Journal Of Harmonized Research (JOHR)

Journal Of Harmonized Research in Management
4(4), 2018, 124-135

ISSN 2454-5384

Case Study Article

INVESTIGATING COMPLEX FINANCIAL CRIME – A CASE STUDY INSPIRED BY THE POLLY PECK PLC FRAUD

Paul Eisenberg

University of Portsmouth, University House Winston Churchill Avenue, Portsmouth PO1 UP, UK,

Abstract: - The purpose of this article is to illustrate a financialfraud investigation by the way of a case study inspired by the famous Polly Peck PLC fraud case. After exploring the features of an investigation plan, false accounting and theft charges are explained and exemplified. Various techniques of tracing the crime proceeds are analysed, as well as investigative models and methods to provide evidence.

Methodologically, economic fraud investigations are discussed through an in-depth literature review. The investigative models applied are characterised by Data Mining techniques (Decision Trees, Neural Networks and Benford's law) as well as the Net Worth Method, the Bank Deposit Method, the Specific Item Method and Digital Link Analysis.

The case study shows that Benford's law and Neural Networks, together with the Specific Item Method can render results admissible in criminal court in cumbersome financial fraud cases involving several jurisdictions and complex banking arrangements.

Keywords: Financial fraud investigation, Data Mining, Benford's law, Neural Networks, Specific Item Method

Introduction: The present Kakos PLC (in the following: Kakos) case study is inspired by the real-life fraud case of the Polly Peck PLC that shook the British investment community, the financial press and even the politics back in the early 1990-ies (Wearing, 2005).The knowledgeable readermay discover that the fictitious business tycoon Brian Mastigiamirrors the ingenious, but fraudulent Asil Nadir, who has made his fortune from scratch and became CEO and Chairman of the Polly Peck PLC (Croft, 2012). Similar to Nadir, Mastigia struggles to manage his highly-diversified company portfolio by lawful means and is charged with false accounting and theft.

An innovative approach to the fraud investigation of Brian Mastigia and the Kakos is

For Correspondence:
eisenberg.scholar@gmail.com
Received on: September 2018
Accepted after revision: October 2018
DOI: 10.30876/JOHR.4.4.2018.124-135

developed. The investigative proposal is not influenced by the current methods of the UK Serious Fraud Office (SFO). The approach builds on circumstantial evidence as financial records and statements. The cross-examination of witnesses is out of the study's focus. Evidence gathering models and methods are critically evaluated so that they can be defended in court of law. Based on the evaluation, a formal proposal for the investigation is recommended to close the report.

Investigation plan to establish evidence: General features of the investigation plan: For the purpose of a structured and target-oriented investigation an investigation plan is to be prepared (Gillespie, 2014). The overall goal of an investigation plan is to prove or to disprove the charges (Kantumoya, 2004). The investigation plan has to meet the following eight criteria according to Richards *et al.* (2008): (1) The plan has to be time-sensitive to meet legal deadlines, statutes of limitations, and to secure evidence in a timely manner before it is lost or destroyed. (2) Notification may be necessary to other law enforcement agencies or to persons who may be suspected of aiding and abetting Mastigia's fraud. (3) Save for these legal notificationsthe investigation has to be conducted in a confidential manner. (4) Information protected by legal advice privilege, i.e. advice given to Mastigia from his lawyers, may not be used in court proceedings against Mastigia. (5) Evidence gathering techniques must comply with laws and regulations. (6) Evidence gathered must be secured from destruction and a chain of custody must be established. To be admissible at court, original evidence must not be manipulated (Miller and Marston, 2006). (7) Objectivity must be ensured to build an unbiased case. (8) Any special goals should be incorporated into the plan, e.g.conducting a tightly organized investigation to prevent Mastigia from fleeing to another country before trial as did Asil Nadir (Gobert and Pascal, 2011).

A team of specialists has to be selected and responsibilities have to be assigned. The team composition depends on the case and charges in question (Vincoli, 1994). An organisational chart should be maintained and updated. Working papers and reports created by the investigative team must be maintained for the later court proceedings. The team must be equipped with technology needed to conduct the investigation, so the plan has to name equipment to be provided by the SFO (Purushothaman and Hashemnejad, 2013). Human and technological resources must be budgeted in financial terms to make the investigation feasible for the SFO (Wells and Carozza, 2000).

Case specific investigation plan: The investigation plan has to consider case specific issues. Kakos has subsidiaries in Colombia, Panama, Netherlands, Spain, Hong Kong, the USA and Japan, it obtains finance from Switzerland and uses Jersey, a tax haven, for its investment vehicles. Clayton (2006) notes that in multilateral settings proper communication in foreign languages is key. Hence, interpreters must be available to the team. The usage of the tax haven may make tax expertise from HMRC necessary. Given the international scope the investigation team should be prepared to make mutual legal assistance requests to obtain evidence from other countries (Kemp, 2012). Furthermore, it will have to apply for search and seizer warrants as well as for disclosure orders to obtain documents from third parties and suspects (Brun *et al.*, 2011).

