Fraud victimization in Greece: room for improvement in prevention and detection

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Abstract

Purpose – The purpose of this paper is to investigate fraud victimisation of Greek companies during the financial crisis years. Moreover, the paper seeks to encourage the implementation of proactive and reactive measures in an effort to minimize fraud victimisation.

Design/methodology/approach – Drawing on an extensive literature review and utilising a questionnaire administered by Krambia-Kapardis and Zopiatis (2010), auditors and management of companies who had fallen victim to fraud provided information on the typology of fraud and on proactive and reactive measures taken after a fraud incident had been reported to them. Both descriptive and inferential statistics were utilized to analyze the collected data and address the postulated research questions.

Findings – The survey has found that no industry or size of company is immune from fraud, with bigger companies and small- and medium-sized enterprises (SMEs) falling victim to industrial espionage and theft of cash and counterfeit, respectively. The banking and insurance sector appeared to be affected mainly by money laundering. Management fraud was mainly in the form of window dressing, whilst employee fraud involved predominately theft of cash and assets. Loss of reputation emerged as the main concern for the victim, and it had a determining impact on deciding not to report cases to the police.

Research limitations/implications – Because of the sensitive topic being investigated and despite having assured the respondents that their anonymity would be guaranteed, the respondents were hesitant in responding. Thus, the response rate was 16.4 per cent, slightly lower than a similar study carried out in Cyprus (Krambia-Kapardis and Zopiatis 2010). The findings, however, are considered to be reliable, given the fact that the respondents were individuals well versed with the topic under investigation and in a position to know if their company had fallen victim to fraud.

Practical implications – The findings have practical relevance to both industry stakeholders and academics who wish to further explore fraud victimization in the Greek business environment. Given that the financial crisis in Greece is continuing, fraud risk assessment ought to concentrate in the area of cash, and preventative measures need to be considered by the regulators and the victims.

Originality/value – Whilst fraud victimisation studies are becoming popular by the Big 4 accounting firms, there is no fraud victimisation study concentrating on the typology of fraud in Greece. With this survey, it will be possible to draw conclusions and make suggestions to the accounting profession on how to combat fraud, at a time, when the economic crisis is persisting and fraud is expected to escalate.

Keywords Greece, Prevention, Fraud, Typology of fraud, Victimisation

Paper type Research paper
Introduction

Fraud and financial crimes generally, although complex, have existed since time immemorial, evolving over the centuries and becoming more complex and difficult to investigate causing catastrophic consequences to businesses and the economy of a country. Fraud erodes investor trust and influences stock market liquidity and performance, yet investors are not aware of common fraud (Cumming and Johan, 2013) until they are victimized, and auditors have difficulty identifying indicators of narcissism and personality trait linked to unethical or fraudulent behaviour (Johnson et al., 2013). According to Pickett (2012, p. 7), “large frauds have led to the downfall of entire organizations, massive investment losses, significant legal costs, incarceration of key individuals, and erosion of confidence in capital markets”. More specifically, the Association of Certified Fraud Examiners (Association of Certified Fraud Examiners, 2014) estimated that a typical organization loses 5 per cent of its annual revenues to fraud and corruption. If applied on the Central Intelligence Agency, 2013 (estimated)\[1\], this translates to nearly $3.7 trillion. Some developed countries have experienced a number of occupational fraud cases in the past decade, including: Enron, WorldCom, Parmalat, Bernie Madoff and Satyam frauds (Bhasin, 2013; Buchanan and Yang, 2005; Clauss et al., 2009; Kuhn and Sutton, 2006, and Li, 2010) that have shown that no industry or size of company is immune to fraud. As a result, people’s reliance on financial information and the confidence and faith in business relations have negatively affected the financial stability of companies and countries; thus, fraud victimization studies (Barlaup et al., 2009; Krambia-Kapardis and Zopiatis, 2010) provide information on the dark figure of fraud, in an effort to reduce this crime.

Greece, a country that has in recent years found itself in the midst of a deep economic crisis, and with a gross domestic product (GDP) of $240bn in 2013\[2\], is expected to have lost an estimated of $12bn to fraud. Moreover, the huge mass of hidden harm that financial crime and corruption cause in a country\[3\] has a negative impact on an economy like Greece’s, and it can put it in deeper economic downturn. Because of the dark figure of fraud and the low reporting of fraud incidence (as illustrated in Krambia-Kapardis and Tsolakis, 2011 and reiterated in Papandreous’ 2013 court proceedings), such crimes have low visibility. Thus, fraud victimization studies can provide useful information to stakeholders and regulators to decrease the incidence of fraud.

Given the limited published work on fraud victimization in Greece, the current paper seeks to investigate a typology of fraud and preventative and investigative methods used once fraud has been reported to management. Such findings will assist both the regulators (e.g. Stock Exchange, Professional Associations) and practitioners (external, internal, fraud auditors and forensic accountants) to implement legislation, regulation, adequate internal controls and a corporate culture in minimizing the impact of fraud on the victims. Organisations and in particular audit committees ought to carry out routine fraud risk assessments; thus, information derived from the present study will assist them in identifying high risk areas to concentrate their testing in.

