The Effectiveness of Forensic Auditors in the Insurance Process

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Abstract:

Purpose: With this study, the authors aim to design a measure to determine the effectiveness of having Forensic Auditors in the Insurance Business. Moreover, in doing this to determine whether this measure is affected by different demographic variables.

Design/Methodology: To prove the effectiveness of forensic auditors in the insurance industry, the authors designed a questionnaire using criteria of effectiveness established by Bond et al. (2011) which was completed by 402 valid participants. The criteria revolved around having procedural, substantive, transactive and normative effectiveness.

Findings: Results show that engaging forensic auditors in the insurance industry are effective. Forensic auditors are needed in the claims process of insurance firms, and possibly, they should further be engaged in the risk management team of an insurance company. However, with regards to determining the compensation amount, respondents showed a lack of trust, and prefer if forensic auditors work together with loss adjusters, lawyers, and actuaries to enhance their service.

Practical Implications: With the engagement of forensic auditors, there would be added benefits to society. Although insurance firms may not eventually benefit in lower claims costs, they would benefit in the way they decide to reserve. Society would also benefit from such engagement, for instance, from enhanced knowledge of fraud detection thereby affecting the behaviour of society towards insurance business, which would ultimately reduce opportunities and capabilities of fraudsters.

Keywords: Forensic Auditing, Forensic Auditors, Fraud, Insurance Firms, Insurance Claims.

JEL classification: M42, G22. Paper type: Research study.

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1. Introduction

Forensic Accounting was first mentioned by Maurice Peloubet in 1946. Although it came into being years ago, it is still gaining ground and has still not fully developed in certain countries. However, according to the National Association of Forensic Accountants (NAFA), there is a growing need for this profession, especially for insurance firms, attorneys, and businesses (NAFA, 2007).

Forensic accounting evolved because of the changes within the economy, society, and law. The first instances of forensic accounting were seen in Al Capone's case (Dreyer, 2014; NAFA, 2007). Al Capone did not claim any of his earnings for taxes since all his earnings came from illegal activity, such as prostitution, gambling, and embezzlement. Dreyer adds that forensic accounting began from the case of Meyer v Sefton in 1817 as this was the first time that a forensic accountant was appointed as an expert witness in court (Dreyer, 2014).

The profession continued to evolve from then onwards, and several associations were developed. In the 20th century, we witnessed the true need for this profession during the huge financial scandals of WorldCom and Enron (Dreyer, 2014).

1.1 The Need for this Study

When an insurance claim goes to court, in most cases, it takes several months for the court to reach a conclusion and decide upon the amount that the policyholder should be indemnified with. As a result, this time lag may intrigue the policyholder to tamper with evidence to make the case look worse and be compensated with a higher amount, and thus, there is a chance of fraud being committed. Similarly, it could be that the insurer is trying to compensate the insured with a lower amount. For instance, sometimes they resolved this lengthy process by compensating the insured immediately but paying a lower amount than what should have been paid; thus, although the insured is receiving the compensation quickly, he is not being compensated for what he is paying (Ralph, 2019).

This study is important since it shows whether the function of a forensic auditor (FA) is effective in easing the process and helping insurance firms to pay the correct compensation. Even more, policyholders would be compensated with a fair amount, thus reducing the overall risk of fraud in insurance claims.

From preliminary meetings held, it transpired that insurers do not believe that appointing FAs is beneficial because they believe that the loss adjuster (LA) is enough when calculating indemnification. This contrast with what other developed countries are doing. In more developed countries, FAs are appointed in insurance claims settlements, and within the profession of forensic auditing itself, they are defined as able to aid in these cases (Baker, 2018). This study will therefore help clarify the effectiveness of employing a FA.

Therefore, with this study, the authors aim to design a measure to determine the effectiveness of employing FAs in the Insurance Business also to determine whether this measure is affected by the different demographic variables.

1.2 Research Questions

Overall, the study will address the following research questions:

RQ1 – What are the factor variables required to design a measure with which to determine the effectiveness of having FA in the Insurance undertaking?

RQ2 – Is employing an FA perceived as increasing the effectiveness of an Insurance undertaking.

RQ3 – *Is this measure effected by the different demographic variables?*

To understand forensic auditing, one must first look at fraud auditing and what it entails. According to Singleton and Singleton (2010), fraud auditing is the process of recognizing fraud, that is, the auditor would be appointed to detect fraud. This contrasts with what is expected from a financial auditor, who audits the company's financial statements.

In ISA 240, fraud is defined as: "an intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception to obtain an unjust or illegal advantage" (International Federation of Accountants (IFAC), 2008).

Emerson (1992) adds that anyone who wilfully conducts fraud will be violating established laws, as well as violating moral values. Since fraud is intentionally done and deliberately planned, it is more than just civil wrongdoing, it is a crime. Due to numerous financial frauds, which occurred in the US and other countries across the world, Smith and Crumbley (2009) question whether the traditional audit model is still important. Smith and Crumbley (2009) define forensic auditing as the process of: "[i]dentification, interpretation and communication of the evidence of underlying strategic economic and reporting events."