Mastigia was an employee (CEO / Chairman) of Kakos and may have used his working premises to commit fraud (PWC, 2008). His office and related locations should be used as a starting point for investigation. His desk, paperwork, IT and communication devices must be searched for evidence (Coderre, 2009). Company trash can be searched for destroyed documents and data carriers (Brun *et al.* 2011). Kakos may have used remote data back-up facilities or outsourced data storage services, which should be approached with warrants and disclosure orders(Miller and Marston, 2006). Call records, e-mails and fax messages can reveal Mastigia's connections. Expert software could extract and preserve digital information to ensure admissibility at court (Cauthen, 2014). These evidencesmay become point of departure for further investigations (Abidogun, 2005). Paperwork gathered should be analysed by handwriting specialist to prove Mastigia's authorship (Coenen, 2009).COSO (2010) shows that 89% of financial reporting fraud is committed by CEO and/or CFO, with 38% committed by vice presidents and 34 by corporate controllers. Zekany *et al.* (2004) demonstrate for WorldCom that complex accounting fraud in a world-wide operating company involves numerous departments, clerks, middle managers and executives. Sims and Brinkmann (2003) show for the Enron fraud case that some employees remain loyal and support crimes of the executive floor if they are attracted by financial rewards. Thus, at Kakos, Mastigia may have colluded with others.It is crucial to establish who was allowed to authorise, to make and who actually made accounting entries at Kakos (Miller *et al.*, 2006). Thus, the line of command tracing back to Mastigiaand the entries performed by himand his accomplices may be revealed.

Charges specific investigation plan: False accounting charges: The following Table 1 presents the criminal act of false accounting.

Theft Act 1968, section 17 – False accounting.
(1) Where a person dishonestly, with a view to gain for himself or another or with intent to cause loss to another, (a) destroys, defaces, conceals or falsifies any account or any record or document made or required for any accounting purpose; or (b) in furnishing information for any purpose produces or makes use of any account, or any such record or document as aforesaid, which to his knowledge is or may be misleading, false or deceptive in a material particular; he shall, on conviction on indictment, be liable to imprisonment for a term not exceeding seven years. (2) For purposes of this section a person who makes or concurs in making in an account or other document an entry which is or may be misleading, false or deceptive in a material particular, or who omits or concurs in omitting a material particular from an account or other document, is to be treated as falsifying the account or document.

Table 1: Theft Act 1968, section 17 – False accounting.

At court, the prosecution must show that Mastigia had committed the offence of false accounting as per act. Circumstantial evidence of false accounting can be gained through Analytical Procedures that reveal unusual and unexpected entries, balances and documentation (Cullinan and Sutton, 2002). Furthermore, organisational arrangements at the entity (Apostolou *et al.*, 2001) and behavioural issues of the personnel (Murphy and Dacin, 2011) may indicate fraud risk. To differentiate between usual and unusual arrangements, transactions and processes a thorough understanding of the business entity and its industry is necessary (ACCA, 2012a). The inconsistencies are referred to as red flags (DiNapoli, 2008). At Kakos, several red flags of false accounting exist.

Over the years, Kakos was able to generate above-average financial returns and beat market expectations, even during the upward bull market under the then Labour government. Kakos has pledged its own shares as collateral to finance its diversification strategy, doubling its size 2011-2012. It might have felt pressure to report steadily growing profits to ensure a high share price, especially given its low Price-Earnings-Ratio (Healy and Palepu, 2003). Misleading accounting to increase revenue and profits may have occurred (Singleton *et al.*, 2006). A report on Kakos issued in August 2014 states that company profits were perceived as mysterious. A questioning and worrying press coverage can point towards irregularities discovered by journalists and analysts (Grove *et al.*, 2005).

A further risk arises from nearly 30% of the group's revenue being generated by subsidiaries from Panama and Colombia. These countries offer little transparency and regulations (IISS, 2002). Related party transactions can be used to inflate revenue and cash positions (Vona, 2008). Manipulated results from Panamanian and Colombian subsidiaries may have been consolidated in the group's financial statements (ACCA, 2012b). Indeed, in 2007 financial press questioned whether Kakos' UK auditors had been able to verify foreign accounts. Thus, the investigation period can start as early as 2007 (Clayton, 2006).

Another red flag arises from the unsuccessful attempt to quote Kakos' subsidiary Del Fruity at the New York Stock Exchange (NYSE) in 2013. Stock markets in the USA are regarded as highly regulated and transparent (Doidge et al, 2004). At that time, the Sarbanes–Oxley Act of 2002 (SOX) has been in force in the USA for over a decade. Research suggests that SOX detracts insiders of foreign corporations from listing on US markets due to regulations protecting minority shareholders (Duarte *et al.*, 2013). It may be inferred that Kakos was unable or unwilling to meet US regulatory requirements in favour of Mastigia.