Literature review

Although many researchers describe fraud and financial crimes as “invisible crimes” (Jupp et al., 1999), these have common characteristics when they are committed (Croall, 1999; Pickett and Pickett, 2002). Despite being criticized for their reliability,
victimization studies present a more realistic and detailed information about economic crimes, as they are concerned with “the dark figure of crime”, whilst official police statistics from authorities do not (Smith, 1999). The first victimization studies were carried out in the 1960s and 1970s (Wilcox, 2010) and were influenced by the growth of feminist theory and later victimology. They emphasized the importance of victims’ view in relation to their victimization and the “invisibility” in official statistics of certain types of crime (UNODC, 2010). Seeking to understand crimes not well identified by police statistics and other authorities, like fraud and financial crimes, these surveys are becoming an important research tool (more effectively in combination with other methods) to assist in identifying aspects of crime and victimization that could not be easily captured by the administrative sources.

State of art
Fraud victimization surveys are carried out predominately by Big 4 accounting firms (PwC, Ernst & Young, KPMG and Deloitte) and other organisations (e.g. ACFE, Kroll, etc.) in an effort to raise awareness and build capacity on fraud, as well as to advocate for enhanced fraud auditing procedures. Given the financial crisis and the unstable global economic climate, many governments have undertaken to reduce economic crime by implementing legislation and harsher penalties for fraud offenders. At the same time, organisations have been using forensic accountants and fraud auditors in an effort to prevent and detect fraud. In addition, companies, bearing in mind the economic scandals and the economic impact on their survival, they have implemented measures and procedures to reduce fraud if not eradicate it (Association of Certified Fraud Examiners, 2009; Levi and Smith, 2011; Ryder, 2014). However, given the persistent economic crisis, one expects fraud to be increasing rather than decreasing.

Recent studies (Kroll, 2014) show that organizations are victimized more frequently as time passes, whereas the level of fraud increased in the past 12 months, reversing recent trends. Overall, 70 per cent of companies reported having suffered from at least one type of fraud in the past year, an increase of 9 per cent from the previous poll (Kroll, 2014). Moreover, in a similar fraud study by PricewaterhouseCoopers (2014), 37 per cent of respondents had been victimized by fraudsters, an increase of 3 per cent from the 2011 survey and 7 per cent from 2009. Whether, of course, the increases found are real to some extent also reflect increases in fraud-victimization reportability, an issue which further research can investigate.

In addition to fraud, corruption and specifically bribery have been reported in relevant fraud studies as also increasing rapidly and having a significant impact on businesses (Association of Certified Fraud Examiners, 2014; Ernst & Young, 2013; PricewaterhouseCoopers, 2014). Similarly, financial statement manipulation and asset misappropriation are still on the top of business risks relating to fraud. Additionally, business attention is diverted in recent years to cyber crime which is considered as a new threat to organizations created by the increasing use and reliance on technology (Ernst & Young, 2014; PricewaterhouseCoopers, 2014). Guillot (2013, pp. 44) has stated that “IT fraud continues to increase in variety, frequency, and sophistication” with growing risks from social media.

Corporate governance refers to the policies and procedures undertaken by the Board and management in controlling and directing a business. In ensuring the effective implementation of corporate governance, it is also important that one looks at the
implementation of codes of conduct, as well as the effective use of audit committees in preventing fraud. According to Razali and Arshad (2014), effective corporate governance measures are essential to preventing corporate scandals, fraud and potential civil and criminal liability. Razali and Arshad’s (2014) content analysis study of annual reports of 227 publicly listed companies in Malaysia have found that the effectiveness of corporate governance structure reduces the likelihood of fraudulent financial reporting. In addition, Vafeas (2005) shows that the measures of audit committee and board structure are related to earnings quality in a manner that is generally consistent with the predictions of agency theory, whilst Harrast and Mason-Olsen (2007), as well as many other US researchers (Dechow et al., 1996; Beasley et al., 2000; McMullen, 1996), remarked that audit committees help deter management fraud and enhance the integrity of financial reporting. For their part, Barlaup et al. (2009) and PricewaterhouseCoopers (2012) have indicated that having a code of conduct and/or ethical guidelines, as well as compliance programs, are critical in the effective mitigation of risk as far as fraud, corruption and ethical behaviour are concerned.

Proactive fraud prevention and detection controls are a vital part in managing the risk of fraud. Whilst external audits are considered as the most common control enacted by victim organizations, their contribution in fraud detection is worthless (Association of Certified Fraud Examiners, 2014), as the external auditor’s primary role is to form an opinion on the financial statements and not to detect fraud (Krambia-Kapardis, 2001) but to act as a “watchdog not a bloodhound” (Lord Justice Lopes in Re Kingston Cotton Mills Co., 1896). The fraud victimization studies in recent years have shown that fraud is normally reported via anonymous whistleblowers or the use of hotlines (Association of Certified Fraud Examiners, 2014; Bussmann and Werle, 2006; Kroll, 2014; PricewaterhouseCoopers, 2014), illustrating the usefulness of whistle-blowing protection legislation. Such legislation was only recently enacted[4] in Greece.

Association of Certified Fraud Examiners (2014) and Kroll (2014) have found that organizations are more frequently victimized by internal fraudsters (i.e. employee or manager) and rarely by external party (customers, suppliers, etc.). Similar findings were found by Krambia-Kapardis and Zopiatis (2010) and Peltier-Rivest and Lanoue (2012), where the perpetrators in most of the cases were “internal” with the vast majority of them being low-level employees. Specific studies (Gill and Goldstraw-White, 2010; Hollinger and Adams, 2006) were also carried out on employee fraud. Interestingly enough, the hierarchical position held by a perpetrator may facilitate certain types of fraud (Holtfreter, 2005). More specifically, Krambia-Kapardis and Zopiatis (2010) found that theft of cash, petty cash fraud and theft of assets were the three most common types of fraud committed by employees, whilst conflict of interest, unnecessary purchases and window dressing/financial statement manipulation were revealed as the three most common types of fraud involving managerial-level employees. It is worth pointing out that where the perpetrator holds management position, there is a strong correlation with fraud losses, as the “manager-fraudster” has greater opportunity than an employee to override internal controls and commit fraud (Peltier-Rivest and Lanoue, 2012). In addition, subordinates very rarely question the authority of their superior, thus allowing the fraud to continue for a longer period of time.