The objective of forensic auditing in the principle-based accounting world is to reduce financial wrongdoings. As stated by Oyedokun (2015), forensic auditing is part of the forensic accounting process because it applies accounting, auditing and investigative skills whenever a case has legal consequences (Oyedokun, 2015).

Forensic auditing is like a statutory financial audit it would follow the same stages. It would start with planning and gathering evidence, and continue to perform other duties, following certain principles, which auditors follow while conducting a financial audit (Association of Chartered Certified Accountants (ACCA), 2018). It

further includes writing a report to management or court. It could be that FAs are not only appointed to prove whether there is a fraud but also to serve as an "expert witness" when a case goes to court and provides support in litigation (Singleton and Singleton, 2010).

Crumbley (2017) emphasizes the difference between fraud auditing and forensic accounting, claiming that a fraud auditor is engaged to determine the existence of fraud. As noted by Vukadinović *et al.* (2015), forensic accounting and forensic auditing are used interchangeably. This may create confusion in understanding the difference between the two, showing further the lack of theory on the subject because the information gathered about this field relates more to practice rather than theory (Vukadinović *et al.*, 2015).

2.1 Forensic Auditing vs. Financial Audit

Insurance firms, like other firms, are required to have a financial audit performed by an independent party on their financial statements. The objectives of the auditor about fraud, as per ISA 40, are:

- a. "To identify and assess the risks of material misstatement of the financial statements due to fraud;
- b. To obtain sufficient appropriate audit evidence regarding the assessed risks of material misstatement due to fraud, through designing and implementing appropriate responses;
- c. To respond appropriately to fraud or suspected fraud identified during the audit" (IFAC, 2008).

Therefore, auditors carrying out financial audits are not directly required to detect fraud but should perform the above duties only if they suspect fraud. The need for forensic auditing thus arose. Although an external auditor would report if fraud were detected, it is not their main duty to detect fraud. Therefore, there may be cases which are overlooked (IFAC, 2008). Although standards state this, the public still seems to expect more. Booker (2015) reports that, in Malta, there is an expectation gap between the external auditor's responsibilities and what the public and regulators expect to receive from them. Booker (2015) stresses that, once an external auditor puts their "forensic hat" on, their role is changed.

A study by Vukadinović *et al.* (2015) found 11 differences between forensic auditing and external auditing. These are outlined in Table 1 below.

Difference	Forensic Auditing	External Auditing
Legislation	Follow professional rules	Follow professional and legal rules
Objective	Prevent, investigate & detect	Express an opinion on Financial
	fraud	Statements
Limitations	No limitations	Abide by professional standards
Materiality	Everything is material	Crucial concept
Period of activity	Until fraud or enough evidence is gathered	One financial year
Methodology	Investigate all transactions	Sampling
Investigation	Main activity	Do not investigate

Through an opinion as per standards

May be a witness

across it and escalate to higher levels

Legal Obligation

On elements relating to

fraudulent acts

Will be a witness

fraud

Not Compulsory

Table 1. Differences between forensic and external auditing

Source: Adapted from Vukadinović et al. (2015).

2.2 Types of Forensic Auditing

Reporting

Court proceedings

Obligation

A forensic accountant may be appointed to investigate three main types of fraud, namely, corruption, asset misappropriation, and financial statement fraud (ACCA, 2018). Corruption is involved in one-third of the fraud cases, and it is mainly in the form of bribery, conflict of interest, and extortion. The most common type of fraud is asset misappropriation, where there is theft of cash, inventory, and other assets. Financial statement fraud can also be undertaken by employees who make false records or complete omissions, and misuse accounting principles (ACCA, 2018).

Method of detecting Requested by the client to detect While conducting the audit, they come

When referring to different types of forensic audits, one must consider the difference between proactive and reactive forensic audits. A reactive forensic audit is performed when there is already a suspicion of fraud, or a significant loss has occurred. Therefore, the event has already taken place, and thus, it is used to prove whether there are any wrongdoings, and to present evidence to be used in court.

Conversely, a proactive forensic audit is performed before there is any suspicion, and thus, it is more of a precautionary type of forensic audit. It is used as a risk assessment procedure, and to rectify and correct any procedures of the company (Crumbley, 2001). Uzoka (1990) describes a proactive forensic audit as creating a culture where employees are aware of the possibility of fraud. Therefore, they would already be prepared to prevent it and how to handle cases of fraud.

2.3 Measuring the Effectiveness of Policy Implementation

To conduct this study, the authors perceive the engagement of the FA in the insurance company as a new policy being implemented by insurance firms. Therefore, to evaluate the results and measure whether this engagement would be effective, the author uses the framework for measuring the effectiveness of policy implementation theory. According to Pradhan *et al.* (2017), implementing a new policy includes the following process:

- ➤ Identifying the current problem in this case from the reviewed literature, it is insurance fraud and the lengthy court cases, which may give rise to further fraud.
- ➤ Describing the purpose of the policy implementation in other words, why are we trying to engage the FA within the insurance industry?
- ➤ Planning what practices are most appropriate for policy implementation.
- Analyzing the implementation of the engagement of FA's to measure its effectiveness in the insurance industry, i.e., the extent to which the insurance industry will benefit from this engagement.

