Audit Tenure, Report Qualification, and Fraud

Richard Fairchild
University of Bath
School of Management
Working Paper Series
2007.02

University of Bath School of Management
Working Paper Series

2007		
2007.01	Fotios Pasiouras	International evidence on the impact of regulations and supervision on banks' technical efficiency: an application of two-stage data envelopment analysis
2007.02	Richard Fairchild	Audit Tenure, Report Qualification, and Fraud

Audit Tenure, Report Qualification, and Fraud.

Richard Fairchild

Email; mnsrf@bath.ac.uk

Abstract.

We consider the effect of auditor tenure on the level of managerial fraud and the extent of auditor qualification of reports. We consider two conflicting effects. As auditor tenure increases, the auditor's ability to detect fraud increases, which reduces the manager's fraud-incentives, but the auditor may become more sympathetic to management, which may increase fraud incentives. In order to analyse these issues, we develop an auditing game in which the manager makes an unobservable decision whether or not to commit fraud. The auditor then decides whether to perform a basic or an extended audit. The level of audit affects the probability of fraud-detection. Following the outcome of the audit, the auditor then decides whether to issue a qualified or unqualified report. Our model provides policy implications in relation to the debate regarding mandatory turnover of auditors.

1. Introduction.

In the light of recent corporate scandals, auditor independence and turnover has become the focus of much debate. Should a firm be forced to replace its auditor on a regular basis, or should the auditor be allowed to build a long-term relationship with the client? Proponents of enforced regular turnover of auditors argue that a long-run relationship may result in increasing empathy between the parties. This may lead to a reduction in the auditor's due-diligence, as she becomes more prepared to 'turn a blind eye' to inappropriate managerial actions. The opposing view is that a long-term relationship is beneficial, as auditors may need time to gain expertise in the businesses that they audit. Regular auditor replacement reduces the auditor's ability to detect irregularities.

In this paper, we contribute to the debate regarding auditor turnover by developing a simple audit model in which a corporate manager makes an unobservable decision whether or not to commit fraud. The auditor then decides whether to perform a basic or an extended audit. The level of audit affects the probability of fraud-detection. Following the outcome of the audit, the auditor then decides whether to issue a qualified or unqualified report. In our model, the auditor's fraud-detecting ability is positively related to tenure, implying that increasing tenure reduces managerial fraud-incentives. However, an increase in tenure may also result in an increase in auditor empathy towards the manager, implying that increasing tenure may increase fraud incentives. Our model considers the trade-off between these two factors.

We thus employ a game-theoretic approach in which the client and the auditor act strategically, given their expectations of the other player's actions. Hence, in choosing

his fraud level in the first stage of the game, the manager anticipates the auditor's choice of audit (basic or extended), and the auditor's choice of qualified or unqualified audit report. In choosing her second-stage audit type, the auditor forms an expectation of the manager's first stage fraud level. In equilibrium, each player's expectations of the other's actions are correct, and each player's actions form a best response.

Matsumura and Tucker (1992) identify that auditing research has developed as follows. Early models used statistical decision theory, in which the auditor plays against a state of nature, rather than a strategic opponent. Next, analysis of the audit problem was based on agency theory. Finally, researchers began to recognise the strategic interactions between auditor and client, and hence employed game-theory.

Although game theory has been used to analyse the auditor's monitoring of the client (eg; Morton 1993) and audit pricing (eg; DeAngelo 1981; Magee and Tseng 1990; Dye 1991; Kanodia and Mukerji 1994), the vast body of research has focussed on auditor/manager reporting issues, and the client-auditor relationship (Fellingham and Newman 1985; Newman and Noel 1989; Shibano 1990; Ante and Nalebuff 1992; Matsumura and Tucker 1992; Bloomfield 1995; Matsumura et al 1997; Smith et al, 2000; Coate et al 2002). Recent work has specifically considered auditing for fraud (Morton 1993, Matsumura and Tucker 1992).