In looking at fraud committed by external parties, normally collusion with an insider fraudster makes the fraud being committed more difficult to uncover (KPMG, 2013a). Moreover, studies illustrated that external fraudsters are still the main perpetrators of
economic crime for the majority of financial service organisations (57 per cent in 2014 and 60 per cent in 2011)[5]. Krambia-Kapardis and Zopiatis (2010) identified that the three most common types of fraud committed by external parties were dishonoured cheques or cheque forgery, poor quality of goods and services provided and theft of assets.

Considering the size of the organization victimized, Association of Certified Fraud Examiners (2014) found that small companies (with less than 100 employees) were victimized in greater percentage than larger one. The reasons provided by some researchers (Hanno and Hughes, 1999; Tysiak, 2012) is that small businesses are less likely to be audited because they are small and are not publicly listed requiring an external audit. Furthermore, smaller organizations would probably not have segregation of duties and other internal controls implemented because of the smaller number of employees. Despite the fact that the magnitude in monetary terms of the fraud loss is higher in larger organisations, the impact of fraud in SMEs[6] is greater than big companies, and in some cases, it may even jeopardize the sustainability of the organisation. In fact, a study in California[7] has found that 30 per cent of businesses fail because of employee theft. Furthermore, Association of Certified Fraud Examiners (2014) stated that small companies face different fraud risks than larger companies, such as cheque tampering schemes, payroll fraud (Bressler and Bressler, 2007) and cash larceny occurring more frequently in small companies, whilst corruption remains a significant threat to larger industries.

In considering fraud-prone industries, different type of fraud is found to be committed in different industries. Greenlee et al. (2007) found that asset misappropriations (in particular cash theft) comprise more than 97 per cent of all reported frauds, in non-profit organizations in Australia. Similarly, Krambia-Kapardis and Zopiatis (2010) found that individuals working in the automotive industry are more vulnerable to receiving corruption/bribery payments and invoice manipulation in comparison to individuals working in the semi-government sector, the banking and the retail/wholesale industries. The same study found that third-party fraud, in the form of dishonoured cheques or cheque forgery happened more commonly in the retail/wholesale companies compared to other industries; industrial espionage posed a problem for the manufacturing industry; and, finally, poor quality of goods/services provided and price fixing constituted a major problem for the health industry.

Bussmann and Werle (2006), in their global fraud survey, found that organizations, generally launched an internal investigation, commissioned an external investigator or called in law enforcement officers when fraud was reported to them. Similar findings are reported by PricewaterhouseCoopers (2014) and Association of Certified Fraud Examiners (2014). However, Krambia-Kapardis and Zopiatis (2010), in their study, in Cyprus, found that internal investigation, immediate dismissal and disciplinary actions, all describing internal reactive procedures, were the most likely responses when fraud was detected and on only rare occasions would they report the incident to the police or other authorities. The difference in the approach taken would relate to cultural issues where in Cyprus and perhaps Greece, as opposed to other parts of the world, the fraud victimized company would opt to address the matter internally, as it is a small country and any involvement of external authorities or investigators would especially affect the reputation of the company, its employees and the fraudster.
Another parameter worth considering is the post-fraud detection priority of the victimized companies (Association of Certified Fraud Examiners, 2014; PricewaterhouseCoopers, 2014), which is no other but to recover the loss incurred because of fraud. Interestingly enough, only 14 per cent of victim organizations had been successful in a full recovery (Association of Certified Fraud Examiners, 2014). More specifically, in 58 per cent of cases reported, the victim organizations had not been successful in recovering the loss incurred from the fraud being committed.

State of practice – Greece. Fraud victimisation surveys pertaining to Greece were carried out by PricewaterhouseCoopers (2011) and Deloitte (2014). Deloitte (2014) noted that 62 per cent of the respondents had been victimized by fraudsters, whereas an earlier study by PricewaterhouseCoopers (2011) found that only 14 per cent of respondents had been victimised by fraud offenders. The reason for the fraud victimisation difference in the three-year gap between the two studies could either be that fraud victims were more willing to admit to having been victims to a fraud in 2011 or that fraud had increased from 2011 to 2014. According to the type of fraud committed, PricewaterhouseCoopers (2011) found asset misappropriation and cyber crime were the main types of fraud being committed against Greek organisations. Similarly, Vlachos et al. (2011) found that computer-related crimes are increasing in Greece. Furthermore, according to PricewaterhouseCoopers (2011), asset misappropriation, unfair competition, cyber crime and bribery/corruption were the most common “fraud fears” that Greek companies had. A finding slightly different to PricewaterhouseCoopers (2011), where fraudulent claims lending/credit, corruption and bribery, accounting fraud and theft of business information, as well as asset misappropriation, were the most commonly fraud schemes in Greece at the time.