This framework requires a feedback loop which, in this study, would be the response obtained from the insurance firms, auditors, and investigators.

To achieve successful results in policy implementation, one can follow the modified framework of policy implementation theory developed by Pradhan *et al.* (2017), which revolves the following four main categories:

- ➤ Having a policy: According to Chen et al. (2014), this category refers to legislation and regulation which need to be adhered to implement the policy. Pradhan et al. (2017) describe it as the ability one must take control of the problem being addressed.
- ➤ Practising the policy: Here, one will evaluate and assesses whether the community is implementing the policy and adapting to it (Baker and McLelland, 2003). This process might take a while and might also be a trial-and-error period.
- ➤ Performance: This step assesses whether the objectives of the implementation were reached (Baker and McLelland, 2003), and how the community is adapting to it, as well as people's perceptions of its effectiveness. Therefore, feedback enables improvement in the policy (Chen *et al.* 2014).
- ➤ Overall effectiveness: To measure whether the implemented policy was effective or not, one must note what the goal was (Pradhan et al., 2017). To measure effectiveness, the study conducted by Bond et al. (2011) establishes four criteria, which are discussed further in the following section.

2.4 Criteria for Effective Implementation

Bond et al. (2011) have established four criteria as follows:

- **a.** Procedural Effectiveness the way the policy is implemented will make a difference to the effectiveness it will have in society or the industry.
- **b.** Substantive Effectiveness after carrying out the implementation, the objectives should be reviewed to test if they were achieved.
- **c.** Transactive Effectiveness apart from assessing if objectives were achieved, one also must note if objectives can be achieved with efficient use of resources (Sadler, 1996). This will determine optimum effectiveness because, if objectives are achieved with minimum resources, it would be an ideal situation. While Baker and McLelland (2003) perceive the use of efficient resources as using the least amount of money and time. Theophilou *et al.* (2010) consider skills and roles.
- **d.** Normative Effectiveness achieving normative goals will increase the effectiveness of policy implementation (Baker and McLelland, 2003). Although achieving the objectives is the main aim of this policy implementation, it would not do any harm in to achieve other additional changes, which have a positive impact on society, organizations, culture, and possibly, a positive change in mind-set (Cashmore *et al.*, 2004).

3. Research Methodology

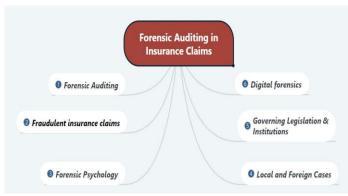
3.1 Preliminary Data Collection

The authors referred to both primary and secondary data to obtain information about the subject matter and to understand and determine any gaps in this research subject. This preliminary research helped the authors to develop the research questions. The authors obtained institutional support to conduct a simple semi-structured interview with the representatives of:

- One of the Big Four audit firms in Malta,
- Insurance firms in Malta,
- Representatives of Malta Financial Services Authority (MFSA),
- Lecturers from the Faculty of Economics, Management and Accountancy (FEMA) and the Criminology department at the University of Malta (UOM).

Information from both local and foreign sources were consulted to obtain a broad perspective on the types of cases FA's can be involved in with regards to insurance claims. To facilitate the readers' understanding, the researchers created Figure 1 to show the structure which was used to come up with the research questions and to obtain background information on the topic.

Figure 1. Secondary data structure



Source: Authors' own compilation.

3.2 Research Design

A cross-sectional time horizon was chosen as the research shows only the perception of the effectiveness of FAs in the insurance industry of the selected sample at the time of the research study (Saunders *et al.*, 2016). Furthermore, given the nature of the research questions and the lack of FAs in Malta, a mixed approach was adopted to obtain both qualitative and quantitative information. Through questionnaires, a better understanding was obtained of the need for forensic auditing in the insurance claim process and the extent to which it is needed.

3.3 Research Tools and Data Collection

Theoretical Data Collection: Various types of literature (old and recent) were reviewed, including articles, journals, legislation, standards, local and foreign studies, websites, and textbooks and attended various local conferences on the subject.

Empirical Data Collection: As stated above, questionnaires were distributed to selected parties in Malta to form a random statistical sample.

Selecting the Sample: The authors made sure that the sample chosen would enable them to answer the research questions in a representative manner. To ensure this, the authors used cluster with simple random sampling (Saunders *et al.*,. 2016). They decided, following the preliminary research, that it would be best to distribute questionnaires among the following clusters:

- Oualified accountants;
- All Certified Public Accountants (CPAs) and those holding the Practicing Certificate in Auditing (PCAs);
- Local insurance firms, Tied Insurance Intermediaries, Agents and Brokers;

 Experts having investigative, compliance, and risk management roles in Maltese society. The authors believed that their perception could be taken into consideration to conduct further research in this research area while providing certain insights, which would help when interpreting results.

After deciding on the above clusters, questionnaires were distributed randomly among them. Given that the questionnaire was distributed among various professions, it was determined using an online sample calculator that for the study to be representative at 95% confidence level, 384 answers would be required (Creative Research Systems, 2012). Subsequently, a response rate of 105% (402) was obtained.