Our model is closest in spirit to the fraud model of Matsumura and Tucker (MT 1992). Matsumura and Tucker (1992) consider a game in which the manager makes a binary fraud decision (whether to commit a fixed level of fraud or not), and then the auditor makes two decisions; whether to audit for unintentional errors, and then whether to audit for intentional errors (fraud). The authors examine the conditions

under which the auditor tests for both types of errors, and the extent of managerial fraud.

We extend MT's (1992) model by considering the effect of auditor tenure on the incidence of fraud commission and report qualification. We are particularly interested in the positive effects of auditor tenure on the auditor's ability to detect fraud, and the negative effects of auditor tenure on auditor independence (represented as increasing auditor/client empathy). Existing game-theoretic models do not consider auditor tenure.

Furthermore, existing audit models assume that the client and the auditor maximise utility based on narrow self-interest. One of our main developments is to consider the effect of the empathetic relationship between auditor and client on the level of fraud and fraud-detection. Therefore, under the assumption that ability *and* empathy increases with auditor retention, we are able to explicitly consider policy implications relating to auditor turnover.

Our results are as follows. In the absence of empathy, increasing auditor tenure results in an increase in ability to detect fraud. This results in an increase in auditing efforts (which we represent by extended audits), a possible increase in qualified reports, and a reduction in fraud. However, in a novel, and enlightening, result, an increase in auditor ability may drive a reduction in managerial fraud, and a reduction in qualified reports. When we consider empathy, increasing auditor tenure may lead to a reduction in fraud-detecting efforts, a reduction in audit qualification, and an increase in managerial fraud. Hence, our model identifies that a reduction in qualified reports over the auditor tenure may be evidence of increasing empathy (leading to higher fraud) or increasing auditor ability (leading to lower fraud).

Hence, the debate into auditor tenure leads to some testable hypotheses. Using a sample of companies entering bankruptcy, Geiger and Raghunandan (2002) test the relationship between auditor tenure and audit reporting failures. They define reporting failure as the issuance of an unqualified report in the year before bankruptcy. These authors find a negative relationship between tenure and reporting failures. This supports the argument that increasing tenure results in increasing ability to detect fraud, and is contrary to the view that increasing tenure results in the auditor 'turning a blind eye.' Hence, this empirical study argues against mandatory auditor turnover.

The paper proceeds as follows. Section 2 presents the audit model. Section 3 presents the equilibrium of the game. Section 4 discusses the policy implications, arising from our model, relating to auditor retention/turnover. Section 5 concludes.

2. The Model.

We consider an auditing/fraud detection game played between an auditor and her client manager. The game consists of one move for the manager, followed by two moves for the auditor. First, the manager decides whether to commit fraud or not. The auditor cannot observe this decision. Next, the auditor decides whether to perform a basic audit, or a more costly extended audit. If the manager has committed fraud, the audit reveals fraud with a certain probability. Finally, the auditor decides whether to issue a qualified or unqualified report.

The detailed timeline of the game is as follows;

Date 0: The manager decides whether to commit fraud (F), or no fraud (NF). Hence, this is a binary decision, represented as $f \in \{F, NF\}$.

Date 1: The auditor (who cannot observe manager's date 0 fraud decision) decides whether to perform a basic audit (BA) at cost zero, or an extended audit (EA) at cost C. If the manager committed fraud at date 0, then a basic audit cannot reveal fraud. On the other hand, an extended audit reveals fraud with probability p, where p represents the auditor's ability to detect fraud.

If the manager has not committed fraud, then it is trivial to observe that neither a basic audit or an extended audit will reveal fraud.

Date 2: Having performed the date 1 audit (which either revealed or did not reveal fraud), the auditor decides whether to provide a qualified (Q) or unqualified (U) report. Payoffs occur and the game finishes[1].