Corruption and bribery seriously harm the economy and society as a whole. Both internationally and in Europe, many countries suffer from deep-rooted corruption that hampers economic development, undermines democracy and damages social justice and the rule of law (European Commission, 2014). Greece is not immune to this type of crime. Although Greece’s ranking by Transparency International’s Greece (2014) index indicates that Greece has improved in its global position from 80th in 2010 to 69th in 2014, Greece maintained its last position in the EU ranking. Corruption is widespread and remains one of the main problems in the Greek business environment, affecting economic growth and affecting on democracy. Interestingly enough:

Eighty nine per cent of Greek businesses (EU average: 73 per cent) and 80 per cent of the respondents from the general population (EU average: 69 per cent) believe that favouritism and corruption hamper business competition in Greece; 92 per cent of companies consider that bribery and the use of connections is often the easiest way to obtain certain public services (EU average: 69 per cent); 66 per cent of business people (EU average: 43 per cent) believe that corruption is a problem for their company when doing business in Greece and 67 per cent consider patronage and nepotism an obstacle (EU average: 41 per cent) (EU Commission, 2014, p. 3).

Other issues addressed in fraud victimisation studies relate to the identity of the fraud offender and the whistleblower. PricewaterhouseCoopers (2011) reported that the fraudster was predominantly “internal” to the fraud victim organisation and the fraud was identified by the internal auditor or accidentally by a whistleblower. Deloitte (2014), as well as Association of Certified Fraud Examiners (2014), estimated that the cost of
fraud is 5 per cent of the annual revenue, whilst PricewaterhouseCoopers (2011) noted that the organization’s losses doubled in two years. Furthermore, it was found that despite the fact that Greek fraud-victimised companies had in place measures for preventing, detecting and responding to fraud, fraud had caused huge losses to the victims. As one would expect, the preventative measures are more evident in large Greek companies, rather than in SMEs, where in the latter, it is easier for fraud to occur because they are family-owned enterprises that lack the controls to protect themselves against potential fraud” (KPMG, 2013a, p. 10).

As previously stated, many studies indicate that corporate governance plays a significant role in fraud prevention. The economic crisis in Greece highlighted the need for a stricter regulatory framework of the capital markets, as well as compliance with internationally accepted codes and standards, and the implementation of corporate governance principles and guidelines in the business environment (Nerantzidis and Filos, 2014). Many surveys have identified problematic issues regarding the efficiency of corporate governance in Greek companies (Bekiris, 2013; Grose et al., 2014; Spanos et al., 2008), whilst others (Chalevas and Tzovas, 2010) noted that corporate governance mechanisms have no impact on firms’ effectiveness and earnings manipulation. Thus, one can question the effectiveness of corporate governance if used alone as a tool in combating fraud, at least in Greece.

Whilst the official Hellenic Police statistics for 2013 indicate that the amount of fraud cases (including counterfeit) reported to the authorities were 5,379, as opposed to 6,124 in 2012 (Hellenic Police, 2014), it is unknown how many cases were actually prosecuted. The complexity of the cases and the lack of visibility by the victim means that fewer cases are reported and even less are prosecuted. The present study also addresses what procedures the victimized companies follow once they have suspicion of fraud having occurred. Perhaps the Greek companies opt for measures like dealing with the fraudster internally rather than report the case to the police, as done in Cyprus (Krambia-Kapardis and Zopias, 2010).

For the authorities, the auditors, as well as the forensic accountants to be in a position to address fraud effectively in Greece, it was considered imperative that a company fraud-victimisation survey be carried out. The survey aims to investigate the typology of fraud committed in Greece and the proactive and reactive methods undertaken by victim organisations during the financial crisis years of 2011-2014 once fraud surfaced.

**Methodology**

Utilising a questionnaire developed by Krambia-Kapardis and Zopias (2010) and having pilot tested it for its usefulness and reliability in Greece, the questionnaire was emailed in March of 2014 to a randomly selected sample of 750 members of the Hellenic Associations of Certified Fraud Examiners (ACFE), the Hellenic Institute of Internal Auditors (Hellenic-IIA) and the Institute of Certified Public Accountants of Greece. Each association was asked to randomly select and email questionnaires to 250 of its members.

The questionnaire comprised three parts. Part A gathered demographic data, Part B related to the typology of fraud being committed, as well as actions taken by the company following the discovery of the fraud, whilst Part C related to the profile of the fraudster. The data analysis presented in this paper relates only to the first two parts (Parts A and B) of the questionnaire.
As stated earlier, the primary objective of the current study has been to ascertain the typology of fraud being committed against Greek companies to enable the external, internal and fraud auditors, as well as forensic accountants, to address it more effectively both as far as detection, as well as the prevention, is concerned. In addition, the researchers wanted to identify the correlation if any between the implementation of a code of conduct and/or an audit committee and fraud prevention, as well as actions taken by the victims post-reporting of suspicion of fraud. More specifically, the research questions are:

**RQ1.** Does the existence of a code of conduct and/or audit committee in Greek companies act as a deterrent to fraud?

**RQ2.** Does the typology of fraud being committed against Greek companies differ from other countries?

**RQ3.** Are actions taken by company fraud victims after the reporting of suspicion of fraud differs from other countries?

**RQ4.** Are preventative measures in responding to fraud different from other countries?

Descriptive and inferential statistics, namely frequencies and Pearson chi-square test ($\chi^2$) and Monte-Carlo simulation method as tests of independence, were utilized to analyze the data and answer the research questions.

**Findings**

A total of 123 usable responses were completed; thus, the response rate is 16.4 per cent. Considering the low response rate experienced by surveys which investigate “sensitive” issues (Cook et al., 2000; Edwards et al., 2002; Keegan and Lucas, 2005 and Weimiao and Zheng, 2010), one would argue that the overall response rate of 16.4 per cent can be considered as satisfactory.

The demographic characteristics of the survey respondents (Table I) illustrate a wide range of respondents holding various positions with the majority (59 per cent) being internal auditors, from various industries, covering both the private and public sector, large- and medium-sized firms.