From the organisational viewpoint, the high diversification of Kakos may be considered a red flag. Struggle to manage ventures from various fields may create pressure to manipulate results (Tebogo, 2011). The combination of the CEO/Chairman position can enhance fraud risk through power accumulation (Skoussen and Wright, 2006). The emergency board meeting on a Sunday in August 2014 with a very short notice period shows that Mastigia does not care about the directors being prepared and fully represented at board. This may constitute a red flag of overriding the control function of the board (Ramos, 2003). However, inferences from corporate governance may be contradictory and thus not supportive for a conviction (Spece and Bernstein, 2007). Research of Kesner et at. (1986) demonstrates that companies with a combined CEO/Chairman position do not commit more economic crimes than those with separated roles. Also, bankruptcy risk is not associated with one person holding both the CEO/Chairman positions (Chaganti *et al.*, 1985). Behavioural red flags arise from Mastigia's personal conduct. Heundertakes investments using Jersey, a tax haven. This demonstrates his indifference towards reputational issues (Posner, 2000). Mastigia dismisses key employees without consultation with other executives. Finally, he blames third parties for his ultimate failure. Selfish and overconfident leaders may rationalise fraudulent behaviour to achieve their means (Beecher-Monas, 2003). Dellaportas (2013) reports for convicted accountants that often ego-centrism was behind accounting fraud. Table 2 provides examples of evidence of false accounting that may be found in Kakos' books.

Examples of evidence of false accounting entries and manipulated documentation
- Accounts may have unusual names, contain unusual amounts, have unusual balances - Entries overstating assets and / or revenue to increase profits - Entries cancelling liabilities and expenses to increase profits - Entries for transactions with related parties - Entries for substantial transactions near financial results announcement / year end dates - Reversing entries after financial results announcement / year end dates - Adjusting entries made by not authorised parties at unusual point in time - Entries made in unusual, transitory accounts - Lack of supporting documentation for accounting entries (invoices / contracts / purchase orders / delivery notes etc.) - Invoices of substantial amounts not backed by contractual agreements - Invoices do not entail required data (tax number / company registered number) - Contracts without information about services performed or supplies delivered - Back-dated documents to match accounting entries

- Side agreements show the true nature of accounting entries (e.g. loan instead of sales) - External / internal auditors' working papers reveal controversy about accounting issues - Accounting ratio results do not correspond to historical patterns of the business and to the industry benchmarks

Table 2: Examples of evidence of false accounting entries and manipulated documentation (ACFE, 2013; Brun *et al.*, 2011; Miller *et al.*, 2006).

Theft charges: The next Table 3 shows the definition of theft per the Theft Act 1968.

Theft Act 1968, section 1 – Basic definition of theft
(1) A person is guilty of theft if he dishonestly appropriates property belonging to another with the intention of permanently depriving the other of it; and "thief" and "steal" shall be construed accordingly.

Table 3: Theft Act 1968, section 1 – Basic definition of theft.

The pure lack of funds at the subsidiaries just before Kakos' collapse may be caused by genuine business expenses. Evidence from Table 4 helps to establish whether the money was spent with due cause or misappropriated (Albrecht *et al.*, 2008). It should be kept in mind that supportive documents could be forged, like the bank confirmation letter falsified by Mastigia's assistant. The authenticity of suspicious documents should be confirmed by the issuer (Murray, 1993).

Examples of evidence of theft by Mastigia from Kakos' subsidiaries
- Cash accounts in subsidiaries' books show large withdrawals and / or suspect transfers - Accounts in subsidiaries' booksfor reimbursement, gifts, entertainment and accommodation are unusually high and reveal no genuine business purpose - Multiple transfers from subsidiaries to the same payee without due business cause - Transfers for services / goods out of balance with its value - Documentation appears to be from a genuine third party, which declines authorship - Recipient name differs from underlying payment documentation - Bank details of payees differ from underlying payment documentation - Multiple payees share the same bank account and receive substantial transfers - Multiple payees issue similar invoices and payment documents - Payments that do not follow established accounts payable procedures at the subsidiary - Payments that do not follow established authorisation procedures at the subsidiary - Payments from subsidiaries to third parties in breach of established due diligence - No genuine business purpose to use several accounts to perform a transfer - No genuine business purpose to split payments into several amounts and accounts - Custom declarations for cross-border movement of money in cash - "Suspicious transaction or activity reports" (STRs) / "currency transactions reports" (CTRs) of banks reveal transactions which are not backed by supporting documents - Payment receipts by Mastigia and / or his family / fellows without due cause and documentation - Substantial payments for assets acquired and / or bills paid by Mastigiaand / or his family / fellows near the date of money transfers ordate of withdrawal - Lack of finance at part of Mastigia and / or his family / fellows to acquire the assets and / or to pay the bills save for the money transferred or withdrawn from subsidiaries

Table 4: Examples of evidence of theft by Mastigia from Kakos' subsidiaries (ACFE, 2013; Brun *et al.*, 2011).

Tracing proceeds of crime: Mastigia has allegedly used misappropriated funds to buy shares in Kakos. This can be verified through his stock portfolio statements (Wells, 2008). From the late 2011 on Kakos obtained debt finance from Switzerland to be used for projects in Central America.It appears odd to borrow funds in Swiss francs, i.e. a strong currency, that will be repaid from revenue in the weak Panamanian and Colombian currencies. However, Mastigia may have referred to Swiss banks due to Switzerland's bank secret law (Chaikin, 2006). This may have allowed him to pledge unknown private assets as collateral beyond Kakos shares to obtain more finance.Table 5 provides a reconciliation of funds that may constitute crime proceeds and that may have been diverted by Mastigia from his creditors.