Our aim is to consider the effect of audit tenure on managerial fraud-commission, fraud detection, and report qualification. We wish to contribute to the policy debate regarding mandatory auditor turnover by considering two conflicting effects of auditor tenure on fraud-commission. Firstly, we postulate that auditor ability to detect fraud increases with auditor tenure (as the auditor learns about the business and its

---

[1] This timeline can be represented as an extended form game. The game-tree is available on request from the author.

management over time). This may reduce the manager's incentives to commit fraud. Secondly, it is surmised that auditor empathy towards management may increase over time, perhaps reducing fraud-detecting efforts. This may increase the manager's incentives to commit fraud.

In order to investigate these issues, we could develop a complex, dynamic, multi-period game. However, in order to simplify and focus the analysis, we consider a static one-period game.

We introduce the effect of audit tenure on auditor ability and empathy as follows. The one-period game represents a particular discrete time period[2] t in the audit tenure (we do not consider what may have happened before this time-period, or what may happen afterwards). The auditor's ability to detect fraud is increasing in audit tenure; that is $\frac{\partial p}{\partial t} > 0$. Further, we define a critical time-period t' where the auditor is no longer independent, but becomes sympathetic towards the manager.

Assume that the policy-maker defines a mandatory auditor-turnover time-period T. That is, at time T, the manager must sever relation with the current auditor, and employ a new one. If $T < t'$, the auditor is unsympathetic towards the manager for the entire tenure. If $t' < T$, the auditor is unsympathetic for time period $t \in [0, t')$, and she is sympathetic for subsequent time period $t \in [t', T)$.

---

[2] This discrete time period assumption is justified by the fact that auditors do not perform continuous audits, but rather, audits are periodic (usually annual) events.

The players' payoffs are defined in terms of costs and benefits from fraud commission, fraud detection, report qualification etc. The "psychic"/ reputation costs (-) and benefits (+) are as follows;

	Manager	Auditor
F + FD + Q	$-R_{F.FD.Q}$	$+R_{F.FD.Q}$
F + FD + U	$+R_{F.FD.U}$	$-R_{F.FD.U}$
F + FND + Q	$-R_{F.FND.Q}$	$-R_{F.FND.Q}$
F + FND + U	$+R_{F.FND.U}$	$-R_{F.FND.U} > -R_{F.FND.Q}$
NF + FND + Q	$-R_{NF.FND.Q}$	$-R_{NF.FND.Q}$
NF + FND + U	$+R_{NF.FND.U} < R_{F.FND.U}$	$+R_{NF.FND.U}$

We justify these payoffs as follows. First, if the manager commits fraud, and fraud is discovered, and the auditor issues a qualified report, the manger suffers a utility loss, which may be in terms of lost reputation, or may be a behavioral ('psychic') cost; for example regret, or even anger at 'not getting way with it.' On the other hand, the auditor achieves a utility gain, which may be in terms of the enhanced reputation of being a good auditor who can detect, and report, fraud, or it may be a 'psychic' income; for example, a vindictive feeling at uncovering a misbehaving manager.

Note that the gains and losses reverse if the manager commits fraud, fraud is discovered, and the auditor issues an unqualified report. For example, the manager may feel pleasure at 'getting away with it', while the auditor may feel guilt at not revealing the fraud, having discovered it.

We can think of similar arguments for all of the other payoffs.

3. The equilibrium of the audit/fraud game.

3.1: T < t': The auditor is unsympathetic for her entire tenure.

We solve the game by backward induction. First, we note that, given the auditor's payoffs, the auditor will prefer to qualify the audit if she discovers fraud, and not qualify if she does not discover fraud[3].

Therefore, the game has been reduced to two decisions; one for the manager (fraud decision) and one for the auditor (BA or EA). Furthermore, since the manager cannot observe the auditor's decision when he makes his decision (since he moves first), and the auditor cannot observe the manager's fraud decision when she moves, we can represent this as a normal form game with simultaneous moves, as follows;

Figure 1: *The Normal Form Fraud/audit Game.*

M\A	BA	EA
NF	1, 2-	3, 4
F	5+, 6	7, 8

---

[3] This simplifies the game-tree mentioned in footnote 1. This simplified version is also available on request from the author.