In responding to **RQ1** in an effort to find whether companies which have implemented a Code of Conduct and/or Audit Committee had fewer incidents of fraud, it was found that the Greek companies had implemented either a code of conduct or an audit committee in significant percentage of 76.4 ($n = 94$) and 72.4 ($n = 89$), respectively. Using chi-square test ($\chi^2$) and Monte-Carlo simulation method as tests of independence, no significant difference was found between the companies that were victimized and those that were not as far as having a code of conduct is concerned, illustrating that having a code of conduct is not a variable that can prevent fraud from being committed. Dewi (2013) noted that an effective audit committee correlates with having less fraud if the members of the audit committee have the expertise and are active in their role. Thus, one would need to study in future research the effectiveness of audit committee *vis-à-vis* the composition, expertise of each member and degree of commitment undertaken by them in detecting, preventing and investigating fraud. No significant difference was found between the companies that had been victimized and those that had not as far as having an audit committee is concerned. Future research should investigate the
comprehensiveness of the codes of conduct implemented, as well as whether they were enforced effectively and do not simply exist on paper. Finally, the mere existence of audit committees is not sufficient to deter or prevent fraud. One would need to look at the audit committee’s composition and terms of reference to determine if it has had a useful role in preventing and investigating fraud in a company.

It is worth noting that companies with no code of conduct were significantly more likely to have experienced corruption and specifically bribery (Asym. Sign. = 0.00; $\chi^2 = 12.84$), as well as window dressing (Asym. Sign. = 0.01; $\chi^2 = 11.98$) by managers. In examining the effect of audit committee regarding the type of fraud committed, no significant difference was found. This finding also warrants further research as one would need to investigate if the code of conduct had made specific reference to the giving or receiving of bribery, conflict of interest, illegal extortion or other forms of corruption.

It is evident from the fraud victimization surveys of Ernst & Young (2013) and PricewaterhouseCoopers (2014), which are in agreement with the present study in Greece (Table II), that false financial reporting/accounting fraud, theft of data, corruption/bribery, money laundering and theft of cash are considered as the types of fraud the Greek companies had fallen victims to during the years (2011-2014). As one would expect at times of financial hardship, one is looking for easy access to cash.

Considering the size of the victimized company, significant differences were found to exist in industrial espionage (Exact. Sig. (two-side) = 0.033), counterfeit (Asym. Sign. = 0.02; $\chi^2 = 10.041$) and theft of cash (Asym. Sign. = 0.014; $\chi^2 = 5.984$), with industrial espionage posing a higher risk for larger organizations, whilst the other frauds, stated

<table>
<thead>
<tr>
<th>Demographics of respondents</th>
<th>Frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positions of respondents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal auditor/advisory</td>
<td>72</td>
<td>58.5</td>
</tr>
<tr>
<td>Chief accountant/external audit</td>
<td>19</td>
<td>15.4</td>
</tr>
<tr>
<td>CEO/CFO and other board member</td>
<td>13</td>
<td>10.6</td>
</tr>
<tr>
<td>Compliance officer and company secretary</td>
<td>12</td>
<td>9.8</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>5.7</td>
</tr>
<tr>
<td><strong>Type of organization–industry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank and insurance company</td>
<td>37</td>
<td>30.1</td>
</tr>
<tr>
<td>Other services</td>
<td>28</td>
<td>22.8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>21</td>
<td>17.1</td>
</tr>
<tr>
<td>Accounting firm</td>
<td>15</td>
<td>12.2</td>
</tr>
<tr>
<td>Retail and wholesale</td>
<td>11</td>
<td>8.9</td>
</tr>
<tr>
<td>Hotel, automobility industry and construction corporation</td>
<td>11</td>
<td>8.9</td>
</tr>
<tr>
<td><strong>Legal status of organization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private corporation</td>
<td>69</td>
<td>56.1</td>
</tr>
<tr>
<td>Public and listed</td>
<td>36</td>
<td>29.3</td>
</tr>
<tr>
<td>Public but not listed</td>
<td>18</td>
<td>14.6</td>
</tr>
<tr>
<td><strong>Size of organization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large size</td>
<td>82</td>
<td>66.7</td>
</tr>
<tr>
<td>Medium/small size (SMEs)</td>
<td>41</td>
<td>33.3</td>
</tr>
</tbody>
</table>

Table I. Demographics of respondents ($N = 123$)
above, threatened the SMEs. Thus, auditors ought to plan their audit accordingly and management ought to implement measures to prevent those types of frauds depending on the size of the company.

Taking into consideration the type of industry, the only significant difference found relates to money laundering (Asym. Sign. = 0.00; \( \chi^2 = 31.385 \)) and theft of cash (Exact. Sig. (two-side) = 0.033), whereby, as one would expect, threatened the banks and insurance companies more than the manufacture and retail/wholesale industry.

Recent fraud victimization surveys (Association of Certified Fraud Examiners, 2014; Kroll, 2014; PricewaterhouseCoopers, 2014) indicate that fraud remains a crime committed by an offender who works inside an organization rather than a third person. Whilst all three studies have found that lower-level employees are the “fraud leaders”, they have also found that the cost of employee fraud is lower than the cost of management fraud. Management at the higher levels of the hierarchy tend to be involved in frauds that require greater access to organizational assets and are better positioned to evade or override controls than lower-level employees. Furthermore, higher-level fraudsters are typically in a better position to circumvent controls, and as it generally takes longer for victimized companies to uncover these schemes, the losses incurred are of higher magnitude than employee fraud (Association of Certified Fraud Examiners, 2014). This finding is also supported in the present study, where the number of incidents of employee frauds was higher than management fraud, but the magnitude of the cost was lower in the former than the latter.