Designing the questionnaire: When designing the questionnaire, one questionnaire was prepared and distributed among the clusters mentioned above to enable comparison while analysing data. The respondents were then grouped into two categories, namely, Internal Controllers and Management.

Internal Controllers consisted of CPA/PCA holders, qualified accountants, compliance officers, risk managers, investigators, and advocates. The management category consisted of personnel working in insurance companies/TIIs/Brokers who have hands-on experience in insurance policies and claims. The authors started off the questionnaire with an introduction to the study and an explanation of what forensic auditing is all about, as well as the reasoning behind the study thereby familiarizing the participant with the context.

The questionnaire was then divided into three sections. The first section was divided into the four categorical criteria to obtain effectiveness, and mainly included four or five statements, which followed the themes suggested by Bond *et al.* (2011), which were developed into 18 statements derived from literature and which had to be rated on a five-point Likert, scale (Table 2). The second section included a comment box for participants to express any opinions on the subject while the final section contained a few demographic questions.

Table 2. Five-point Likert scale

Scale	Points of Scale
1	Strongly disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree

Source: Authors' own compilation.

In the above Table, one can note that the authors maintained the option of 'neutral' since FAs are not well established in Malta, and thus, the neutral point allows the respondent to answer according to their true knowledge and perception. As Saunders

et al. (2016, p. 458) observe, it allows the respondent to take a "sit on the fence" approach by ticking the neutral point when they are unsure about something, rather than ticking a negative statement. A five-point scale was chosen because, it makes it easier for the respondent to answer and enables more accuracy and better representation of the participants' thoughts (Saunders et al., 2016). Questionnaires were prepared using an online application (Qualtrics XM), given that it would be more convenient for the participants to complete them.

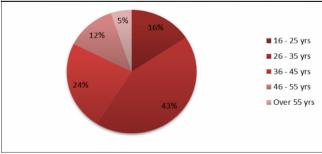
3.4 Data Analysis Tools

The quantitative data gathered through the questionnaires were analysed statistically using SPSS (version 26). This involved analysing the reliability of internal consistency between related statements through Cronbach Alpha and carrying out Exploratory Factor Analysis, using principal components extraction with Oblimun and Kaiser Normalization. Since the questionnaire also included open-ended questions, these were analyzed by identifying common themes, hence using thematic analysis (TA) as suggested by Braun and Clarke (2017). The authors used a similar approach to that used by Braun and Clarke (2016), to code and develop themes as they offer flexibility while analysing findings. Coding was done by observing all comments in the open-ended questions and grouping them into themes according to the most frequent responses.

4. Research Findings and Discussion

In all, 402 responses were gathered, 57% of which were male, while 43% of the respondents were female. These were then subdivided into two lines of business, namely, internal controllers (57%) and the management team within an insurance company (43%). The majority in both lines of business were male. The age of the respondents varied, with many respondents aged between 26 and 35 years (43%), while the second-largest cohort was the 36-45 years group (23%). Therefore, respondents had a good experience in their line of work. A total of 16% of the respondents were aged between 16 and 25 years, while 12% were 46 to 55 years old, and 5% aged 56 years and over. This is illustrated in Figure 2 below:

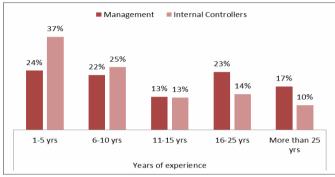
Figure 2. Age of participants



Source: Authors' own compilation.

The experience of these participants is evenly distributed, especially among management respondents. With regards to internal controllers, the majority had '1 to 5' and '6 to 10' years of experience, however, this is still reliable as respondents hailed from large accountancy firms and were thus exposed to various scenarios which could enable them to answer the questionnaire with ease. Figure 3 below indicates the years of experience of the respondents.

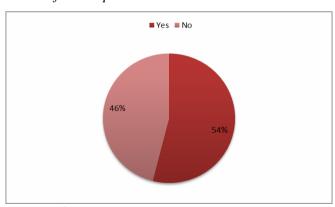
Figure 3. Years of experience



Source: Authors' own compilation.

Furthermore, as per the results noted in the study by Locano (2012), in this study, we also noted that most respondents experienced insurance fraud throughout their work experience. This can be seen in Figure 4 below:

Figure 4. Insurance and fraud experience



Source: Authors' own compilation.

Moreover, the authors found that insurance frauds were encountered mostly by management, and not by internal controllers, thus, it could be a possibility that fraud stopped at the first line of defence. However, 20% of the respondents who experienced insurance fraud were internal controllers. Therefore, there is still the possibility that fraud is being encountered by internal controllers.



Figure 5. Insurance and fraud experience by Lob

Source: Authors' own compilation.

When analysing according to the years of experience, undoubtedly, most insurance frauds were encountered by the respondents having most years of experience. Furthermore, from the comments of the respondents, the overall perception of engaging FAs in the insurance industry is positive. Figure 6 below demonstrates that 54% of the respondents are positive about such engagement, while 27% are neutral or still undecided, and the remaining 20% are against it. The main reasons for being against such engagement were that LAs, lawyers, and claim handlers can do the work of FAs.