In the normal form game, + represents the manager's best responses, while – represents the auditor's best responses.

We first derive the payoffs, given the different combinations of fraud and audit decisions, as follows;

$$\Pi_M = R_{NF.FND.U} \qquad\qquad (1)$$

$$\Pi_A = R_{NF.FND.U} \qquad\qquad (2)$$

$$\Pi_M = R_{NF.FND.U} \qquad\qquad (3)$$

$$\Pi_A = R_{NF.FND.U} - C \qquad\qquad (4)$$

$$\Pi_M = R_{F.FND.U} \qquad\qquad (5)$$

$$\Pi_A = R_{F.FND.U} \qquad\qquad (6)$$

$$\Pi_M = -pR_{F.FD.Q} + (1-p)R_{F.FND.U} \qquad\qquad (7)$$

$$\Pi_A = pR_{F.FD.Q} - (1-p)R_{F.FND.U} - C \qquad\qquad (8)$$

We solve for the equilibrium using best responses. First, consider the auditor's best responses. If the manager chooses $f = NF$, the auditor chooses BA for sure, since (2) > (4). That is, if the auditor is expecting the manager not to commit fraud, the

auditor will unambiguously choose to perform the basic audit, due to the cost of the extended audit.

If the manager chooses $f = F$, the auditor chooses EA if (8) > (6); that is, if

$$p(t)(R_{F.FD.Q} + R_{F.FND.U}) \geq C. \qquad\qquad (C1)$$

Recall that the auditor's ability to detect fraud is increasing in tenure; $\dfrac{\partial P}{\partial t} > 0,$ with $p(t) = 0.$ Therefore we can define a critical time period t_c such that $p(t_c)(R_{F.FD.Q} + R_{F.FND.U}) = C.$ Hence, when $t \in [0, t_c)$, (C1) is violated, while, if $t \in [t_c, T\}$, (C1) holds.

Next, consider the manager's best responses. If the auditor chooses BA, the manager chooses fraud for sure, since (5) > (1); that is, since a basic audit cannot discover fraud, the manager will commit fraud.

If the auditor chooses EA, the manager chooses fraud if (7) > (3), that is, if

$$- p(t)R_{F.FD.Q} + (1 - p(t))R_{F.FND.U} \geq R_{NF.FND.U} \quad (C2)$$

Since $\dfrac{\partial P}{\partial t} > 0,$ with $p(t) = 0,$ we can define a critical time period t_C such that $- p(t_C)R_{F.FD.Q} + (1 - p(t_C))R_{F.FND.U} = R_{NF.FND.U}.$ Therefore, if $t \in [0, t_C)$, (C2) holds, while, if $t \in [t_C, T\}$, (C2) is violated. We focus on the case where $t_c < t_C$.

We therefore derive the following equilibria;

Proposition 1: *When $T < t'$ (No auditor sympathy for the entire tenure), the effect of auditor's tenure on the type of audit, the probability of fraud, and the probability of a qualified audit is as follows;*

    a) *When $t \in [0, t_c)$, the equilibrium is {BA, F}. Therefore, the probability of fraud is 1, and the probability of a qualified audit is zero.*

    b) *When $t \in [t_c, t_C)$, the equilibrium is {EA, F}. Therefore, the probability of fraud is 1, and the probability of a qualified audit is p.*

    c) *When $t \in [t_C, T\}$, there are no pure strategy equilibria. The mixed strategy equilibrium is as follows. The auditor performs the extended audit with probability* $1 - r^* = \dfrac{R_{F.FND.U} - R_{NF.FND.U}}{p(R_{F.FD.Q} + R_{F.FND.U})} < 1$. *The manager commits fraud with probability* $1 - S^* = \dfrac{C}{p(R_{F.FD.Q} + R_{F.FND.U})} < 1$. *The probability of a qualified audit is* $Q^* = \dfrac{C[R_{F.FND.U} - R_{NF.FND.U}]}{p(R_{F.FD.Q} + R_{F.FND.U})^2}$. *Note that the probability of fraud, and the probability of a qualified audit, are reducing in p, the auditor's fraud detecting ability.*