Reconciliation of funds that may constitute crime proceeds and that may have been diverted from creditors
On 7 October 2014 Mastigia announces his private wealth being 8-10 times his shareholding in Kakos. His stake represents 24% of Kakos shares. Kakos market capitalisation on 16 September 2014 is £468m. It falls by 10% after an article of Business Times on 23 September 2014, resulting in: £468m*90%= £421.2m. Hence, Mastigia's wealth as on 7 October 2014 can be estimated as between: £421.2m*24%*8= £808.704m and £421.2m*24%*10= £1,010.88m. He also claims to have substantial private assets in Colombia and Panama. Mastigia is made personally bankrupt in November 2014. Known private debts amount to:£3.6m (Berkeley Hambro) + £8.4m (administrator lawsuit) + £20m (HMRC) = £32m. His stake in Kakos of: £421.2m*24%=£101.088m may have become worthless by that time. But there still could be assets worth between: £808.704m-£32m-£101.088m=£674,616m and £1,010.88m-£32m-£101.088m=£877,792m In addition, there may be private assets in Colombia and Panama of unknown amount.

Table 5: Reconciliation of funds that may constitute crimeproceeds and that may have been diverted from creditors (own calculation).

Table 6 contains evidence to prove acquisition ofassets and payment of private expenses with proceeds of crime.

Examples of evidence to prove private usage of criminal proceeds
- Civil records repositories may entail information about relatives, who may hold assets for Mastigia - Bank accounts opening / Know-your-customer documents may point towards nominees - Listing records, Company register and credit agencies may entail information about new shareholdings privately held by Mastigia or his nominees and their directorships in the new companies - Bankruptcy register may entail information about dissolved companies that may have been acquired with criminal proceeds during the period under investigation - Car register / aircraft register / watercraft register / Real estate register and mortgage records may be searched for acquisitions by Mastigia and / his family / fellow suspects - Tax records may reveal substantial tax settlements during the period under investigation, like the £1m private tax bill as per the case study - Tax records may show taxable wealth acquired during the period under investigation to account for suspicious acquisitions - Customs declarations may show cross-border transfer of assets - Internet / social networks may reveal new connections to persons, business and assets

Table 6: Examples of evidence to prove private usage of criminal proceeds (ACFE, 2013; Brun *et al.*, 2011; Frank and Schaffer, 2006).

After evidence is gathered and secured, it is evaluated for the purpose of a successful prosecution. In the following, the models and methods of evidence evaluation are presented and analysed.

Critical analysis of the models and methods recommended to provide evidence: The prosecution must prove the suspect's guilt under the criminal law standard of proof "beyond reasonable doubt" using the evidence gathered (Ross, 2016). Generating such evidence from accounting and documentary records imposes problems. Kranacher et at. (2011) note that company accounts and supportive paperwork may contain myriad red flags. This is especially due for complex and diversified entities like Kakos (Kenyon and Tilton, 2006). Processing of all the suspicious transactions is limited by human capabilities (Libby and Lewis, 1982). Furthermore, accounting standards and principles are not strictly prescriptive. Instead, they often offer scope for interpretation (ACCA, 2012b). Hence, entries that appear prima facie in breach of accounting rules may constitute permitted earnings management (Dechow *et al.*, 2010). It may prove difficult to differentiate between deliberate fraud and clerical errors (Bazerman *et al.*, 2006).

Data Mining techniques use IT processing capabilities to analyse huge datasets to obtain statistically significant results (Lavrac *et al.*, 2004). Data Mining includes several approaches. Decision Trees can be programmed to establish if-then relations in datasets (Han and Comber, 2000). Kirkos *et al.* (2007) show an accuracy rate of 73.6%. for Decision Trees applied in fraud detection in financial statements of Greek listed companies. Kent (1964) and Cleaves (1994) argue that judges assign a likelihood of ca. 70-100% to evidence established beyond reasonable doubt. For US criminal courts, Wagner (2012) quantifies the likelihood with 98-99%. Hence, evidence gathered through Decision Trees may fail at court if judges (and the jury) apply a benchmark of likelihood considerably above 73.6%.

Neural Networks analyse data for similarities. Transactions can be discovered where prima facie different third parties use the same names, addresses, phone numbers or goods descriptions. Thus, forged documents sought to back fake accounting entries can be found. The Theft Act 1968 states that any falsified "record or document made or required for any accounting purpose" constitutes false accounting. Hence, Neural Networks may prove helpful in convicting Mastigia.