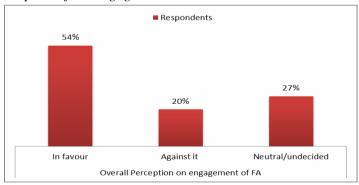


Figure 6. Perception of FA engagement

Source: Authors' own compilation.

However, one must consider that the current local circumstances in which the study was conducted may also affect the results as society is becoming increasingly more aware of the crime.

However, even though forensic auditing is like the statutory financial audit, as stated by ACCA (2018), respondents are still sceptical about the idea of the financial audit being replaced by forensic audit, especially internal controllers. 45% of the

respondents are against this idea, 32% of whom are internal controllers. According to Figure 7 below, most insurance management are neutral about the proposal; thus, it could be that they would ask for such change in the future, as it would be more worthwhile to the insurance firm. This is also in line with Cachia's (2009) findings that insurers do like the proposition of external auditors doing such forensic work while conducting the audit, whereas internal controllers remain sceptical about the proposal.

35% 32% 30% 25% 20% 16% 14% 14% 15% 13% 11% 10% 5% 0% Disagree Neutral Agree ■ Internal Controllers ■ Insurance Management

Figure 7. Perception of substituting the financial audit with forensic audit

Source: Authors' own compilation.

4.1 The Factors Explaining the Effectiveness of Forensic Auditors

Bond *et al.* (2011) explain that effectiveness can be measured through procedural, substantive, transactive and normative effectiveness. With Exploratory Factor Analysis the authors' aim to "examine the underlying patterns or relationships for 18 variables and to determine whether the information can be condensed or summarized in a smaller set of factors or components" (Hair *et al.*, 2010), research question RQ1. The Kaiser–Meyer–Olkin (KMO) statistic, which is a measure of sampling adequacy for the appropriateness of applying factor analysis, fell within the acceptable range (above 0.6), with a value of 0.856 and a p-value < 0.05. This further supported continuance of factor analysis and so the analysis proceeded.

Factor analysis loaded the best of 4 factors and 17 statements, which in combination explained 63.68% of the variance. One statement was omitted (i.e., statements B1 – Substantive Effectiveness - 'Forensic auditors can serve a purpose in the insurance industry'). This was both because they explain little variance and because they fell under factors which were defined by one or two variables, making them unstable and generally unreliable (Tabachnick and Fideli, 2001). The factors were interpreted or omitted cautiously with scientific utility. Therefore, variables that give a low level of association with several factors at the same time are neglected in the analysis.

Table 3 shows which statements are grouped under each of the 4 factors. Factor 1,

which has now been termed "Normative Effectiveness", explained 31.82% of the variance and comprised 5 items. Factor 2, which has now been termed "Transactive Effectiveness" explained 18.81% of the total variance and comprised 4 items, Factor 3, which has now been termed "Procedural Effectiveness" explained 6.83% of the total variance and comprised 4 items and Factor 4, which has now been termed "Substantive Effectiveness" explained 6.21% of the total variance and comprised 4 items (Hair *et al.*, 2010):

Table 3. Exploratory Factor Analysis

Table 5. Exploratory Factor Analysis		Comp	onent	
	1	2	3	4
D3. The role of forensic auditors in the	.796			
insurance industry will affect society's				
behaviour towards insurance services.	-0.4			
D1. Forensic auditing in the insurance industry	.781			
will decrease criminality in society.	c15			
D2. If insurance companies appoint forensic	.615			
auditors as an anti-fraud measure,				
policyholders may benefit a lower premium.	520			
D5. The financial audit should turn into a	.529			
forensic audit to cover the fraud aspect.	505		-	
D4. The engagement of forensic auditors will	.525			
clarify that the purpose of a financial audit is not to detect fraud.				
C4. While utilising fewer resources, the		999		
engagement of forensic auditors will boost		777		
consumer confidence in insurance firms.				
C3. Claims will be finalised in a shorter time,		997		
hence fewer resources being used (workers		991		
spend less time dealing with a claim; therefore				
insurers save costs and time).				
C1. When engaging forensic auditors,		995		
employees will benefit from enhanced		.,,,		
knowledge on fraud detection and they will				
become more aware of the risk of fraud.				
C2. Although wages will increase, insurers will		994		
ultimately benefit from a decrease in costs, due		.,,		
to paying less fraudulent claims.				
A1. Forensic auditors should be engaged at the			.765	
proposal stage (When the client is taking out an				
insurance policy).				
A4. Forensic auditing should be implemented			.663	
as part of the risk management process of an				
Insurance company				
A2. Forensic auditors should be engaged at the			.438	
claims stage when the insurer is suspecting				
fraud.				

A3. When a claim is taken to court, it would be the ideal time to appoint a forensic auditor. B3. Forensic auditors will determine the compensation amount better than loss adjustors (given they have financial and auditing	.388	901
knowledge). B5. Forensic auditors are capable in determining the compensation to be provided to policyholders having injury claims, upon consultation with doctors about the degree of injury.		739
B2. With the engagement of forensic auditors, insurance firms can allocate better reserves.		632
B4. Insurance companies appointing forensic auditors will be more profitable due to a decrease in fraud risk.		503

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization. a. Rotation converged in 7 iterations.