Proof:

    a) *When $t \in [0, t_c)$, (6) > (8). Referring to the normal form game in figure 1, we observe that the auditor's dominant strategy is BA. Since (5) > (1) for sure, the equilibrium is {BA, F}.*

b) *When* $t \in [t_c, t_C)$, *(8) > (6). Further, (7) > (3). Referring to figure 1, we observe that the equilibrium is {EA, F}.*

c) *When* $t \in [t_C, T\}$, *(8) > (6), but (3) > (7). Referring to figure 1, we observe that there are no pure strategy equilibria. As always, we can solve for mixed strategy equilibria* [4] [5]. *Having solved for the probability of fraud, and the probability of an extended audit, we can then solve for the probability*[6] *of a qualified report.*

Proposition 1 is represented in appendix diagram 1.

It is interesting to note that, as the auditor's ability increases, we reach a critical level of audit tenure where the auditor switches from BA to EA, and therefore the probability of fraud detection, and hence the probability of qualified audits, jumps from zero to p. This ties in with the view that an increase in auditor tenure, and auditor ability, results in an increase in qualified audits and fraud-detection[7].

However, our novel result is that, beyond a subsequent critical level of tenure (ie; in the mixed strategy interval), qualified audits actually decrease in auditor ability. This is because an increase in auditor ability now reduces fraud- commission by the manager.

---

[4] This mixed strategy version of the game is similar to that of Coate et al (2002). The interesting idea is that, if the manager is expecting a basic audit, he has an incentive to commit fraud. Next, if the auditor is expecting the manager to commit fraud, the auditor performs an extended audit in an increased attempt to find it. Next, if the manager is expecting an extended audit, he will not commit fraud. Next, if the auditor is not expecting fraud, she performs a basic audit. Next, if the manager is expecting a basic audit, he has an incentive to commit fraud….. ! Ad infinitum! Therefore, no pure strategy equilibrium exists, and we must appeal to mixed strategy equilibria..

[5] The solution to the mixed strategy game is available on request.

[6] This solution is available on request.

[7] See, for example, Geiger and Raghunandan (2002).

13

We now incorporate empathy into the analysis. We model empathy in the following simple way. At a critical level of audit tenure, t', the auditor's behaviour changes, such that she now becomes sympathetic towards management. This changes her payoffs such that $R_{F.FD.U} > R_{F.FD.Q}$, $-R_{F.FND.U} > -R_{F.FND.Q}$, $+R_{NF.FND.U} > -R_{NF.FND.Q}$. Therefore, the auditor's dominant strategy is now to issue an unqualified audit report, even if she has found fraud. By backward induction, the auditor therefore only performs the basic audit. From condition C1, the manager therefore commits fraud with probability 1. In summary, when the auditor becomes sympathetic, the equilibrium becomes {BA, F}.

Now, we may amend proposition 1 as follows;

Proposition 2: *When $t' < T$ (the auditor becomes sympathetic during the tenure, the equilibrium of the game is as in proposition 1 for $t \in [0, t')$. When $t \in [t', T]$, the equilibrium is {BA, F}. Therefore, the probability of fraud is 1, and the probability of a qualified audit is zero.*

Proposition 2 is represented in appendix diagram 2.

4. Policy Implications.

We assume that the policy-maker sets the audit tenure to minimise the risk of fraud (as such, the policy-maker is therefore not interested in the level of qualified audits, but the auditor ability, and the *threat* of qualified audits, as a deterrent to fraud). Our results suggest the following policy implications;

a) If we only consider the effect of audit tenure on auditor ability, diagram 1 reveals that it is optimal for the policy-maker to allow long audit tenure. Beyond the critical audit tenure, fraud-commission is decreasing in audit tenure (due to increased auditor ability). Interestingly, we note that the probability of qualified audits jumps up and increases in audit tenure up to a critical period, but after this critical period, it decreases in audit tenure. This is because higher auditor ability deters fraud, and therefore reduces qualified audits.