Bussmann and Werle (2006), summarizing international fraud victimization studies, have identified the following seven types of economic crime being perpetrated against victimized companies in other countries:

1. asset misappropriation (e.g. theft, embezzlement);
2. false pretenses;
3. financial misrepresentation;
4. corruption and bribery;
5. insider trading;

<table>
<thead>
<tr>
<th>Types of fraud with the greatest risk in organizations*</th>
<th>N</th>
<th>% of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>False financial reporting/accounting fraud</td>
<td>68</td>
<td>55.3</td>
</tr>
<tr>
<td>Theft of data/confidential information/cyber crime</td>
<td>65</td>
<td>52.8</td>
</tr>
<tr>
<td>Corruption and bribery</td>
<td>63</td>
<td>51.2</td>
</tr>
<tr>
<td>Money laundering</td>
<td>60</td>
<td>48.8</td>
</tr>
<tr>
<td>Theft of cash</td>
<td>54</td>
<td>43.9</td>
</tr>
<tr>
<td>Breach of secrets</td>
<td>42</td>
<td>34.1</td>
</tr>
<tr>
<td>Embezzlement</td>
<td>37</td>
<td>30.1</td>
</tr>
<tr>
<td>Insider trading</td>
<td>29</td>
<td>23.6</td>
</tr>
<tr>
<td>Theft of other assets</td>
<td>29</td>
<td>23.6</td>
</tr>
<tr>
<td>Counterfeit</td>
<td>24</td>
<td>19.5</td>
</tr>
<tr>
<td>Industrial espionage</td>
<td>14</td>
<td>11.4</td>
</tr>
<tr>
<td>Other fraud</td>
<td>2</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Note: *Multiple response questions N = 123 (487 responses)
On the other hand, Gottschalk (2010) suggests a classification of financial crime into: corruption, fraud, theft and manipulation. Association of Certified Fraud Examiners (2014) categorized occupational frauds into three categories: asset misappropriation, corruption and financial statement fraud, with each category further broken down into several sub-categories and micro categories, resulting to occupational fraud and abuse classification system. In the present study, it was decided to concentrate on investigating management, employee and third-party fraud.

In response to RQ2, regarding the typology of fraud, the study (Table III) illustrates that the conflict of interest, theft of assets, theft of cash (through false claims) and corruption/bribery (taken) were the most common types of fraud committed by employees, whilst managers undertake window dressing/statement manipulation, conflict of interest, expense accounts and unnecessary purchases. Finally, when it comes to external parties such as customers and suppliers, the most common types of fraud committed were dishonoured cheques or cheque forgery, poor quality of goods and services provided, as well as money laundering. These findings are very similar to the study carried out in Cyprus (Krambia-Kapardis and Zopiatis, 2010).

It was also investigated whether there was a relationship between employee and management fraud and the size of the organization or the type of industry. It was found

![](https://www.ats.ucla.edu/stat/stata/faq/Table3.png)

Notes: * Multiple response: employees (308 responses); management (286 responses); third parties (290 responses)
that (Asymp. Sign. (two side) = 0.004; $\chi^2 = 8.448$) large organizations were significantly more likely to have fallen victims to employee theft of cash through false claims. Furthermore, significant difference was found in SMEs, where management was involved in offering bribes (Asymp. Sign. (two side) = 0.009; $\chi^2 = 6.845$) and in window dressing (Asymp. Sign. (two side) = 0.003; $\chi^2 = 9.132$).

When investigating industries and fraud types committed by employees and management, two differences where revealed. For employee fraud, significant differences exist on the variable of corruption/bribery received (Exact. Sign. (two side) = 0.003) and for management fraud, significant difference was found only for window dressing (Exact. Sign. (two side) = 0.017). More specifically, employees working in banking/insurance industries were found to be more vulnerable to corruption/bribery (receiving) in comparison to employees from other industries. When it comes to window dressing committed by managers, the manufacturing industry was found to be the most prone towards such fraud.

Comparing the types of fraud committed in Greece with those in Cyprus (Krambia-Kapardis and Zopiatis, 2010), some differences are noticed. They relate to the size of the companies in question and the fact that, generally speaking, companies in Greece are larger than in Cyprus. In addition, the Cypriot legal system is based on the English Common Law, whilst the Greek one is based on Civil Law.

According to Association of Certified Fraud Examiners (2014), the majority of victim organizations lacked the appropriate internal controls to prevent fraud from occurring. In this context, Krambia-Kapardis (2003) found that opportunities which made it possible for fraud to take place were:

- the weakness of internal controls;
- the external criminological factors;
- the type of company;
- the internal criminological factors; and
- collusion.

Looking for the opportunity provided for fraud in the Greek business environment, it was found that weak internal controls, type of business and collusion were the three common issues believed to have facilitated the fraud commitment. Comparing the findings to the size of the company and type of industry, significant differences exist in weak IT security/access controls for both comparing groups (Asymp. Sign. (two side) = 0.019; $\chi^2 = 5.503$ and Exact. Sign. (two side) = 0.028). The weakness of IT security/access controls tend to be evident more in large companies, accounting, banking and insurance companies as opposed to other industries.