According to Benford's law, lower numbers are more frequently distributed than higher numbers (Nigrini, 1996). Intelligent software can be used to find and isolate unusual distributions (Taylor, 2011). If frequency of digits does not follow expected probabilities,questions about the validity of the underlying accounting entries may arise (Rose, 2016). Fake accounting entries that could be made or authorised by Mastigia to improve Kakos' results may be detected. Benford's law is applied by tax administrations (Tödter, 2009), but the results obtained are only indicative of fraud; they do not prove fraud (Durtschi et al, 2004).Generally, Data Mining techniques are susceptible to two kinds of errors. Type I errors occur when a real fraud is not detected. Type II errors arise if a fraud signal is generated although no fraud exists (Albrecht *et al.*, 2000). These errors can limit the admissibility of Data Mining techniques at court.

Regardingtheft charges, several methods of proof are available. The Net Worth Method indirectly assesses the increase in personal wealth over a period of time, which cannot be explained by legitimate sources (Eads, 1991). Over years, Mastigiahas accumulated high wealth and legally invested in various business ventures and assets. As a defence, he could point to any of these legitimate sources to explain that the £60.6m allegedly stolen from Kakos originated not from theft, rendering this method ineffective.

Under the Bank Deposit Method all suspect's bank accounts are analysed to discover deposits that cannot be explained save for illegal funds (Pasco, 2012). This method might be cumbersome to apply given Mastigia's numerous and complex bank arrangements.

The Specific Item Methodtraces back specific assets and sums of money to identifiable transactions (Manning, 2010). The £10.804m and the £10.5m obtained by Mastigia on 14th August 2011 and 6th August 2014, respectively, may represent specific items. If no valid purpose for these two transfers could be established, then the prosecution would have direct evidence of theft against Mastigia (Schmidt, 1961).

To trace crime proceeds, Digital Link Analysis can disclose relationships between search items like names, places and numbers, e.g. monetary amounts, IDs or postal codes (Phua *et al*., 2003). Connections between people and assets can be uncovered (Simser, 2008).The magnitude of personal interaction can be revealed to identify a core group of suspects (Diesner and Carley, 2005). Textual communication of the culprits can then be analysed for keywords (assets, names). The Form-Oriented Content Analytic Method provides a technique to analyse the frequency of keywords used (Dragomir, 2010).Mastigia's residual worth is estimated within £674,616m and £877,792m (Table 5).There may be much room for Link Analysis to lift the veil of secrecy.

Recommendations and conclusion: In November 2014, Mastigia faced personal insolvency. This precludes him from the CEO/Chairman positions at Kakos as well as from directorships in UK subsidiaries. Hence, he cannot commit false accounting or steal Kakos funds any more. Because of this, surveillance and invigilation techniques to obtain direct evidence cannot be used either (Zimbelman and Albrecht, 2011). Indirect evidence is to be relied upon to reach Mastigia's conviction at court.

Courts may be restrictive in permitting circumstantial evidence. Red flags arising from behavioural misconduct like egoism, overconfidence or unfair dismissal of subordinates may constitute bad character evidence that is not admissible at court (Chasse, 1978). Through Link Analysis and Analytical Procedures, the culprit'sfinancial profile can be built (Omar *et al*., 2014). However, profiles do not establish facts (Ormerod, 1996). Therefore, indirect evidence from a financial profile could be dismissed following the English case law of *R. v Stagg*,U. K. ***Central Criminal Court***, 121, 1994 and *R. v Guil foyle* [2001] 2 Cr. App. Rep. 57.(Meyer, 2007).Hence, regarding false accounting charges brought against Mastigia, it is recommended to locate suspicious transactions and documentation using Benford's law and Neural Networks. In the next step, identified dubious transactions could be scrutinisedto establish whether falsification had occurred for accounting purposes under the Theft Act 1968. Applying various techniques to a single inquiry constitutes methodological triangulation (Bryman, 2015). It helps to increase credibility and to reduce uncertainty of results (Webb *et al*., 1966).

Concerning theft charges, the Specific Item Method has been shown to be superior to other methods in Mastigia's case. In tax fraud cases, criminal courts accept evidence created by the Specific Item Method (Comisky, 1981). This method should be used to prove Mastigia's crime.

References:

- Abidogun, O. A. (2005). *Data mining, fraud detection and mobile telecommunications: call pattern analysis with unsupervised neural networks*. Master Thesis. University of the Western Cape. Retrieved from: http://etd.uwc.ac.za/xmlui/handle/11394/249
- CA – Association of Chartered Certified Accountants (2012a). *Audit and Assurance (United Kingdom) (*6th ed.). London: BPP Learning Media Ltd.
- ACCA – Association of Chartered Certified Accountants (2012b). *Financial reporting (International and UK stream*) (6th ed.). London: BPP Learning Media Ltd.
- ACFE – Association of Certified Fraud Examiners (2013). *Fraud Examiners Manual* (Int. ed.). Austin: Association of Certified Fraud Examiners.
- Albrecht, C., Albrecht, W. S., &Dunn, J. S. (2000). Conducting a Pro-Active Fraud Audit: A Case Study. *Journal of Forensic Accounting*, 2, pp. 203-218.
- Albrecht, C., Kranacher, M.-J., &Albrecht, W. S. (2008). *Asset Misappropriation Research White Paper for the Institute for Fraud Prevention*. Retrieved from:www.theifp.org/research-grants/IFP-Whitepaper-5.pdf