Source: Authors' own compilation.

The Cronbach's alpha coefficients as shown in Table 4 of this scale were between 0.62–0.998. Moreover, that of the 4 Factors is 0.70. Therefore, as part of our statistical analysis, we can conclude that this scale is reliable.

Table 4. Cronbach's Alpha Values (n=471)

Factor	Item	Mean	Min-Max	Cronbach's Alpha
F1 Normative Effectiveness	5	3.32	3.03-3.91	0.73
F2 Transactive	4	4.30	4.29-4.30	0.998
Effectiveness				
F3 Procedural Effectiveness	4	3.23	2.52-3.98	0.62
F4 Substantive	4	3.41	3.26-3.64	0.74
Effectiveness				
FA Effectiveness	4	3.57	3.23-4.30	0.70

Source: Authors' computations.

The computed 'FA Effectiveness Measure' shows a mean of 3.56 (SD = 0.55). Meaning that the 'FA Effectiveness measure' and Factors (1, 2, 3 and 4) produced means that were close to the computed 'FA Effectiveness Measure', Table 5. This shows that participants, overall, believe that FA is effective in the insurance process, research question RQ2.

Table 5. FA Effectiveness Measure

j_j					
	N	Min	Max	Mean	Std. Deviation
F1 Normative Effectiveness	402	1.00	5.00	3.3179	.71138
F2 Transactive Effectiveness	402	1.00	5.00	4.2985	.87594
F3 Procedural Effectiveness	402	1.00	5.00	3.2289	.72379
F4 Substantive Effectiveness	402	1.00	5.00	3.4279	.72027

FA Effectiveness	402	1.00	5.00	3.5683	.55308
Valid N (listwise)	402				

Source: Authors' computations.

The authors then carried out multiple linear regression on the resultant FA Effectiveness Measure and the demographic factors (independent variables) namely: gender, age, line of business (LOB), years of experience of the respondents, company size, and whether respondents experienced insurance fraud. This was carried out to determine how this measure (FA Effectiveness Measure-dependent variable) varies with these independent variables.

Table 6. Model Summary

Model	R	R Square	Adjusted R Square	Std. An error of the Estimate	Durbin- Watson
1	.239a	.057	.043	.54107	1.990

a. Predictors: (Constant), Experienced insurance fraud at work, Number of employees, Gender, Age, Line of Business, Years of experience. b. Dependent Variable: FA Effectiveness.

Source: Authors' computations.

The computed one-way analysis of variance (ANOVA) was used to show that there are statistically significant differences between the means of the independent (unrelated) groups (p < 0.005) in Table 7, research question RQ3.

The multiple regression analysis $[F_{6,395} = 3.999, p < 0.05]$ and the variables explained 5.7% of the variability in the 'FA Effectiveness Measure' (Table 6). The regression coefficients in Table 8 shows that there is a significant positive relationship between the FA Effectiveness Measure and participants who experienced insurance fraud at work ($\beta = 0.154$, t=2.668, p-value < 0.05). On the other hand, there is no relationship between the other independent variables and the 'FA Effectiveness Measure' (p-value > 0.05) (Table 8).

Table 7. ANOVA^a

N	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	7.025	6	1.171	3.999	.001b
1	Residual	115.639	395	.293		
	Total	122.664	401			

a. Dependent Variable: FAEffectiveness

Gender, Age, Line of Business, Years of experience

Source: Authors' Computations.

b. Predictors: (Constant), Experienced insurance fraud at work, Number of employees,

Tab	le 8.	Coefficients

Model			ndardized fficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	3.556	.164		21.625	.000
	Gender	.089	.057	.080	1.570	.117
	Age	033	.045	064	735	.463
1	Line of Business	115	.061	103	-1.877	.061
1	Years of experience	023	.034	060	672	.502
	Number of employees	015	.017	042	855	.393
	Experienced insurance fraud at work	.171	.064	.154	2.668	.008

a. Dependent Variable: FAEffectiveness

Source: Authors' Computations.

Therefore, from the latter finding, for each respective factor, except for the participants who experienced insurance fraud at work, one cannot predict effectiveness from the demographics. Therefore, the null hypothesis is rejected, meaning that the independent variables do not significantly affect the FA effectiveness Measure (the dependent variable).

4.2 The Perception of Participants on the Effectiveness of Forensic Auditors

Respondents (302) suggest and agree that employees would benefit from enhanced knowledge of fraud detection, and they would become more aware of the risk of fraud (substantive effectiveness). Similarly, Uzoka (1990) explains that it would be more effective if companies adopted proactive forensic audits. Therefore, by making employees knowledgeable and aware, the insurance firms will be taking a proactive stance in combating insurance fraud.

Most of the respondents (261) also agreed that insurance companies would benefit from a decrease in claims cost if FAs are employed since they would pay less fraudulent claims, while 201 respondents agreed that the role of FAs would leave an impact on the behaviour of society towards insurance business (normative effectiveness). However, there is still scepticism of whether policyholders would benefit from lower premiums if FAs are employed. This may be because policyholders experienced increased premium rates in recent years; however, as Malta Insurance Association (MIA) (2019) confirmed, they are currently increasing at a lower rate than the European market. Therefore, as insurance firms continue to enhance their service and take extra precautionary measures to combat fraud, premiums may continue to balance out.