RQ3 related to the most common actions taken by Greek companies when fraud was discovered and whether the fraudster position in the organizational level (management level) would influence the steps taken by the victim. It was found that internal investigation disciplinary actions, audit committee review and immediate dismissal were the most likely procedures taken when fraud was revealed (Table IV). It is worth noting that reporting fraud to police or to other regulatory authorities is not an action adopted by the victimized company, some preferring not even to report the fraud. A similar finding was found by PricewaterhouseCoopers (2011), where the Greek companies preferred to keep secret the fraud and find solutions internally (i.e. internal
investigation, recovery of losses, fraudster dismissal) and rarely did they report the fraud. It was also found that in occasions where the fraudster was external to the organization or did not cooperate in the recovery of assets, the victim would opt to report to the police, a finding also obtained in the Cypriot study by Krambia-Kapardis and Zopiatis (2010).

Furthermore, investigating these findings with the size of the organization as a variable, significant differences were found for internal investigation (Asymp. Sign. (two side) = 0.001; χ² = 10.464), disciplinary actions (Asymp. Sign. (two side) = 0.002; χ² = 9.371), audit committee review (Asymp. Sign. (two side) = 0.013; χ² = 6.123) and immediate dismissal (Asymp. Sign. (two side) = 0.049; χ² = 3.844). Thus, indicating that the larger companies, as opposed to SMEs, were more likely to carry out internal investigations, the audit committee would carry out review of the incident and impose disciplinary actions or immediate dismissal.

Respondents also were asked to answer if the actions taken when the fraud was revealed were affected by the fraudster’s organizational position. It was found that where the fraudster was a senior manager, the action was different to when the fraudster was a low-level employee.

Studies (Association of Certified Fraud Examiners; 2014; PricewaterhouseCoopers (2011); PricewaterhouseCoopers, 2014) in other countries have shown that the priority of the victimized companies is to recover the losses, a finding not obtained in the present study in Greece. The study found that Greek companies have difficulties (only 30 per cent) to recover the fraud losses; thus, the victim opts for other actions post-fraud investigation. Because of cultural issues where showing and shaming, as well as reputational damage, are important elements, Greek companies choose to silently close off cases rather than proceed legally against the fraudster (where their reputation, as well as the fraudster’s, will be damaged), a finding also noted by PricewaterhouseCoopers (2011). Association of Certified Fraud Examiners (2014) has found that there are other “undercover” costs affecting the survival of the victim, after

<table>
<thead>
<tr>
<th>Actions taken by organizations once fraud was identified</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal investigation</td>
<td>95</td>
<td>17.4</td>
</tr>
<tr>
<td>Disciplinary action</td>
<td>63</td>
<td>11.6</td>
</tr>
<tr>
<td>Reviewed by the audit committee</td>
<td>49</td>
<td>9.0</td>
</tr>
<tr>
<td>Immediate dismissal</td>
<td>48</td>
<td>8.8</td>
</tr>
<tr>
<td>Civil action for recovery</td>
<td>47</td>
<td>8.6</td>
</tr>
<tr>
<td>Warning/reprimand</td>
<td>30</td>
<td>5.5</td>
</tr>
<tr>
<td>Referred to appropriate authority</td>
<td>27</td>
<td>5.0</td>
</tr>
<tr>
<td>Voluntary resignation/retirement</td>
<td>27</td>
<td>5.0</td>
</tr>
<tr>
<td>Settled before the courts</td>
<td>24</td>
<td>4.4</td>
</tr>
<tr>
<td>Settled out of court</td>
<td>24</td>
<td>4.4</td>
</tr>
<tr>
<td>Negotiated settlement</td>
<td>22</td>
<td>4.0</td>
</tr>
<tr>
<td>External investigation</td>
<td>21</td>
<td>3.9</td>
</tr>
<tr>
<td>Report to the police</td>
<td>21</td>
<td>3.9</td>
</tr>
<tr>
<td>Insurance claim</td>
<td>19</td>
<td>3.5</td>
</tr>
<tr>
<td>Encourages individual to resign</td>
<td>15</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Note: *Multiple responses question: N = 123 (545 responses)
the fraud incident. Table V illustrates that the company’s reputation, staff morale, impaired business relations and loss of share market are important elements that influence the victim’s action after the fraud discovery. This explains, therefore, that the Greek victim organization would carry out internal investigation rather than tarnish their reputation and proceed legally, a finding also reported in the Cypriot study (Krambia-Kapardis and Zopiatis, 2010).

No study on fraud victimization would be complete without considering the preventative measures undertaken by the victim (RQ4). The participants appear to be cognizant of the importance of a well-implemented code of conduct, a comprehensive IT security policy and a comprehensive fraud and misconduct risk assessment as measures in preventing fraud. As far as measures that ought to be taken once a suspicion is reported, the participants find the use of auditing and monitoring plans, as well as the use of hotlines, for reporting to be useful. Furthermore, the participants appear to be well versed with the measures (Association of Certified Fraud Examiners, 2014) they ought to implement to avoid future fraud victimization. However, it is unknown and warrants future research why they did not implement and enforce such measures prior to victimization.

Policy Implications and conclusions
The present study found that 86.9 per cent of the respondents had fallen victims to fraudsters in the past three years, a period that the financial crisis had affected all companies and individuals in Greece. This victimization rate is significantly higher than the 50 per cent reported by Bussmann and Werle (2006) in their international study, higher than the 50 per cent mentioned by Surveillgence et al. (2011) in Czech Republic and Slovakia but similar to the Cypriot study by Krambia-Kapardis and Zopiatis (2010).