- Apostolou, B. A., Hassell, J. M., Webber, S. A., & Sumners, G. E. (2001). The Relative Importance of Management Fraud Risk Factors. *Behavioral Research in Accounting,* 13 (1), pp. 1-24.
- Bazerman, M. H., Moore, D. A., Tetlock, P. E., & Tanlu, L. (2006). Reports Of Solving The Conflicts Of Interest In Auditing Are Highly Exaggerated. *Academy of Management Review*, 31 (1), pp. 43-49.
- Beecher-Monas, E. (2003). Corporate governance in the wake of Enron: an examination of the audit committee solution to corporate fraud. *Administrative Law Review*, 55 (2), pp. 357-392.
- Bryman, A. (2015). *Social Research Methods* (5th ed.). Oxford: Oxford University Press.
- Brun, J.-P., Gray, L., Scott, C., & Stephenson, K. M. (2011). *Asset Recovery Handbook A Guide for Practitioners*. Washington: The International Bank for Reconstruction and Development / The World Bank.
- Cauthen. J. M. (2014). Executing Search Warrants in the Cloud. *FBI Law Enforcement Bulletin*. Retrieved from: https://leb.fbi.gov/2014/october/executing-search-warrants-in-the-cloud
- Chaganti, R. S., Mahajan, V., & Sharma, S. (1985). Corporate board size, composition and corporate failures in retailing industry. *Journal of Management Studies* 22, pp. 400-417.
- Chaikin, D. (2006). The Impact of Swiss Principles of Mutual Assistance on Financial and Fiscal Crimes. *Revenue Law Journal*, 16 (1), pp. 192-214.
- Chasse, K. L. (1978). Exclusion of Certain Circumstantial Evidence: Character and other Exclusionary Rules. *Osgoode Hall Law Journal*, 16 (2), pp. 445-493.
- Clayton, M. M. (2006). Investigative Techniques. In: T. W. Golden, S. L. Skalak, & M. M. Clayton (Eds.). *A Guide to Forensic Accounting Investigation*. New York: John Wiley & Sons, Inc., pp. 295-312.
- Cleaves, D. A. (1994). *Assessing Uncertainty in Expert Judgments about Natural Resources*. General Technical Report SO-110. U.S. Department of Agriculture, Retrieved from: https://www.treesearch.fs.fed.us/pubs/18
- Coderre, D. (2009). *Computer Aided Fraud Prevention and Detection: A Step by Step Guide*. Hoboken: John Wiley & Sons, Inc.
- Coenen, T. L. (2009). *Expert Fraud Investigation: A Step-by-Step Guide*. Hoboken: John Wiley & Sons, Inc.
- Comisky, I. M. (1981). The Likely Source: An Unexplored Weakness in the Net Worth Method of Proof. *University of Miami Law Review*, 36 (1), pp. 1-40.
- COSO – Committee of Sponsoring Organizations of the Treadway Commission (2010). *Fraudulent Financial Reporting: 1998-2007, An Analysis of U.S. Public Companies*. Durham: American Institute of Certified Public Accountants.
- Croft, J. (2012, August 22). Profile: Who is Asil Nadir? *The Financial Times*. Retrieved from: https://www.ft.com/content/0ac0469e-e0a0-11e1-8d0f-00144feab49a
- Cullinan, C. P., & Sutton, S. G. (2002). Defrauding the Public Interest: A Critical Examination of Reengineered Audit Processes and the Likelihood of Detecting Fraud. *Critical Perspectives on Accounting*, 13 (3), pp. 297-310.
- Dechow, P., Ge, W., &Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*,50 (2-3), pp. 344-401.
- Dellaportas, S. (2013). Conversations with inmate accountants: motivation, opportunity and the fraud triangle. *Accounting forum*, 37 (1), pp. 29-39.
- Diesner, J., & Carley, K. M. (2005). *Exploration of Communication Networks from the Enron Email Corpus*. Working

Paper. Carnegie Mellon University. Retrieved from: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.86.7791&rep=rep1&type=pdf