Some researchers argue against long audit tenure due to increased empathy, and cite reduction in qualifed audits as tenure increases as evidence of the auditor 'turning a blind eye.' We demonstrate here that such evidence needs to be considered carefully. A reduction in qualified audits over audit tenure may be due to increased threat of qualification (as auditor ability increases) driving a reduction in fraud.

b) In diagram 2, we introduce empathy. As in diagram 1, long audit tenure results in a reduction in qualified audits. Also, over a certain time-period, fraud decreases, as in diagram 1. However, when the auditor becomes empathetic, a reduction in qualified audits is accompanied by an *increase* in

fraud. This emphasises the point made in a); a reduction in qualified audits over audit tenure may be due to increased auditor ability driving reduction in fraud, or it may be due to increased auditor empathy, leading to an *increase* in fraud.

5. Conclusion.

We have developed a game-theoretic model that addresses the policy debate regarding mandatory auditor rotation. In our model, auditor ability to detect fraud increases in auditor tenure. Therefore, as tenure increases, the auditor increases fraud-detecting efforts, and, therefore, the probability of fraud detection, and the probability of qualified audits, increases. This reduces managerial fraud incentives. In a novel, and enlightening result, beyond a critical level of tenure, auditor ability increases to an such an extent that the reduction in managerial fraud drives a *reduction* in qualified audits.

Furthermore, beyond a critical level of tenure, the auditor becomes sympathetic towards the manager, and she reduces fraud-detecting efforts. This results in a reduction in qualified audits and an increase in fraud.

As far as we are aware, we are the first researchers to take a behavioural game-theoretic approach to auditing for fraud. We have considered one behavioural factor; auditor empathy towards the manager. Marnet (2004) considers deeper behavioural factors relating to auditor tenure that could influence auditor investigation into fraud. Building on the work of Bazerman et al (1997), he discusses how auditor independence may be compromised by self-serving biases. For example, an auditor who has already issued an unqualified report may then face subsequent psychological

