ACCOUNTING FRAUD AND CHARACTERISTICS OF COMPANY EXECUTIVES: AN EMPIRICAL INVESTIGATION

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Abstract: *This study examines accounting fraud in relation to the characteristics of company executives. The study portrays the degree to which company as well as personal motives could urge an executive to commit fraud. Subsequently, we attempt to identify the degree to which certain socio-economic factors and the existence of strong internal audit mechanisms act as deterrence agents.*
Furthermore, we investigate the personal financial gain in relation to annual income as a motivator to commit fraud. Finally, we examine the optimal imprisonment duration as a deterrent and the overall probability to commit fraud.
The research method was based in the distribution of a questionnaire and took place in the city of Thessaloniki and the region of West Macedonia and Thessaly. The participants were executives in the banking, financial and insurance sector.
Our findings show that it is mostly personal factors that motivate an executive to commit fraud, but the fear of immediate legal sanctions and the existence of strong internal audit mechanisms are effective deterrence agents.

Keywords: *accounting fraud, company executives, incentives of fraud, imprisonment.*

JEL Classification Codes: M42

1. INTRODUCTION

This paper examines accounting fraud and the characteristics of the company executives that commit them. Accounting fraud is a global phenomenon with severe socio-economic impact. Numerous surveys are conducted periodically, attempting to estimate the economic and social cost of fraud, however the estimation of the qualitative factors limit the validity of the estimates. The safest conclusion is that fraud is a practice found in almost all companies and in many cases it is committed by top level management driven by greed. We intend to investigate the degree to which different incentives urge executives to commit fraud and also the effectiveness of strong internal control mechanisms as well as other socio-economic factors as a deterrent to fraud.

The primary research method applied was a questionnaire designed to accommodate the afore-mentioned objectives. The questionnaire was sent via e-mail to banking branch executives, company consultants, executives in local institutions and delivered by hand to insurance companies' executives during a daily event in Thessaloniki. The geographic area covered by the survey includes Central and West Macedonia and Thessaly. The 70 participants who completed the questionnaire include executive and non-executive employees in the banking, financial and insurance sector. The questionnaire consists of 21 questions derived from the current theories of internal audit and accounting fraud and was designed to ensure the anonymity of the participants.

The findings of the research show the degree to which seven incentives motivate executives to commit fraud and the size of the fraud in relation to the annual income of the executive. We identified five deterrence factors and the consequent analysis showed that the length of imprisonment as a penalty for committing fraud is the strongest deterrent.

2. ACCOUNTING FRAUD

2.1 DEFINITION OF ACCOUNTING FRAUD

In current literature fraud has various definitions. SAS 99 defines fraud as an intentional act that results in a material misstatement in financial statements. Furthermore, it specifies two types of misstatement: misstatements arising from fraudulent financial reporting and misstatements arising from misappropriation of funds.

Rubin (2007) suggests a broad definition for fraud as "an intentional act to gain an unfair or unlawful advantage or gain". Brink and Witt (1982) suggest that fraud is an ever present threat to the effective utilization of resources and it will always be an important concern of management. Wells (2009) emphasizes that there is no accidental fraud and that the following four elements exist in any case of fraud: a material false statement, knowledge of the falsity of the statement, reliance on false statement by the victim and damages as a result. Indeed the definitions of fraud vary from very narrow to very broad and it is useful to consider the case that MacDonald (1993) makes that distinction exists between fraud and error based on the psychological intent. He also specifies fraud as a legal term used only when intent can be proven in court.

2.2 WHO COMMITS FRAUD

Fraud is an act driven by intentions and it is therefore important for the researcher to understand the economic factors that motive the fraudster and the psychological mechanisms that form his behavior. Ratley (2011) emphasizes the fact that contrary to common belief, people who commit fraud are very much like everyone else. In most cases fraudsters have never been arrested before, they have similar lifestyles, education, familiy and hobbys like people who do not commit fraud. Indeed, it is rather hard to identify a fraudster simply by appearance or some trait. In most cases of fraud (Balaciu & Cosmina, 2008), the main factor that seems to drive the participants is a conflict of interest. For example, top level executives want to pay less taxes and dividends, shareholders want to receive more dividends, employees want higher salaries and bonuses, government officials want to receive more taxes and so on.

A person or a group of people may be induced to commit fraud by a number of motives. Both the current literature and a number of surveys identify the need to achieve higher goals as the most common motivator for financial reporting misstatements. However, greed or fear of failure are not the only driving forces behind such behavior. Inherent in accounting is a complex decision making process. Top level executives, like chief executive officers, play a crucial role in these processes and their narcissism influences and impels their decision making (Olsen, et al., 2013). As the frequency of fraud continues to rise, the study of the behavioral patterns of fraudsters rises in importance also in relation to both fraud detection as well as fraud deterrence.

