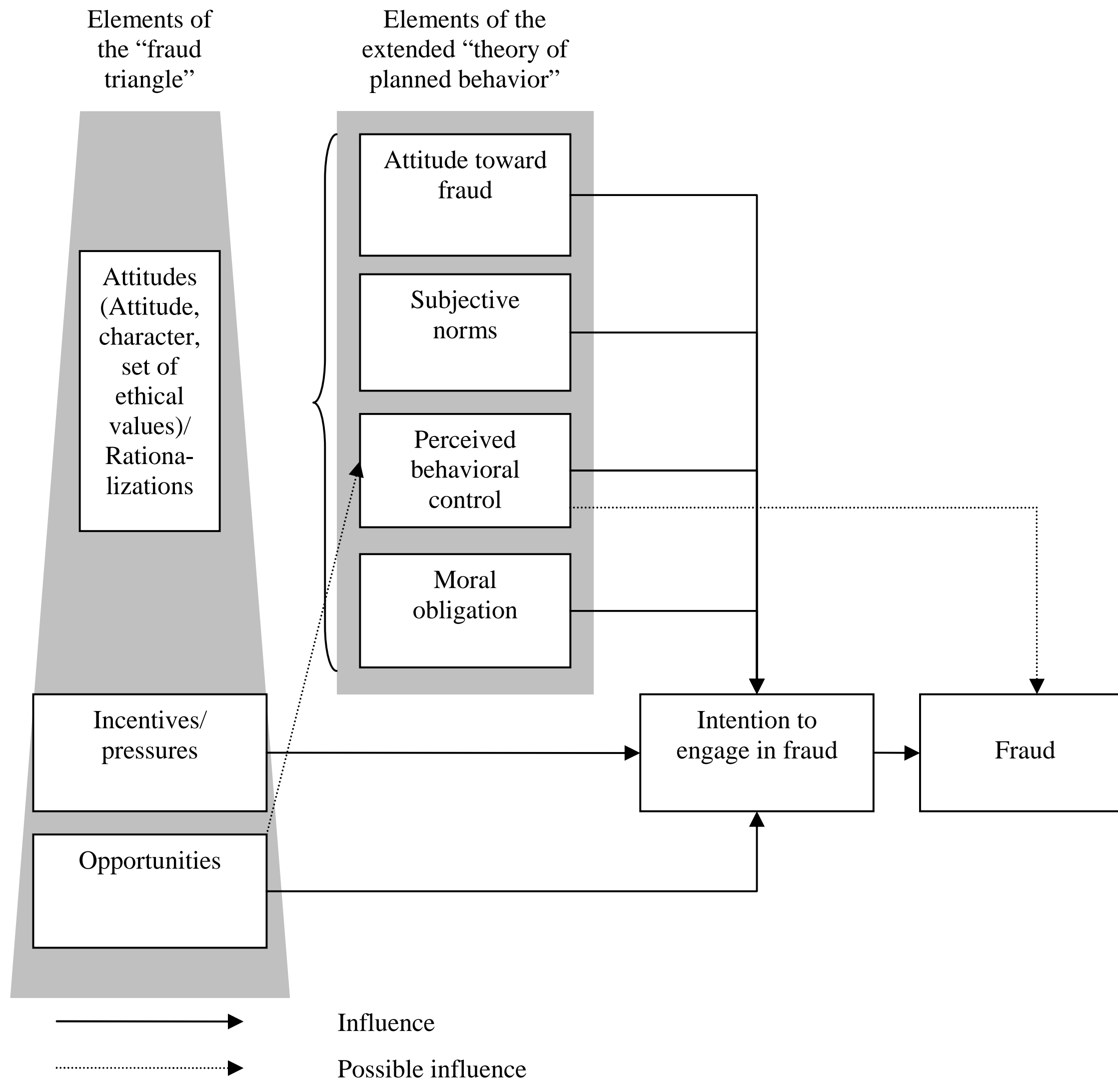
Figure 1: A combination of fraud triangle (FT) and theory of planned behavior (TPB)



Adapted from Ajzen (1991) and Beck and Ajzen (1991).