pressures to 'self-justify' her earlier opinions. We may relate this to framing biases, including sunk costs, regret, loss aversion and prospect theory. We may also consider confirmation biases. Hence, there is much scope for future research into the behavioural biases affecting auditor independence.
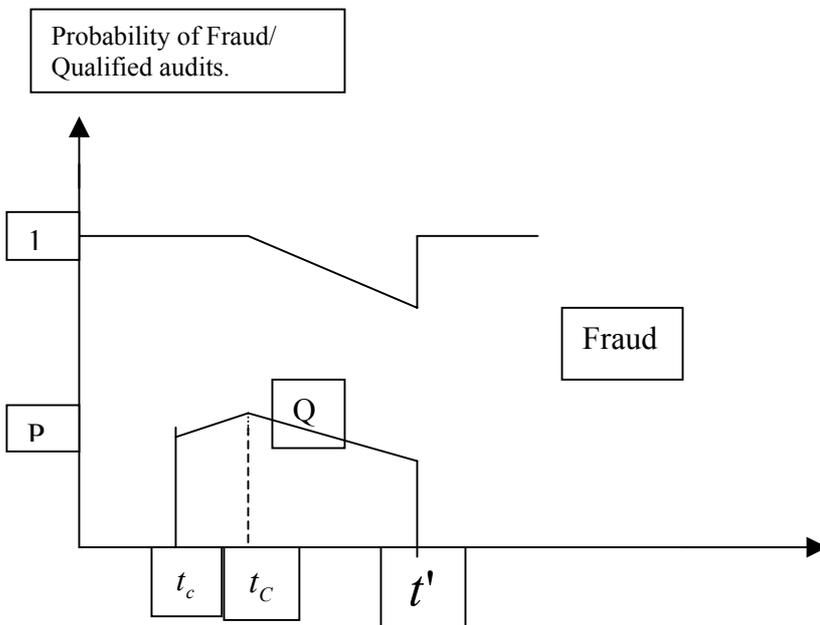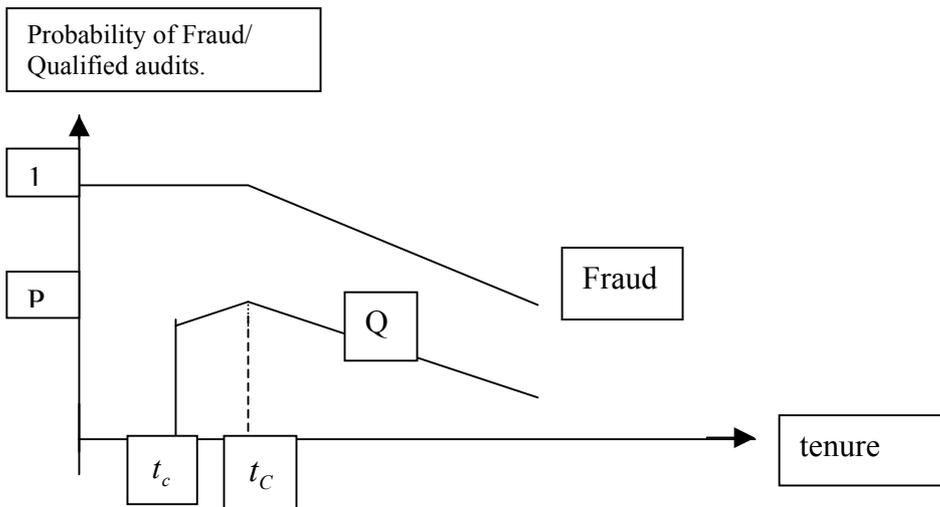
References

Antle, R. and B. Nalebuff. (1992). "Conservatism and Auditor-Client Negotiations." *Journal of Accounting Research* 29, 31 – 54.

Bazerman, M., G. Loewenstein, and D.A. Moore (1997). "The Impossibility of Auditor Independence." *Sloan Management Review.*

Bloomfield, R. (1995). "Strategic Dependence and Inherent Risk Assessment." *The Accounting Review 70*, 71 – 90.

Coate, C. J, R. Florence, and K.L. Kral. (2002) "Financial Statement Audits, a Game of Chicken?" *Journal of Business Ethics 41*, 1 – 11.

DeAngelo, L. (1981). "Auditor Independence, 'Low Balling,' and Disclosure Regulation." *Journal of Accounting and Economics 3*, 113 – 127.

Dye, R.A. (1991). "Informationally Motivated Auditor Replacement." *Journal of Accounting and Economics 14*, 347 – 374.

Fellingham, J. C., and D. P. Newman (1985). "Strategic Considerations in Auditing." *The Accounting Review 60*, 634 – 650.

Geiger, M.A., and K. Raghunandan (2002). "Auditor Tenure and Audit Reporting Failures." *Auditing: A Journal of Practice and Theory, Vol 21, no 1 (March).*

Kanodia, C. and A.Mukherji (1994). "Audit Pricing, Lowballing and Audit Turnover: A Dynamic Analysis." *The Accounting Review 70*, 593 - 615.

Magee, R. P. and M. C. Tseng (1990). "Audit Pricing and Independence." *The Accounting Review 65*, 315 – 336.

Marnet, O. "Behavioural Aspects of Corporate Governance." *Corporate Governance; Advances in Financial Economics*, Vol 9, 265 – 285.

Matsumura, E. M. and R. R. Tucker (1992). "Fraud Detection: A Theoretical Foundation." *The Accounting Review 67*, 753 – 782.

Matsumura, E. M., K.B. Subramanyam and R. R. Tucker (1997). "Strategic Behavior and Going Concern Decisions." *Journal of Business, Finance, and Accounting 24*, 727 – 758.