Even though, behavioral scientists have failed to identify a well-defined characteristic or set of characteristics that may pinpoint a fraud perpetrator, they do recognize that fluctuations in business cycles and the criminogenic culture are correlated with fluctuations in the rate of fraud (Ramamoorti, 2008). Feng et al. (2011) suggest that CFOs are likely to manipulate financial data not so much for personal gain as because they succumb to pressures by the CEO. Their research shows that powerful CEOs with high equity incentives exert so much pressure on the company's hierarchy that they will manipulate accounting data with or without the help of the CFO. They suggest that steps must be taken to ensure the independence of the role of CFO. Dechow et al. (1996) arrive at similar conclusions and further suggest the need to raise capital at lower cost as an important motive to manipulate accounts. A recent survey by KPMG (2011) pinpoints the fact that it is statistically more likely for someone with access to sensitive information and the ability to override controls to commit fraud. Women have the least participation in fraud and in general do not assume a leading role in the scheme (Steffensmeier, et al., 2013). In most cases women participate in fraud schemes either because of personal relationships with one of the participants or because they hold a key role in the company's hierarchy that renders them necessary for the successful attempt. Steffensmeier et al (2013) recognize the fact that the rate of participation of women in fraud is proportionate to the percentage of women employees in corresponding industries. In banking specifically, it was found that women misappropriated funds almost as much as men. It is implied, therefore, that women are just as likely to commit fraud as men, as long as the participation of others is not necessary.

In many instances the founder of the company plays a key role in accounting fraud as is evident in the cases of Adelphia Communications Corporation, Tyco International Ltd, ImClone Systems, Bernard L. Madoff Investment Securities LLC, Satyam Computer Services. The founder's sense of ownership probably provides them with moral justification to manage the company's affairs as they see fit without any need to gain permission. We could say that the founders have difficulty to accept that their spiritual "child" has out-grown them and they remain over-protective and despotic. This special relationship between founder and company provides them with the illusion that all their actions are justified in the pursuit of growth and/ or profits and it is therefore ok to "window dress" the figures or to take now an advance of the future "sure-thing" profits. It is obvious in these cases that the founders perceive no moral obligation towards the shareholders, employees and other stakeholders. Greed and lack of proportion are evident in all the afore-mentioned cases.

The chairman of the Association of Certified Fraud Examiners in Austin, Texas (Wells, 2012) points out that a common characteristic of all criminals is over-confidence. Criminals of all categories believe that they will not be caught and it is this misconception that makes them careless which results in the mistakes that bring about their detection and apprehension.

2.3 CONSEQUENCES OF ACCOUNTING FRAUD

The menace of accounting fraud is spread world-wide. ACFE's (2012) global research shows that in 1.388 cases of occupational fraud only 8% were cases of financial reporting misstatement but caused a median loss of $1 million. Accounting fraud has social consequences, apart from legal and financial, for the perpetrators. Fich and Shivdasani (2007) looked into the reputational impact to ouside directors of firms that are facing lawsuits for financial fraud. Their findings show that the reputation of executives declines significantly even if they are not involved in the fraud case and that there is usually a decline in the number of board memberships they hold after the filing of the lawsuit.

The social impact and the financial and legal sanctions that come as a result of the detection of financial fraud usually lead to the loss of employment. Karpoff et al (2008) looked at the carreers of 2.206 individuals that were involved in 788 cases of financial misrepresentations filed by the SEC and the Department of Justice from 1978 until 2006. Of those accused, 93.6% lost their jobs and 92.4% of those were executives. A further sanction imposed was the ban from holding executive positions in publicly traded companies.

2.4 RESEARCH METHODOLOGY

As we mentioned in the introduction, our empirical research was based on a questionnaire consisting of 21 questions. The questions were formulated according to current theories on auditing and financial fraud. The questionnaire was sent via e-mail and handed out in person during a daily event in Thessaloniki. 70 individuals responded in time and they are mostly employed in banking and the insurance industry. Out of the 21 questions, 1 was open-ended, 5 were closed-ended and 15 were likert scale. No personal or company data were recorded so as to ensure the anonymity of the participants. The data were processed and analyzed with the use of a statistical program. The variables were tested for normality and consequently were tested for correlation with the use of χ^2 test. The descriptive statistics are presented in the next sections graphically.

2.5 RESEARCH FINDINGS

Our sample consists mostly of individuals in the age group 31 – 50 (88.6%) and with university or postgraduate education (80%). 63% of participants come from the finance/ banking industry and the rest of the sample comes from the insurance and services industries. 68.6% are managers or supervisors that have had these positions for 5 to 10 years. 71.4% are men and 28.6% are women.