Table 1: Frequencies of FT/TPB elements

#	Companies	Incentives/pressures (col. 1)			Opportunities (col. 2)			Attitudes/rationalizations												Total by company
								Attitude (toward the fraud) (col. 3)			Subjective norms (col. 4)			Perceived behavioral control (col. 5)			Moral obligation (col. 6)			
		P	NP	T	P	NP	T	P	NP	T	P	NP	T	P	NP	T	P	NP	T	
1	Adelphia Communications	1		1	1		1	2	1	3			0			0		1	1	6
2	Ahold	5		5	1		1	1	2	3			0		1	1		1	1	11
3	AIG	3		3	1		1	2	1	3			0		1	1			0	8
4	AOL	4		4	1		1	1		1			0		1	1			0	7
5	Bristol-Myers Squibb	4		4	1		1	1		1		1	1		3	3			0	10
6	Cendant	2		2	2		2	1		1			0			0			0	5
7	Computer associates	2		2	1		1	1	1	2			0		2	2		1	1	8
8	CMS Energy	1	2	3	1		1		1	1			0			0			0	5
9	Datek Online	1		1	1		1		1	1			0		2	2			0	5
10	Delphi	6		6	2		2		1	1			0			0			0	9
11	Dollar General	2		2	1		1			0			0		1	1		1	1	5
12	Duke Energy	1		1	1		1		1	1			0			0			0	3
13	Dynegy	1		1	2		2		1	1			0			0			0	4
14	El Paso Corporation	2	3	5	1		1	1		1			0			0			0	7
15	Enron	1	1	2	2		2	1		1		1	1		2	2		2	2	10
16	Freddie Mac	2		2		2	2	1	1	2			0			0		1	1	7
17	Global crossing	3		3	1		1	1	2	3			0		1	1			0	8
18	Halliburton	2		2	1	1	2	1	1	2			0			0			0	6
19	Harken Energy	1		1		1	1	1	1	2			0			0			0	4
20	HealthSouth	3		3		1	1		2	2			0		2	2		2	2	10
21	Homestore.com	2	1	3	1	1	2		2	2			0			0			0	7
22	HPL Technologies	3		3	1		1			0			0		1	1		1	1	6
23	Im Clone Systems	1		1	1		1		4	4			0			0			0	6
24	K-Mart	4		4	1		1	1		1			0			0			0	6
25	Lucent	3		3	1		1		2	2			0			0			0	6
26	Merck	3		3	1		1			0			0			0			0	4
27	MicroStrategy	1		1	1		1		1	1			0		2	2			0	5
28	Network Associates	4		4	1		1	1	1	2			0		1	1			0	8
29	Peregrine Systems	3		3	2		2	2		2			0			0		1	1	8
30	Phar-Mor	1		1	1		1	1	1	2		1	1		1	1			0	6
31	Qwest	5		5	1		1		3	3			0			0			0	9
32	Reliant Energy	2		2	1	1	2		1	1			0			0			0	5
33	Rite Aid Corporation	4		4	1		1		3	3			0		1	1			0	9
34	Sunbeam	2		2	1		1		1	1			0		2	2			0	6
35	Tyco	3		3	1		1	1	1	2			0			0			0	6
36	Ullico	1		1	1		1		1	1			0			0			0	3
37	Waste Management	3		3	1		1		1	1			0			0			0	5
38	WorldCom	4		4	1		1	1		1		1	1		1	1		3	3	11
39	Xerox	3		3	2		2	1		1			0			0			0	6
	Total by component	99	7	106	42	7	49	23	39	62	0	4	4	0	25	25	0	14	14	260

Table 1 discloses frequencies based on Appendix 2.

P: present in auditing standards. NP: not present in auditing standards. T: total.