- DiNapoli, T. (2008). *Red Flags for Fraud*. State of New York. Office of the State Comptroller. Retrieved from: http://web4.osc.state.ny.us/localgov/pubs/red_flags_fraud.pdf
- Doidge, C., Karolyi, G. A., &Stulz, R. M. (2004). Why are foreign firms listed in the U.S. worth more? *Journal of Financial Economics*, 71 (2), pp. 205-238.
- Dragomir, V. D. (2010). Environmentally sensitive disclosures and financial performance in a European setting. *Journal of Accounting and Organizational Change*, 6 (3), pp. 359-388.
- Duarte, J., Kong, K. Siegel, S.,&Young, L. (2013). The Impact of the Sarbanes–Oxley Act on Shareholders and Managers of Foreign Firms. *Review of Finance*, 18 (1), pp. s17-455.
- Durtschi, C., Hillison, W., &Pacini, C. (2004). The Effective Use of Benford's Law to Assist in Fraud in Accounting Data. *Journal of Forensic Accounting*, 5, pp. 17-34.
- Eads, L. S. (1991). From Capone to Boesky: Tax Evasion, Insider Trading, and Problems of Proof. *California Law Review*, 79, pp. 1421-1484.
- Frank J. J., & Schaffer, G. (2006). Background Investigations. In T. W. Golden, S. L. Skalak and M. M. Clayton (Eds.). *A Guide to Forensic Accounting Investigation*. New York: John Wiley & Sons, Inc., pp. 331-348.
- Gillespie, R. T. (2014). *The best practices applied by forensic investigators in conducting lifestyle audits on white collar crime suspects*. Master Thesis. University of South Africa. Retrieved from: http://uir.unisa.ac.za/bitstream/handle/10500/14383/dissertation_gillespie_rt.pdf?sequence=1
- Gobert, J., & Pascal, A.-M. (2011). *European Developments in Corporate Criminal Liability*. Abington: Routledge.
- Grove, H., Cook, T., &Goodwin, J. (2005). Case Study: Tele Com Red Flags. *Journal of Financial Education*, 31, pp. 108-122.
- Han, J., & Camber, M. (2000). *Data mining concepts and techniques*. San Diego: Morgan Kaufman.
- Healy, P. M., & Palepu, K. G. (2003). The Fall of Enron. *Journal of Economic Perspectives*, 17 (2), pp. 3-26.
- IISS – International Institute of Strategic Studies (2002). Transnational Control of Money
- Laundering. *Strategic Survey 2001/2002*. Oxford: Oxford University Press.
- Kantumoya, L. M. (2004). *Investigative Reporting in Zambia: A Practitioner's Handbook*. Lusaka: Friedrich Ebert Stiftung and Transparency International Zambia.
- Kemp, S. (2012). The criminal investigation and its relationship to jurisdiction, extradition,co-operation and criminal policy: Voices from Latin America and Spain. In J. Almqvist and C. Esposito (Eds.). *The Role of Courts in Transitional Justice*. Abington: Routledge, pp. 210-240.
- Kenyon, W., & Tilton, P. D. (2006). Potential Red Flags and Fraud Detection Techniques. In: T. W. Golden, S. L. Skalak, &M. M. Clayton (Eds.). *A Guide to Forensic Accounting Investigation*. New York: John Wiley & Sons, Inc., pp. 119-160.
- Kent, S. (1964). Words of estimated probability. *Studies of Intelligence*, 8, pp. 49-64.
- Kesner, I. F., Victor, B., & Lamont, B. T. (1986). Board Composition and the Commission of Illegal Acts: An Investigation of Fortune 500 Companies. *The Academy of Management Journal*, 29 (4), pp. 789-799.
- Kirkos, E., Spathis, C., &Manolopoulos, Y. (2007). Data Mining techniques for the detection of fraudulent financial statements.

Expert Systems with Applications, 32, pp. 995-1003.

- Kranacher, M.-J., Riley, R., &Wells, J. T. (2011). *Forensic Accounting and Fraud Examination*. Hoboken: John Wiley & Sons, Inc.
- Lavrac, N., Motoda, H., Fawcett, T., Holte, R., Langley, P., &Adriaans, P. (2004). Introduction: Lessons Learned from Data Mining Applications and Collaborative Problem Solving. *Machine Learning*, 57 (1-2), pp. 13-34.
- Libby, R., &Lewis, B. L. (1982). Human information processing research in accounting: The state of the art in 1982. *Accounting, Organizations and Society*, 7 (3), pp. 231-285.
- Manning, G. A. (2010). *Financial Investigation and Forensic Accounting* (3rd ed.). Boca Raton: CRC Press.
- Meyer, C. B. (2007). Criminal Profiling as Expert Evidence? An International Case Law Perspective. In: R. N. Kocsis (Ed.). *Criminal Profiling: International Theory, Research, and Practice*. Totowa: Humana Press, Inc., pp. 207-247.
- Miller, F. R., & Marston, D. L. (2006). Building a case: Gathering and documenting evidence. In T. W. Golden, S. L. Skalak, & M. M. Clayton (Eds.). *A Guide to Forensic Accounting Investigation*. New York: John Wiley & Sons, Inc., pp. 423-438.
- Miller F. R., Mizerek, E. J., &Clayton M. M. (2006). Conducting Global Investigations. In T. W. Golden, S. L. Skalak, & M. M. Clayton (Eds.). *A Guide to Forensic Accounting Investigation*. New York: John Wiley & Sons, Inc., pp. 493-508.
- Murphy, P. R., &Dacin, M. T. (2011). Psychological Pathways to Fraud: Understanding and Preventing Fraud in Organizations. *Journal of Business Ethics*, 101 (4), pp. 601-618.
- Murray, D. E. (1993). Letters of Credit and Forged and Altered Documents: Some Deterrent Suggestions. *Commercial Law Journal*, 98, pp. 504-515.
- Nigrini, M. J. (1996). Taxpayer compliance application of Benford's law. *Journal of the American Taxation Association*,18 (1), pp. 72-92.
- Pasco, G. A. (2012). *Criminal Financial Investigations: The Use of Forensic Accounting Techniques and Indirect Methods of Proof* (2nd ed.). Boca Raton: CRC Press.
- Phua, C., Lee, V., Smith, K., &Gayler, R. (2005). *A Comprehensive Survey of Data Mining-based Fraud Detection Research*. Working Paper. Monash University. Retrieved from: https://arxiv.org/abs/1009.6119
- Posner, E. (2000). Law and social norms: the case of tax compliance. *Virginia Law Review*, 86, pp. 1781-1819.
- Purushothaman, K., & Hashemnejad, R. (2013). Cyber Forensic Investigation Plan. *International Journal of Advance Research*, 1 (1), pp. 1-8.
- Omar, N., Koya, R. K., Sanusi, Z. M., &Shafie, N. A. (2014). Financial Statement Fraud: A Case Examination Using Beneish Model and Ratio Analysis. *International Journal of Trade, Economics and Finance*, 5 (2), pp. 184-186.
- Ormerod, D. (1996). The evidential implications of psychological profiling. *Criminal Law Review*, 92, pp. 863-877.
- Ramos, M. (2003). Auditor's responsibility for fraud detection. *Journal of Accountancy*, 195 (1), pp. 28-36.
- Richards, D. A., Melancon, B. C., &Rathley, J. D. (2008). *Managing the Business Risk of Fraud: A Practical Guide*. Retrieved from: https://www.acfe.com/uploadedFiles/ACFE_Website/Content/documents/managing-business-risk.pdf
- Rose, L. (2016). Understanding Fraud: From the Basics to Analysis. *Stevenson University*
- *Forensics Journal*,7, pp. 11-19.