2.5.1 The motives that drive fraud

The participants were asked to rank a number of motives according to the likeliness that these might urge an executive to commit fraud on a scale ranging from 1 (not likely) to 5 (very likely). Since likely and very likely have a very similar result for the purpose of this study, by summing the two ranks we find that the strongest motive is the achievement of goals, next comes personal financial gain and then the reduction of company taxes. However, if we consider the average score of the rankings, personal financial gain becomes the strongest motive. The belief that fraud will serve the greater good scored the least while the preservation of the current job status and the belief that the fraud will not be detected in the short-term only mildly motivate, according to the participants. The data are shown in the following table.

Table 1: Ranking of fraud motives.

	Very unlikely	Unlikely	Neutral	Likely	Very likely	Aver.
Greater good	35,7%	37,1%	15,7%	10,0%	1,4%	2,04
Reduction of company taxes	10,0%	14,3%	20,0%	35,7%	20,0%	3,41
Raise capital	2,9%	17,1%	37,1%	24,3%	18,6%	3,39
Achieve goals	2,9%	18,6%	18,6%	45,7%	14,3%	3,50
Preservation of job status	7,1%	18,6%	30,0%	24,3%	20,0%	3,31
No detection in short-term	8,6%	11,4%	38,6%	30,0%	11,4%	3,24
Personal financial gain	5,7%	12,9%	24,3%	27,1%	30,0%	3,63

It becomes apparent from the above rankings that personal needs and ambition motivate a person to commit fraud. Personal financial gain, achievement of goals and the job status are related since the achievement of goals usually leads to higher income through bonuses and/or a promotion. In the following figure we show the average responses ranked also according to sex. It is interesting to point out that women place higher importance to the 3 motives mentioned above that we group as personal.

The next question asked the participants to specify the amount of personal financial gain in relation to the annual income.

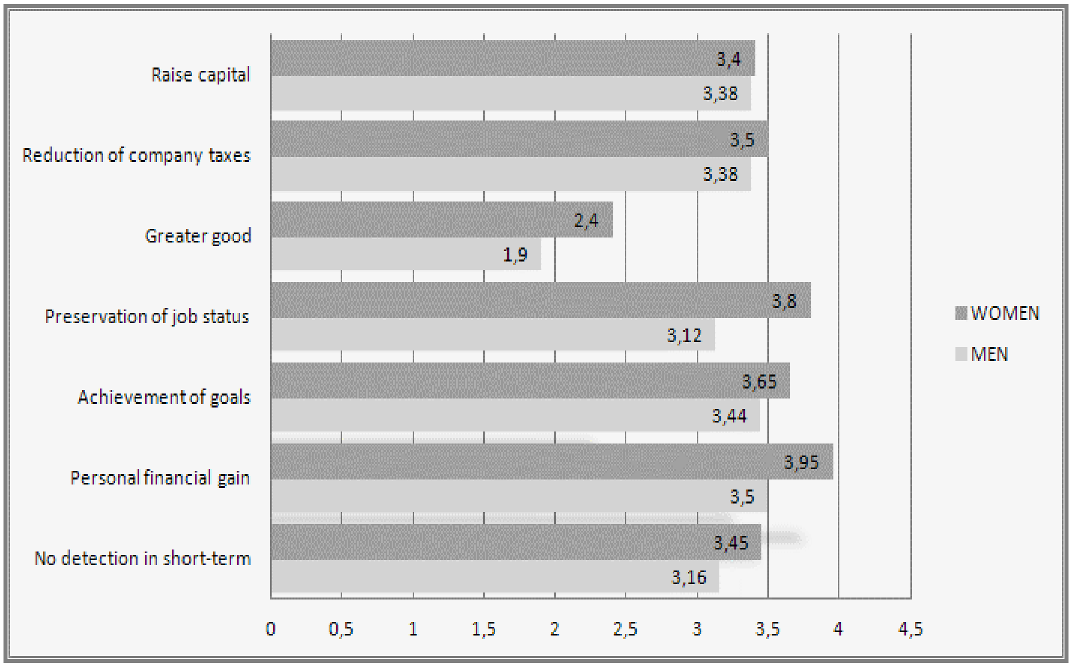

Figure 1: Average rankings of fraud motives for men and women participants.

The available answers ranged from 1 “less than” annual income, 2 “equal to” annual income, 3 “double” the annual income and 4 “ multiple” times the annual income. 51,43% of the respondents believe it would take multiple times the annual income for an executive to commit fraud.

At this point it is necessary to test whether the executives answered differently than regular employees in the ranking of fraud motives. We tested all our variables for normality and none of them follow the normal distribution,hence we used the χ^2 test. We set the null hypothesis that executive position is independent from any of the motives. The test statistics are displayed in Table 2 and we see that the p value is less than 0.05 only the case for the greater good, which has the least rank as a motive as we showed in Table 1.