Concerning the scepticism of whether the engagement of FAs would decrease crime in society overall (normative effectiveness), this is reminiscent of Simeunovic *et al.* 's (2016) findings. As stated in both the fraud triangle and the diamond theory, the main reason why someone is intrigued to commit fraud is that they have an economic motive. Although the fraud triangle only highlights embezzlement, as also noted by Huber (2017), the authors agree with Simeunović *et al.* (2016) that embezzlement is also categorized as a financial crime.

Therefore, so far, the instinct for policyholders to commit fraud will still be there, even though FAs may be engaged to investigate. However, as mentioned in the diamond theory, one also needs to have the capability, and thus, although respondents are sceptical that the engagement of FAs would reduce criminality in society, the authors believe that the engagement of FAs would indeed decrease criminality since they would curb the capability of fraudsters.

Despite IFAC (2008) stating that the engagement of FAs helped to enhance the understanding of the role of an external auditor, respondents are still sceptical whether the purpose of the financial audit would be clarified, that it is not engaged to detect fraud. Furthermore, this result also contrasted with that highlighted by Vukadinovic *et al.* (2015), because respondents are showing reluctance to turn the financial audit into a forensic audit. They showed further scepticism on whether the engagement of FAs would clarify the purpose of a financial audit. This echoes the findings by Cachia's (2009), who found that Maltese insurance firms rarely use forensic audits, and when used, they are used as a random check. This contrasts with Bhasin's (2015) affirmation that they are currently popular.

Results show that there is still a misunderstanding of the purpose of an external audit because it is used it to check for fraudulent acts, but in fact, an external audit does not focus on detecting fraud. Although the finance departments perceive forensic audits as not worthwhile, the insurance firms, in general, do believe that a statutory audit could include some forensic auditing procedures, and if it were to be done, it would be done by external auditors (Cachia, 2009).

Respondents (202) disagreed that FAs should be appointed at the proposal stage (proactive procedural and transactive effectiveness). However, 74% of the respondents are in favour of FAs being appointed as risk management policy, which may be beneficial because, if FAs are appointed at the proposal stage of every policy, there may be cases which are not fraudulent thereby wasting resources, while there would be no transactive effectiveness; in fact, only 20.4% of the respondents agreed with this option. If this is implemented as part of the risk management process, management may formulate certain criteria about when to appoint FAs thereby being more efficient and effective (Cachia, 2009).

However, one must not forget that the Insurance Business Act (IBA) requires and encourage insurers and intermediaries to exchange information between them and

with other organizations, or else they will be guilty of an offence if something is kept hidden (Laws of Malta, 1998).

Therefore, if insurers appoint FAs, they would be enhancing their knowledge about their customers and keeping a safe environment within the insurance industry, while also enhancing their adherence to insurance laws. Looking at this from a broad perspective, the public, especially investors, will also benefit from this because all insurance firms will be working with a common motive and doing their utmost to mitigate fraud.

With regards to normative effectiveness, where the authors asked participants if the financial audit should be amalgamated with a forensic audit, (301) respondents are between neutral and agreeing to this idea, with a mean in this factor of between (3.03-3.91). This disagreement could be attributed to the expectation gap mentioned by Booker (2015) because auditors are expected to do work which is not within their responsibilities. Respondents also seem reluctant on insurance firms utilizing fewer resources as they engage FAs.

Respondents seem to be in favour of appointing FAs as part of the risk management team. This may be because some classes of insurance, such as motor insurance, are sold at a fast rate. Wong in Errol Oh's (2017), similarly mentions this in a report showing that appointing FAs within the risk management team is more effective because it can prevent fraud from taking place (proactive).

The implications are therefore, the overall, appointing FAs at the proposal stage for all policies would be ineffective and a waste of resources. However, FAs should be effective if they are either appointed as part of the risk management team and policy design and continue to be present at the claims stage if needed, or else at claims stage only. Overall, the engagement of FAs would lead to efficiency within an insurance firm and may have substantive and normative effectiveness, thus affecting the firm itself and other external factors. With regards to transactive effectiveness, it was agreed with a mean ranging between (4.29-4.30) that this would also be achieved if FAs are appointed at the right time.

From the feedback obtained from respondents (120), it transpired that, in Malta, there is still a lack of knowledge on FAs, and also lack people working in the area. They urged to have more people in the financial services sector to pursue FA.

Most (222) respondents suggested conducting a cost-benefit analysis before appointing FAs. They suggested that, when appointing FAs, people want them to go a step further than LAs and noted that, although their jobs are similar, they are not the same, thereby making their job more worthwhile. Furthermore, respondents pointed out that it would be a good idea to include it as part of the risk management process. This is reminiscent of Crumbley (2001) and Smith and Crumbley (2009), who emphasised the importance of appointing FAs at an early stage.