Morton, S. (1993). "Strategic Auditing for Fraud." *The Accounting Review 68*, 825 – 839.

Newman, P. and J. Noel (1989). "Error Rates, Detection Rates and Payoff Functions in Auditing. *Auditing: A Journal of Practice and Theory 8* (Supplement) 50 –63.

Shibano, T. (1990). "Assessing Audit Risk from Errors and Irregularities." *Journal of Accounting Research* 28, 110 – 140.

Smith, J. R., S. L. Tiras, and S. S. Vichitlekarn. (2000). "The Interaction Between Internal Control Assessment and Substantive Testing in Audits for Fraud." *Contemporary Accounting Research* 17, 327 – 356.

Appendix.

Diagram 1 (represents proposition 1: no sympathy), and diagram 2 (incorporating sympathy):

Probability of Fraud/
Qualified audits.

1

P

Fraud

Q

t_c t_C tenure

Probability of Fraud/
Qualified audits.

1

Fraud

P

Q

t_c t_C t'

19

University of Bath School of Management
Working Paper Series

School of Management
Claverton Down
Bath
BA2 7AY
United Kingdom
Tel: +44 1225 826742
Fax: +44 1225 826473
http://www.bath.ac.uk/management/research/papers.htm

2006		
2006.01	Neil Allan and Louise Beer	Strategic Risk: It's all in your head
2006.02	Richard Fairchild	Does Auditor Retention increase Managerial Fraud? - The Effects of Auditor Ability and Auditor Empathy.
2006.03	Richard Fairchild	Patents and innovation - the effect of monopoly protection, competitive spillovers and sympathetic collaboration.
2006.04	Paul A. Grout and Anna Zalewska	Profitability Measures and Competition Law
2006.05	Steven McGuire	The United States, Japan and the Aerospace Industry: technological change in the shaping of a political relationship
2006.06	Richard Fairchild & Yiyuan Mai	The Strength of the Legal System, Empathetic Cooperation, and the Optimality of Strong or Weak Venture Capital Contracts
2006.07	Susanna Xin Xu, Joe Nandhakumar and Christine Harland	Enacting E-relations with Ancient Chinese Military Stratagems
2006.08	Gastón Fornés and Guillermo Cardoza	Spanish companies in Latin America: a winding road
2006.09	Paul Goodwin, Robert Fildes, Michael Lawrence and Konstantinos Nikolopoulos	The process of using a forecasting support system
2006.10	Jing-Lin Duanmu	An Integrated Approach to Ownership Choices of MNEs in China: A Case Study of Wuxi 1978-2004
2006.11	J.Robert Branston and James R. Wilson	Transmitting Democracy: A Strategic Failure Analysis of Broadcasting and the BBC
2006.12	Louise Knight & Annie Pye	Multiple Meanings of 'Network': some implications for interorganizational theory and research practice

2006.13	Svenja Tams	Self-directed Social Learning: The Role of Individual Differences
2006.14	Svenja Tams	Constructing Self-Efficacy at Work: A Person-Centered Perspective
2006.15	Robert Heath, David Brandt & Agnes Nairn	Brand relationships: strengthened by emotion, weakened by attention
2006.16	Yoonhee Tina Chang	Role of Non-Performing Loans (NPLs) and Capital Adequacy in Banking Structure and Competition
2006.17	Fotios Pasiouras	Estimating the technical and scale efficiency of Greek commercial banks: the impact of credit risk, off-balance sheet activities, and international operations
2006.18	Eleanor Lohr	Establishing the validity and legitimacy of love as a living standard of judgment through researching the relation of being and doing in the inquiry, 'How can love improve my practice?'
2006.19	Fotios Pasiouras, Chrysovalantis Gaganis & Constantin Zopounidis	Regulations, supervision approaches and acquisition likelihood in the Asian banking industry
2006.20	Robert Fildes, Paul Goodwin, Michael Lawrence & Kostas Nikolopoulos	Producing more efficient demand forecasts