Table 2: Independence testing for executive position and fraud motives.

Executive Position	**Value (x2)**	**Asump.sig p**
Greater good	10,612	0,031
Reduction of company taxes	2,797	0,592
Raise Capital	0,916	0,922
Achievement of goals	2,513	0,642
Preservation of job status	1,636	0,802
No detection in short-term	1,371	0,849
Personal financial gain	5,276	0,260

Therefore we can accept the null hypothesis, which means that the participants' answers were not influenced by their job status. We do not imply that the experience accumulated by a branch manager, for example, does not alter his perception compared to a bank teller, but that sort of analysis could not be derived from the questionnaire we distributed.

2.5.2 Fraud deterrence factors

The participants were also asked to rank a number of factors as possible deterrents to fraud using the same likert scale as before.

The majority of the respondents ranked the strong internal control mechanisms as an effective deterrent to fraud. The sum of the answers 4 "likely" and 5 "very likely" is 84,3% . Since a significant number of participants were executives with managerial positions, we tested the variables executive position and the strong internal control mechanisms for independence using the χ^2 test and the resulting statistic (Pearson Chi-Square) had a value of 0,353. The null hypothesis is that the two variables are independent and we accept it because the statistic is higher than 0,05 . Numerous papers and surveys in current literature suggest that internal control mechanisms can be circumvented by managers. This suggestion is justified by the corporate power held by managers and also by the experience and knowledge one usually has when appointed to such a position. However, our findings do not show a significant difference to the answer between executives and non-executives and we cannot support the afore-mentioned suggestion.

Consequently we ran the independence test between sex and strong internal control mechanisms. Again the null hypothesis is that the two variables were independent. The test statistic was 0,031 and it is smaller than 0,05, therefore we reject the null hypothesis and accept the suggestion that internal control mechanisms affect men and women differently as a deterrent to fraud. It is important to note that the participation of women to this survey was low (28,6%) and it might be useful to test this with more complex statistical tests, but this is out of the scope of the current study.

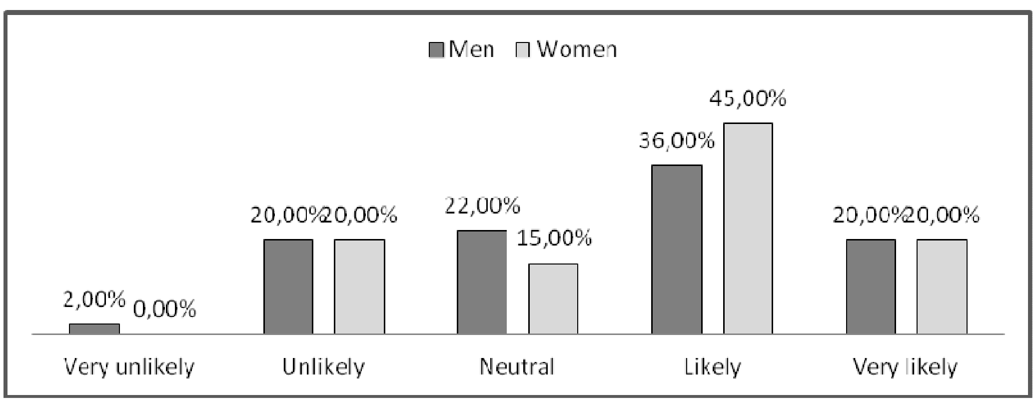

Figure 2: Comparison of the rankings of strong internal control mechanisms as a deterrent between men and women.

The participants next ranked their answers from very unlikely to very likely as to their perceived effectiveness of the social impact and the loss of face as a deterrent to fraud. Only 58,6% of the respondents ranked this deterrent as likely and very likely (4 and 5 respectively). The corresponding independence test between executive position and social impact produced a test statistic of 0,427 which is higher than 0,05 and we therefore accept the null hypothesis that the two variables are independent.

The next deterrent we examined was the reduced employment capability after the detection and exposure of the fraud. 62,85% of the respondents consider this factor to be an effective deterrent (sum of 4 and 5 answers) and the independence test between reduced employment capability and executive position showed that the two variables are independent (test statistic 0,544>0,05).

The fourth deterrent was the imposition of economic sanctions after the detection of the fraud. In the following figure we graphically show the responses recorded. It is evident from the figure below that almost 70% of the respondents consider this deterrent to be effective. The independence test between economic sanctions and executive position confirms that the two variables are independent (test statistic 0,588>0,05). This means that all employees, both executive and non-executive, are equally affected by the economic sanctions.

