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A Cognitive Approach to Fraud Detection

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Fraud detection is usually done by looking for red flags and various other cues of deceit. Research in auditing and psychology has questioned the effectiveness of these methods. Here we summarize work on constructing a new cognitive approach to understanding both success and failure at detecting financial statement fraud (Johnson, Grazioli, Jamal and Berryman 2001; Johnson, Grazioli, Jamal and Zualkernan 1992). We begin by analyzing the information processing problem than an auditor must solve to detect the presence of deceptive financial information. We then describe a theory of the solution to this problem, i.e. a theory of successful fraud detection. The theory is used as a yardstick to evaluate the actual behavior of Big 4 firm audit partners engaged in the review of real cases of financial statement fraud. An analysis of the errors made by these auditors allows us to formulate and test hypotheses on where they succeed, where they fail, and the cognitive processes that underlie both success and failure.

INTRODUCTION

Fraud detection researchers have spent a great deal of effort looking for information cues (often termed 'red flags') that signal the presence of fraud (Albrecht and Romney 1986). This research has been motivated by the desire to improve on auditors' accuracy at detecting fraud, in particular financial statement fraud. Despite the intuitive appeal of the red flag approach, studies have shown that this search for cues has not been entirely successful. Red flags have frequently been found to be ineffective, sometimes even hindering the ability of an auditor to detect fraud (e.g., Pinkus 1989; Johnson, Jamal and Berryman 1989).

With striking similarity, psychology researchers have been searching for "Pinocchio cues," which are cues or patterns of cues that are reliably present when one lies or attempts to otherwise deceive another. Not only have these cues proven to be elusive to discover, studies have also shown that reliance on such cues may be detrimental to accurate detection, as judges of deceptiveness often pay attention to cues that are not correlated with actual deception (DePaulo, Lindsay & Malone 2003).