- Ross, I. (2016). *Exposing Fraud: Skills, Process and Practicalities*. Chichester: John Wiley & Sons, Ltd.
- Schmidt, R. M. (1961). Hybrid Methods of Reconstructing Income in Criminal Tax Fraud Cases. *American Bar Association Journal*, 47, pp. 560-562.
- Scoussen, C. J., & Wright, C. J. (2006). *Contemporaneous Risk Factors and the Prediction of Financial Statement Fraud*. Paper presented at the 2005 AAA Tenth Ethics Research Symposium, Provo. Retrieved from: https://papers.ssrn.com/sol3/papers2.cfm?abstract_id=938736
- Sims, R. R., &Brinkmann, J. (2003). Enron Ethics (Or: Culture Matters More than Codes). *Journal of Business Ethics*, 45, pp. 243-256.
- Singleton, T., Singleton, A., Bologna, J. and Lindquist, R. (2006). *Fraud Auditing and Forensic Accounting*(3rd ed.). Hoboken: John Wiley & Sons, Inc. Spece, Jr. R., & Bernstein, C. (2007). What is Scientific Misconduct, Who has to (Dis)Prove It, and to What Level of Certainty? *Arizona Legal Studies*. Retrieved from: https://papers.ssrn.com/sol3/papers2.cfm?abstract_id=1015364
- Taylor, J. R. (2011). *Forensic Accounting*. Harlow: Financial Times Prentice Hall
- Tebogo, B. (2011). *Does the Enron Case Study Provide Valuable Lessons in the Early Detection of Corporate Fraud & Failure?* Working Paper. Institute of Development Management, Botswana. Retrieved from: https://papers.ssrn.com/sol3/papers2.cfm?abstract_id=1906045
- Tödter, K.-H. (2009). Benford's Law As An Indicator Of Fraud In Economics. *German Economic Review*,10 (3), pp. 339-351.Theft Act 1968
- Vincoli, J. W., (1994). *Basic Guide to Accident Investigation and Loss Control*. New York: John Wiley & Sons, Inc.
- Vona, L. W. (2008). *Fraud Risk Assessment: Building a Fraud Audit Program*. Hoboken: John Wiley & Sons, Inc.
- Wagner, L. W. (2012). *Unexpected Expectations: The Curiosities of a Mathematical Crystal Ball*. Boca Raton: Taylor & Francis Group.
- Wearing, R. (2005). *Cases in Corporate Governance*. London: Sage Publications.
- Webb, E. J., Campbell, D. T., Schwartz, R. D., &Sechrest, L. (1966). *Unobtrusive Measures: Nonreactive Measures in the Social Sciences*. Chicago: Rand McNally.
- Wells, J. T. (2013). *Principles of Fraud Examination* (4th ed.). Hoboken: John Wiley & Sons, Inc.
- Wells, J. T., & Carozza, R. B. (2000). Corruption in Collegiate Sports. *Fraud Magazine*. Retrieved from:http://www.fraud-magazine.com/article.aspx?id=4294968457
- Zekany, K. E., Braun, L. W., & Warder, Z. T. (2004). Behind Closed Doors at WorldCom: 2001. *Issues in Accounting Education*, 19 (1), pp. 101-117.
- Zimbelman, M. F., &C. C. Albrecht (2011). *Forensic Accounting* (4th ed.). Andover: Cengage Learning Emea.