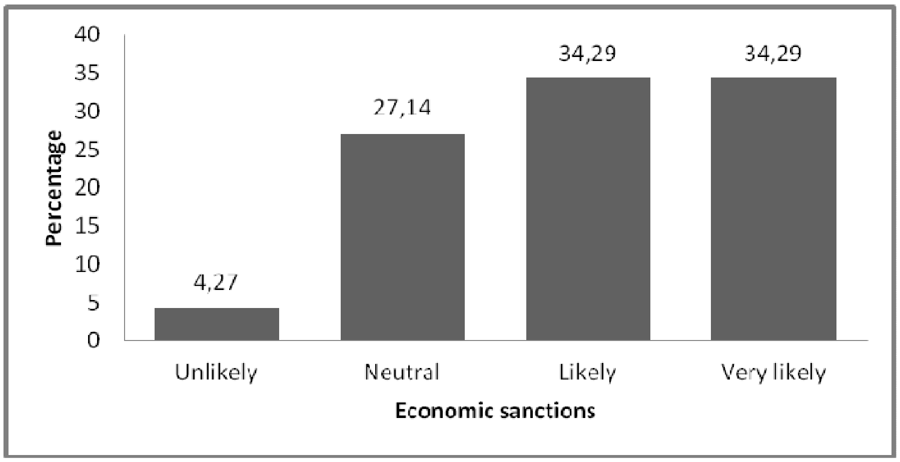

Figure 3: Economic sanctions as a deterrent to fraud.

The last deterrent we examined was the effectiveness of immediate imprisonment and the participants were asked to rank their answers from 1 very unlikely to 5 very likely. Taking the sum of answers 4 and 5, which for the purpose of this study are considered almost identical, we see that 92,86% of the respondents perceive this measure to be effective as a deterrent. Indeed, this factor is the most effective of the five deterrents and in essence incloses partly some of the other factors as well. When a person is imprisoned, they immediately lose income hence the economic sanctions, they are stigmatized socially hence the social impact and loss of face (Polinsky & Shavell, 1999) and they have extremely reduced future employment capabilities. The responses are shown graphically in Figure 4 that follows.

Consequently we tested for independence between imprisonment and executive position as well as imprisonment and sex. The null hypothesis in each case is that the two variables are independent and test statistic in the first test was 0,21 which higher than 0,05 and we therefore accept that imprisonment and executive position are independent. In the second test the statistic was 0,366 and again we accept the null hypothesis that imprisonment and sex are independent. This means that imprisonment acts as an effective deterrent to men and women equally regardless of the position they hold in the company.

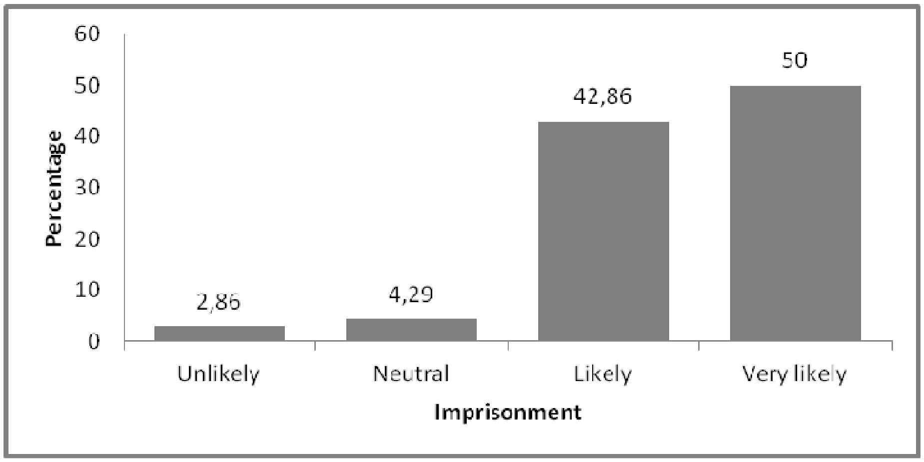

Figure 4: Imprisonment as a deterrent to fraud.

The participants were also asked to specify the length of imprisonment in years they consider to be an effective deterrent to fraud using the following time intervals: less than two years (<2), two to five years (2-5), six to ten years (6-10), eleven to twenty years (11-20) and more than twenty years (20>). The results are shown in Figure 5 that follows. Almost 80% of the respondents believe that imprisonment for fraud should more than 5 years. Following this question the participants were able to record further comments regarding imprisonment and it was noted that since the efficiency of the judicial system is low and the final decision is expected to come after several years, taking into account the reduction in sentence because of the previously blank criminal record, the initial sentence should be longer. Also the respondents noted that the sentence should be proportionate to the magnitude of the fraud, the position that the perpetrator held and who was affected by the fraud.