The reasons explaining the high percentage of fraud victimization in the two countries confirm the Krambia-Kapardis (2001) ROP model according to which:

- by deciding to either dismissing quietly or simply taking a disciplinary action against the fraudster, and not reporting the matter to the police, the management of the victimized company provides the fraudster with the rationalization/justification that the crime committed is not a serious one and the sanction is not a deterrent;
- opportunities to commit the fraud are provided to the potential fraudster through weak internal controls; and

<table>
<thead>
<tr>
<th>Socio-economic factors affecting a victimized organization</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation</td>
<td>93</td>
<td>31.2</td>
</tr>
<tr>
<td>Staff morale</td>
<td>58</td>
<td>19.5</td>
</tr>
<tr>
<td>Impaired business relations</td>
<td>41</td>
<td>13.8</td>
</tr>
<tr>
<td>Loss of share market</td>
<td>33</td>
<td>11.1</td>
</tr>
<tr>
<td>Impaired regulator relations</td>
<td>28</td>
<td>9.4</td>
</tr>
<tr>
<td>Fear of business disruption</td>
<td>21</td>
<td>7.0</td>
</tr>
<tr>
<td>Share price</td>
<td>16</td>
<td>5.4</td>
</tr>
<tr>
<td>None</td>
<td>8</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Table V.
Factors affected by fraud in victimized organizations*

*Multiple responses question (N = 123, responses = 298)
• a crime-prone person facing financial difficulties is motivated and decides to commit the fraud.

Despite the fact that the majority (80 per cent) of companies in the present survey had in place a code of conduct, as well as an audit committee, they had fallen victim to fraud. This finding contradicts the work of Razali and Arshad (2014), Harrast and Mason-Olsen (2007) and Uzun et al. (2004). Thus, one needs to:

• investigate whether the codes of conduct were adequately communicated and implemented;
• assess the effectiveness and terms of reference, as well as the composition of the audit committees; and
• whether other exogenous factors such as the economic crisis transformed a system of non-compliance (Nerantzidis and Filos, 2014; Grose et al., 2014).

The main types of fraud committed were false reporting, theft of data, corruption, money laundering and theft of cash with the banking and insurance industry facing money laundering and theft of cash. Large companies experienced industrial espionage, whilst SMEs experienced theft of cash and counterfeit. Window dressing was undertaken by management, whilst employee fraud concentrated on theft of cash and theft of assets. The typology of fraud in Greece is the same as one would expect, as the country has been facing a serious financial crisis for a number of years now where employees need cash and management have a motive to window dress their accounts in an effort to increase capital and finances. The financial crisis followed 14 years of continuous economic expansion, had GDP shrinking to its 2002 level (Kondilis et al., 2013), population living under extreme financial pressure with 27.7 per cent of its population at risk of poverty and social exclusion. These consequences had a negative impact on public health of the Greek population trying to make ends meet (Nena et al., 2014) and of course created a motive for committing a fraud.

As Krambia-Kapardis and Zopiatis (2010) noted, once fraud is reported, the Greek and Cypriot fraud victims choose to address the crime internally rather than expose themselves and the victim to legal or other external investigation, which will tarnish their reputation. This method also minimizes indirect non-financial costs such as employee morale, corporate and brand reputation and business relations, a finding supported by PricewaterhouseCoopers (2011).

Although Greek companies are aware of fraud risk and its consequences through establishing and developing specific anti-fraud procedures and systems, fraud remains pervasive. Thus, the study results show that the controls implemented will not be sufficient to mitigate the risk of economic crime. As prevention is better than cure, proactive actions at the prevention stage should be undertaken by regulators and Board of Directors. Krambia-Kapardis and Zopiatis (2010, p. 207) propose that:

[...] companies ought to be encouraged not only to actually implement a code of conduct and set up an audit committee but also, to ensure the former is properly enforced and the latter is encouraged to assume its role and responsibilities as set out in the relevant legislation and the Code of Corporate Governance.

Fraud and economic crime, in general, are not going to be completely eliminated, no matter what measures and procedures are adopted and implemented by business, as the
fraudster will always find the opportunity (having the motive and using rationalizations) to commit it. Thus, the development of a corporate culture with an emphasis on ethical behaviour and the appropriate tone at the top could act as a deterrent to fraud being committed.

Despite the low response rate, the survey has revealed that company fraud victimization needs to be addressed by stakeholders to reduce its incidence. Given the lack of trust in businesses (PricewaterhouseCoopers, 2014), senior management ought to adopt a role model approach in setting ethical behaviour, with the appropriate “Tone from the Top” and the determined proactive and reactive measures which will prevent fraud from being committed.

Notes
3. For example, tax evasion/shadow economy, reduction of economic growth, investments, society poverty, etc.
4. Legislation N. 4254/2014 (85/7.4.2014) New legislation Protecting the Whistleblower for Corruption Cases www.transparency.gr/wp-content/uploads/2014/04/%CE%9D%CE%95%CE%95%CE%A3-%CE%94%CE%99%CE%91%CE%A4%CE%91%CE%9E%CE%95%CE%99%CE%A3_-WHISTLEBLOWING1.pdf and www.transparency.gr/wp-content/uploads/2014/04/%CE%9D%CE%95%CE%95%CE%A3-%CE%94%CE%99%CE%91%CE%A4%CE%91%CE%9E%CE%95%CE%99%CE%A3_-WHISTLEBLOWING1.pdf (accessed 9 February 2015).
6. According to the EU Commission, 2005, the definition of what constitutes SMEs are those with less than 250 employees and annual turnover less than €50m or less than €43 annual balance sheet total.

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Association of Certified Fraud Examiners (2014), Report to the Nation: Occupational Fraud and Abuse, Association of Certified Fraud Examiners, Austin, TX.


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Further reading


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