Some (44) respondents also mentioned the principle of proportionality which revolves around adopting policies in line with, the nature, scale, and complexity of the firm (Grima, 2019). Although this should be taken into consideration, a small insurance firm should still not be deprived of the appointment of FAs since they can still serve a purpose. Another respondent mentioned that it can serve as a training source to insurance employees, even if the claims are not fraudulent. Training employees is crucial, as they are the ones having direct contact with the clients, hence they would be able to notice behavioural patterns of the client, even from the conversations brought up by the client. The need of training employees was also mentioned by Camilleri (2019), who highlights the importance of insurance employees being capable of identifying vulnerabilities, which money launderers would be searching for, while reviewing their work and procedures. Given that FAs would know what red flags to look for, such as changes in behaviour patterns or business performance (Grabosky and Duffield, 2001), they would be able to train insurance employees on what to look out for when policyholders want to buy additional policies or placing claims.

The effectiveness of appointing FAs would further depend on the effectiveness of other controls within the firm. This is why, as stated by (301) respondents, FAs should work with the compliance function and Money Laundering Reporting Officers (MLRO). Their job should be properly scoped and defined to avoid any overlaps.

Moreover, it was suggested by these respondents, that if FAs are appointed in Malta, it should be a "market stance, not a unitary stance". This is crucial as it would be useless if only one insurance firm start engaging FAs since fraudsters would go to other companies not engaging such professionals. Lastly, Singleton and Singleton (2010) and Brennan and Hennessy (2001) explain that FAs can predominantly help in personal injury, business interruption, and fidelity bond. These were also mentioned by the majority (388) of the respondents, while further outlining travel, professional indemnity, and fire and theft claims.

As in other accounting matters, there seems to be a 'battle' between what lawyers should advocate in such matters and until what point should FAs intervene. There were various respondents (88) who claimed that, if they were the insured and ended up in a situation where they had to decide whether they should appoint an FA, they would instead appoint a lawyer because they believed that the latter has adequate knowledge to defend them and prove the compensation they deserve. This may be a question of trust in FAs as stated by some respondents (66). Since the profession of forensic auditing is still not well established in Malta, it could be that people are still not aware of their skills and potential, and thus, prefer to use traditional means when taking the trial to the court.

Some (72) of the respondents emphasised that they prefer to have LAs determining the compensation to be paid. These respondents advised that they should work together as they have different roles and can help enhance each other's work. Another option which was proposed by a few (38) respondents was that after the LA provides evidence of fraud, FA would be appointed and thus, they should work together to provide technical knowledge. However, a number (22) of respondents observed that they would recognise the FAs' claim quantification after preparing "sound loss modelling". Therefore, when comparing the responses of the respondents and Cila (2016a), there seems to be an agreement. The work of the LA does include reaching an agreement on the compensation amount between the insurer and the insured, and evaluating that all policy terms were abided by.

However, Cila (2016b) does not state directly that they identify and mitigate fraud. Therefore, in this regard, if an agreement is reached between both the FAs and LAs and they work together, it would enhance each other's work and provide a more robust service. This is in line with what Baker's (2018) reports, as the FAs have robust skills and knowledge, which take aspects into consideration, which LAs may be lacking. Therefore, if they work together, FAs can do the 'back-office work' for LAs to reach an informed conclusion based on various facts and evidence.

5. Conclusions, Limitations, Recommendations, Further Research

In conclusion, when the respondents were asked whether they would appoint FA if they were the policyholders, the majority (206) answered that they would, especially if they had a claim of a high amount and they were not adequately compensated. They further considered the cost of engaging FA, adding that they would appoint FAs only if it would be feasible when compared to the compensation from this engagement that they would earn or not lose. Some others (102) preferred to appoint a lawyer, loss adjustor, or actuaries. It was additionally suggested by some (88) that insurers and the insured should not get involved in the engagement of FAs and should leave this in the hands of the court to appoint them.

5.1 Recommendations

Crime needs to be acted upon because every fraudster is depriving an innocent of certain benefits which companies may be able to give. Therefore, Maltese professionals should be encouraged by the firms to take into consideration learning more about FA. Vukadinović *et al.* (2015) contend that forensic auditing is not a profession, which can be learnt from theory since it revolves mainly around experience. However, there are certain techniques which need to be learnt through training, like the ones provided by the Institute of Certified Forensic Accountants (ICFA) (2016).

Moreover, if claims are taken to court and FAs are still not appointed, the judge should consider appointing FAs and ask for recommendation about the case. Currently, as stated by various respondents (306), the court finalizes a court case by seeing how previous similar cases were dealt with (precedents) and provides a

sentence on the same lines. This should not be the way to go as each case is separate and unique. Although fraudsters have similar intentions, the sensitivity and grievousness of the case are different.

5.2 Concluding Remarks

This study highlighted the lack of knowledge of the profession of FA and the lack of supply in Malta, even though insurance companies may be showing interest in appointing them. Furthermore, engaging FAs would be effective and would benefit society. Therefore, the key takeaway from this study is to encourage professionals to study and provide such forensic service to insurance firms, policyholders, and possibly other businesses. Consequently, insurance firms would benefit from fewer fraudulent claims and less fraud in society.

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