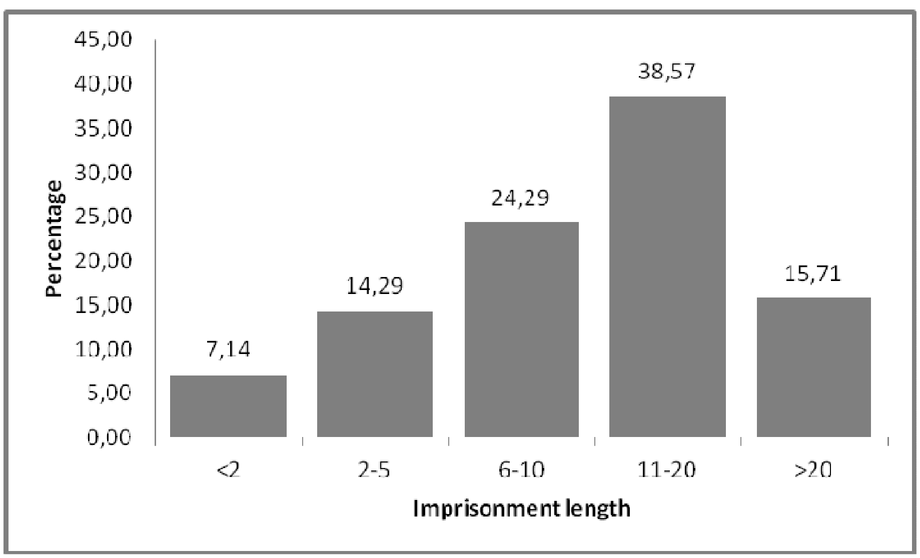

Figure 5: Length of imprisonment

Another interesting point from the above graph is that there is a gradual increase from less than 2 years up to 20 years of imprisonment and a dramatic decrease for a sentence of more than 20 years. In a similar study (Ugrin & Odom, 2010), it was shown that the length of imprisonment rises in effectiveness as a deterrent when raised from 1 year to 10 years but drops significantly when the length is raised from 10 to 20 years. It seems the marginal effectiveness of raising the length of imprisonment has a decreasing rate. Utilizing the study by Polinsky and Shavell (1999) we note that the secondary effects of imprisonment such social stigmatization and the reduced future employment capabilities are not affected by the length of the sentence and they are incorporated to the beliefs of potential perpetrators.

Lastly the participants were asked to rank the probability of an executive to commit fraud in their own work environment. The answers were ranked from very unlikely to very likely. The following pie chart shows the responses. It seems that only 13% of the participants believe it probable for fraud to be committed in their work environment. Since the formulation of the question specifies that the fraud might be committed only by an executive, it is interesting to see whether the answers were biased by the position held. The null hypothesis is that the variables executive position and fraud probability are independent and the Pearson Chi-Square statistic is 0,192 which is higher than 0,05 and we ,therefore, accept the null hypothesis.

The percentage of respondents that consider fraud as improbable is 60% and it is initially comforting to consider, however taking into consideration the rather large portion of participants that have ranked this probability as medium (27%), it is alarming as this category could swing either way. If the 27% are marginally towards the unlikely region then approximately 90% would be considering fraud as improbable. This certainly would show that the combination of deterrents and possibly the lack of motivation are effective enough to create a safe and ethical work environment. On the other hand, if the neutral respondents are marginally closer to the likely region then the resulting situation is alarming since the “almost” likely part would reach 40%. Obviously, the current data cannot produce more detailed results in this question and this is perhaps a valid suggestion for further research.

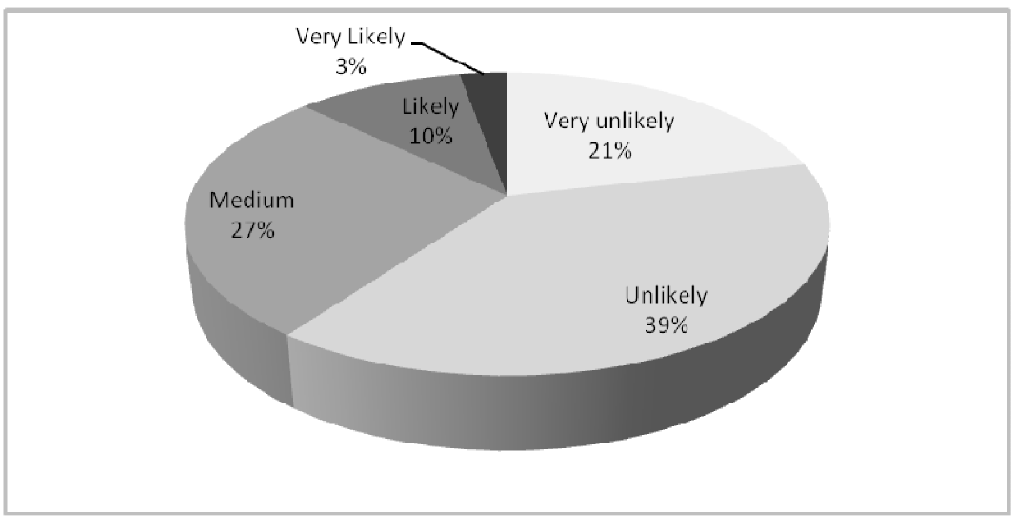

Figure 6: Probability of an executive to commit fraud in the respondent’s work environment