Table 2: Explanation of fraud behaviors present in the auditing standards

Elements of the fraud triangle	Items	Companies involved (anecdotal evidence)
Incentives/ pressures	High degree of competition or market saturation	Ahold, AOL, Bristol-Myers Squibb, Cendant, HPL Technologies, K-Mart, Reliant Energy
	Profitability or trend level expectations of investment analysts, institutional investors, significant creditors or other external parties	Adelphia Communications, AIG, AOL, Bristol-Myers Squibb, Computer Associates, Delphi, Dollar General, Freddie Mac, Global Crossing, HealthSouth, Homestore.com, Lucent, Merck, MicroStrategy, Network Associates, Phar-Mor, Qwest, Sunbeam, Waste Management, WorldCom, Xerox
	Need to obtain debt or equity financing to stay competitive	Ahold, Datek Online, Enron, HPL Technologies, K-Mart, Merck, Rite Aid Corporation, Tyco
	Significant financial interests in the entity	AIG, AOL, Bristol-Myers Squibb, Delphi, El Paso Corporation, Global Crossing, Halliburton, Harken Energy, HealthSouth, Homestore.com, Im Clone Systems, Peregrine Systems, Qwest, Rite Aid Corporation, Sunbeam, Ullico, Waste Management, Xerox
	Significant portion of the compensation being contingent upon achieving aggressive targets for stock price operating results, financial position of cash flow	Ahold, AIG, AOL, Bristol-Myers Squibb, Cendant, Computer Associates, CMS Energy, Delphi, Dollar General, Duke Energy, Dynegy, El Paso Corporation, Freddie Mac, HealthSouth, K-Mart, Lucent, Network Associates, Peregrine Systems, Qwest, Rite Aid Corporation, Waste Management, Xerox
Opportunities	Significant related-party transactions not in the ordinary course of business	CMS Energy, Duke Energy, Dynegy, El Paso Corporation, Global Crossing, Homestore.com, Network Associates, Reliant Energy
	Strong financial presence or ability to dominate an industry	Ahold, Bristol-Myers Squibb, Global Crossing
	Accounting figures based on significant estimates	AOL, Datek Online
	Significant, unusual, or highly complex transactions	AIG, Datek Online
	Domination of management by a single person or small group	Adelphia Communications, Computer Associates, Delphi, Dollar General, Enron, HealthSouth, Im Clone Systems, K-Mart, MicroStrategy, Peregrine Systems, Qwest, Rite Aid Corporation, Ullico
	Ineffective board of directors or audit committee oversight over the financial reporting process and internal control	Cendant, Delphi, Enron, Halliburton, HPL Technologies, Merck, Peregrine Systems, Phar-Mor, Sunbeam, Tyco, Waste Management, WorldCom, Xerox
	Ineffective accounting and information systems	Cendant, Lucent
Attitudes/ rationalizations	Excessive interest by management in maintaining or increasing the entity's stock price or earnings trend	Ahold, AIG, AOL, Bristol-Myers Squibb, Computer Associates, El Paso Corporation, Freddie Mac, Halliburton, Peregrine Systems, WorldCom
	A practice by management of committing to analysts, creditors, and other third parties to achieve aggressive or unrealistic forecasts	Adelphia Communications, Network Associates
	The owner-manager makes no distinction between personal and business transactions	Adelphia Communications, Cendant, Enron, Global Crossing, K-Mart, Peregrine Systems, Phar-Mor, Tyco

Table 3: Explanation of fraud behaviors not present in the auditing standards

Elements of the TPB	Items	Companies involved (anecdotal evidence)
Attitude toward the fraud	To maintain a high living standard	Adelphia Communications, Cendant, Computer Associates, Datek Online, HealthSouth, Im Clone Systems, Phar-Mor, Rite Aid Corporation, Tyco
	sometimes linked to a passion for sports	Harken Energy, Qwest
	Reputation at stake (company's success = personal success)	Ahold, AIG, Network Associates, Qwest
Subjective norms	Influence of the managers	Bristol-Myers Squibb
	Influence of the CEO	Enron, Phar-Mor
	Complicity between the CEO and the CFO	WorldCom
Perceived behavioral control	Prize received	Ahold, Computer Associates
	or superlative:	- Youngest chief executive (Bristol-Myers Squibb) - Marketing genius (Dollar General) - Admired head of a fast-growing company, very rich and very young manager (Datek Online) - Highest-paid CEO (HealthSouth) - Worldwide recognition (Sunbeam) - Financial wizard (CFO of WorldCom)
	Personality	- Tyrannical/autocratic (AIG, Enron, HealthSouth, Network Associates, Rite Aid Corporation, Sunbeam, WorldCom) - Narcissistic (AOL) - Encourages hero worship of executives (Phar-Mor) - Personal ambition - career (Freddie Mac, Homestore.com, Reliant Energy, Waste Management) or for the firm (Global Crossing, Qwest) - Alcoholic (MicroStrategy)
Moral obligation	Charitable causes	Adelphia Communications, Computer Associates, Enron, Freddie Mac, HealthSouth, and WorldCom
	Action for the good of the company	Ahold