3. CONCLUSIONS

As we mentioned in the introduction, the purpose of this study is to identify and rank the motives, either linked to personal ambition or the corporate environment, which might drive an executive to commit fraud. We also looked into factors that act as deterrents to fraud. Our findings indicate that the most effective motive for fraud is the personal financial gain and the expected outcome should be multiple times the annual income of the perpetrator. Furthermore, the most efficient deterrent is the possibility of immediate imprisonment of the perpetrator once the fraud is detected and the length of imprisonment should more than 5 years.

The research was carried out via the distribution of a questionnaire to executives and non-executives working in banking, insurance and the service industries in Thessaloniki and the regions of Central and Western Macedonia and Thessaly. The questionnaire was answered by 70 participants. The questionnaire was comprised by 21 questions that covered demographic data, factors that act as motives to commit fraud and factors that act as deterrents to fraud and were formulated using current theories in auditing and accounting fraud.

Out of the seven factors categorized as motives, the most effective was the personal financial gain as a result of fraud. It held the highest average score in the rankings of the respondents. The second ranking motive was the achievement of goals, through which it is expected that employees will retain or advance their position and probably achieve higher earnings. The next motives were the reduction of company taxes and the ability to raise capital with low cost. The preservation of the current job status and the possibility of the fraud not to be detected in the short term were the fifth and sixth ranking motives respectively. The notion that the fraud is committed for the greater good ranked the lowest as a motive and the resulting average score was considerably lower than the other six motives. It was also the only motive that seems to have some correlation to the position held in the company.

The categorization of the respondents according to sex showed that the ranking of motives changes only slightly. Women seem to rank the preservation of job status as the second higher ranking motive. Also women showed a significantly higher average score for personal financial gain and the preservation of job status than men. This suggests that these two motives are significantly more efficient motives for women than they are for men. It is also important to point out that the majority of the respondents (51,43%) believe that the personal financial gain as a result of fraud must be a multiple of the annual income of the perpetrator.

The ranking of the five suggested deterrents to fraud showed that the most efficient deterrent, by far (92,86%), is the immediate imprisonment of the perpetrator following the detection of the fraud. Specifically, the participants indicated that the length of imprisonment must be upwards of 5 years for this to be an efficient deterrent. The next deterrent was the existence of strong internal control mechanisms which seem to convince 84,3% of the respondents. The economic sanctions imposed as part of the penalty to fraud are an efficient deterrent for 68,58% of the respondents. The reduced employment capabilities and the social impact are the last deterrents and were ranked as efficient by 62,85% and 58,6% respectively. The consequent independence tests showed that only the strong internal control mechanisms seem to be correlated to the sex of the respondent.

An important finding is that the majority of the respondents consider it unlikely for an executive in their work environment to commit fraud. However, there is a significant portion of the participants (27%) that believe that the probability of such an event is medium. The questionnaire we used does not allow us to infer whether this portion of the responses is closer to likely or unlikely and adding it to either possible outcome alters the balance significantly. In one case we could have aggregately 87% of the participants believing that fraud is unlikely and on the other case we could have aggregately 40% of the participants believing that fraud is likely. Therefore, our questionnaire in this case does not allow for further analysis and produced an ambiguous result.

An important limitation to our study was the relatively small sample size. Moreover, the composition of the sample is not balanced in regards of the sex of the participants as well as the position held. Specifically, there were more executives than non-executive employees and the executives positions held were restricted to a medium level in the hierarchies of the respective companies. The responses from top level management (c-level) might be different and would produce different averages. This follows from the fact that a medium level executive is usually not involved in raising capital for the company and cannot significantly influence the amount of taxes the company pays.

Another limitation has to do with industries in which the participants are employed. Banking, in general, has a very strict set of internal control mechanisms and their perceived efficiency is incorporated into the mindset of any probable fraudster. Furthermore, since our research was not limited to one industry only it might be more useful for the sample to contain participants from all the industries that are active in the Greek economy with the same respective percentages in its composition.

A general limitation that any such study will have is that the distribution of a questionnaire regarding fraud is met with reluctance, especially if the participant knows the researcher. Even though, such a questionnaire is traditionally followed by an anonymity clause, the participant might not be convinced that the clause will be held. Therefore the answers might not be completely truthful or might not portray the full extent of the participant's beliefs.

Furthermore, the fraud literature suggests that the society's views towards committing fraud and its consequences differ from period to period according to current events. It would be useful to conduct a similar analysis where the same participants answer the questionnaire periodically. Alternatively the participants could answer the questionnaire during a "neutral" period and answer it again immediately after the revelation of a large scale fraud.

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REFERENCES

1. ACFE, 2012. *Report to the Nations on Occupational Fraud and Abuse.* [Online] Available at: http://www.acfe.com/uploadedFiles/ACFE_Website/Content/rttn/2012-report-to-nations.pdf
2. Balaciu, D. & Cosmina, M. P., 2008. Is creative accounting a form of manipulation?. *Annals of the University of Oradea, Economic Science Series*, 17(3), pp. 936-940.
3. Brink, V. Z. & Witt, H., 1982. *Modern internal auditing: Appraising operations and controls.* 4th ed. New York: John Wiley & Sons.
4. Dechow, P. M., Sloan, R. G. & Hutton, A. P., 1996. Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC. *CONTEMPORARY ACCOUNTING RESEARCH*, 13(2), pp. 1-36.
5. Feng, M., Ge, W., Luo, S. & Shevlin, T., 2011. Why Do CFOs Become Involved in Material Accounting Manipulations?*. *Journal of Accounting and Economics*, February, 51(1-2), pp. 21-36.
6. Fich, E. M. & Shivdasani, A., 2007. Financial fraud, director reputation, and shareholder wealth. *Journal of Financial Economics*, November, 86(2), pp. 306-336.
7. Karpoff, J. M., Lee, S. D. & Martin, G. S., 2008. The Consequences to Managers for Financial Misrepresentation. *Journal of Financial Economics*, May, Volume 88, pp. 193-215.
8. KPMG, 2011. *Who is the typical fraudster?.* [Online] Available at: https://www.kpmg.com/BY/ru/IssuesAndInsights/ArticlesPublications/Press%20Releases/Documents/Who%20is%20the%20typical%20fraudster.pdf
9. MacDonald, C. A., 1993. *Typology of Fraud and Error Control Programs.* [Online] Available at: http://www.camacdonald.com/typology.htm[Accessed 21 October 2013].

10. Olsen, K., Dworkis, K. K. & Young, M. S., 2013. Ceo Narcissism and Accounting : A picture of profits. *Journal of Management Accounting Research* , pp. in-press.

11. Polinsky, M. A. & Shavell, S., 1999. On the Disutility and Discounting of Imprisonment and the Theory of Deterrence. *Journal of Legal Studies*, January, 28(1), pp. 1-16.

12. Ramamoorti, S., 2008. The Psychology and Sociology of Fraud: Integrating the Behavioral Sciences Component Into Fraud and Forensic Accounting Curricula. *ISSUES IN ACCOUNTING EDUCATION*, November, 23(4), pp. 521-533.

13. Ratley, J. D., 2011. *Are You Sitting Next to a Fraudster?.* [Online] Available at: http://www.strozfriedberg.com/files/Publication/b48afe85-ff1f-4689-a30b-10d14d83f9ec/Presentation/PublicationAttachment/8ae26a50-b103-4e2b-a5cd-113c5c5b4191/Are%20You%20Sitting%20Next%20to%20a%20Fraudster.pdf [Accessed 13 October 2013].

14. Rubin, G. A., 2007. *Fraud Risk Checklist: Aguide for Assessing the Risk of Internal Fraud.* 1st ed. New Jersey: Financial Executives Research Foundation.

15. Steffensmeier, D. J., Schwartz, J. & Roche, M., 2013. Gender and Twenty-First-Century Corporate Crime: Female Involvement and the Gender Gap in Enron-Era Corporate Frauds. *American Sociological Review*, June, 78(3), pp. 448-476.

16. Ugrin, J. C. & Odom, M. D., 2010. Exploring Sarbanes–Oxley's effect on attitudes, perceptions of norms, and intentions to commit financial statement fraud from a general deterrence perspective. *Journal of Accounting and Public Policy*, September, 29(5), pp. 439-458.

17. Wells, J. T., 2009. *Fraud: the occupational hazards.* [Online] Available at: http://www.accountancyage.com/aa/feature/1748964/fraud-occupational-hazards [Accessed 25 October 2013].

18. Wells, J. T., 2012. *Inside the Fraudster's Mind.* [Online] Available at: http://www.theiia.org/intAuditor/feature-articles/2012/april/inside-the-fraudsters-mind/