

Stance of Accounting Instructors to Forensic Accountancy Profession: Example of Turkey

Gorgulu, Mehmet Emre and Elitas, Cemal and Karakoc, Mehtap

2011

Online at https://mpra.ub.uni-muenchen.de/62081/ MPRA Paper No. 62081, posted 20 Feb 2015 13:28 UTC

STANCE OF ACCOUNTING INSTRUCTORS TO FORENSIC ACCOUNTANCY PROFESSION: EXAMPLE OF TURKEY

Assoc.Prof.Dr.Cemal Elitaş Research Assistant M.Emre Görgülü Research Assistant Mehtap Karakoç

Abstract

Considerable firm scandals that have been experienced in recent years, have reduced the confidence to financial statements and have caused amendments to be made on existing regulations. This situation brought attention to accountants and auditors that expose the financial conditions of the firms. The scandals have been experienced, revive the importance of accounting auditing and the increasing responsibility of the auditors. Inadequacy of accountants and auditors that have been educated according to the existing curriculum, conduce a new profession to arise. Being its original name "Forensic Accounting", this profession, that exhibits rapid progress in delevoped countries with United States of America in the lead, is known as "Forensic Accountancy-Adli Muhasebecilik" in our country. Forensic Accountancy profession; with its services as litigation support consultancy, expert testimony and fraud auditing (investigative accountancy) fills a large gap in this field. This study is aimed at measuring the awareness of accounting instructors against this profession that has not been applied in our country yet. For this purpose, the survey being developed is going to be forwarded to accounting instructors in an attempt to determine the level of awarenesses. This study deals with the scope of forensic accountancy profession, the specifications of forensic accountants, belonging to forensic accountancy profession and the education of forensic accountants, thereby this study attempts to explain the level of awareness and to comment on survey results.

Keywords: Forensic Accounting, Litigation Support Consultancy, Expert Testimony, Fraud Auditing/Investigative Accountancy, ANOVA test.

1. Introduction

Induced large economic losses in firms by the scandals that have been experienced, give rise to a new profession that is known as "forensic accounting". In addition, mislead of financial statement users and the increases in commercial disputes, accounting frauds and cases at courts, with the increase in applications such as creative accounting and vague accounting, have supported the need to this profession (Pazarçeviren, 2005: 1). This profession has been applied in abroad, but not yet found a field of application in Turkey. This study aims at asserting the stance of accounting instructors to forensic accountancy profession. For this purpose, relevant literature will be presented initially and then forensic accountancy subject will be attempted to be explained briefly but widely from different perspectives. Next, investigation of observed findings and evaluations from semi-structured survey technique applied to academicians partaking in accounting field in Turkey will take place.

2. Literature Review

Recently, forensic accounting has become popular in the field of accounting and has been widely investigated in the literature abroad (Crumbley, 1995; Rezaee and Burton, 1997; Crumbley, Kratchman and Smith, 2004; Carnes and Gierlasinski, 2001; Rezaee, Crumbley and Elmore, 2003; Singleton et. al., 2006; Ramaswamy, 2007; Carpenter, Durtschi and Gaynor, 2008; DiGabriele, 2007-2010; Kasum, 2009). On the other hand, studies made in this field in the domestic literature (Nejat, 2000; Kaya, 2005; Pazarçeviren, 2005; Toraman, Abdioğlu and İşgüden, 2009; Ulucan and Pektekin, 2009; Cankaya and Gerekan, 2009) are limited. With its most widely accepted definition forensic accountic is; "a type of a service that deals with resolution of legal, financial and social problems with the usage of accounting, auditing and juristical concept, principle and techniques in a context of a research". The concept of forensic accounting first brought in to the literature by Maurice E. Peloubet in the year 1946. Although, initially the concept was solely used for juridical cases, in time accountants found themselves in forensic accounting (Kaya, 2005: 51). From 1980's onwards, Being its original name "Forensic Accounting", this profession has become widespread in delevoped countries with United States of America in the lead. The word forensic with its lexical meaning can be explained as "belonging to the court", "accepted as a standard in juridical cases" (Bozkurt, 2000: 56). This profession was translated into our language as "adli muhasebe-forensic accounting" and practitioners of this profession is called "adli muhasebeci-forensic accountant". Considering the name of forensic accounting, we can say that, "forensic accounting; is a type of speciality that attempts to resolve the legal problems experienced by firms with the help of financial data".

We have already expressed that when analyzed, studies in the domestic literature concerning the concept of forensic accounting are limited. Bozkurt (2000) in his study, attempted to introduce the profession to Turkey with the dimensions of scope and the necessity reasons of the profession of forensic accountancy. In his study, the most emphasized important subject was the magnitude of Turkey's need to the forensic accountancy profession. The author thinks that Turkey has the necessary infrastructure and accumulation to form the profession and that this profession needs to be bringing in to Turkey by organizing systematically. Further, Kaya (2005), while explaining the profession of forensic accountancy in detail, also dealt with its essentiality and applicability for Turkey. He indicates that, with forensic accountancy professional education using a precedure suitable for the conditions of Turkey, in averting suffered losses of firms due to fraud and corruption, effective results can be achieved. Pazarçeviren (2005) in his study, examined a forensic accounting suit experienced by Mooresville Honda firm as a case study. In his conclusion, he pointed out the differences between accountants, independent auditors and internal auditors and forensic accountants and he emphasized the expectation that forensic accountants, due to the education they received, may be more successful in struggle with fraud. Toroman, Abdioğlu and İşgüden (2009) in their study, examined the profession of forensic accountancy in the dimension of laundering of illicit money. Forensic accountants are seen as profession elements who provide professional assistance in the struggle with crime and are expected to provide assistance - with their technical knowledge, skill and experiences - in execution and conclusion of the investigation related with the crime of money laundering. This assistance, can take the forms of pre-suit; litigation support consultancy, fraud auditing or investigative accountancy and of process of a suit as assisting the lawyers or bearing the title of expert testifier by expressing his opinion to the court. In addition, Ulucan and Pektekin (2009) in their study, while emphasizing the increasing importance of information technologies in accounting auditing, they also dealt with the data mining technique that the forensic accountant can benefit from when facing with arising corruption when technology is being used for vicious purposes and struggle with this corruption. They indicate that with data mining - as one of the methods used by forensic accountants - financial statements can be analyzed punctiliously, and data mining can provide means to determine and prevent the realized or potential losses of firms. Çankaya and Gerekan (2009) in their study, while introducing the profession of fraud auditing or investigative accountancy which perceived as an extend of forensic accounting, they presented the standards and the professional ethic rules about the profession developed by Association of Certified Fraud Examiners-ACFE whose headquarters is established in the United States. In conclusion of their study, in terms of Turkey, they emphasized the need to determine an institution that satistfy the necessary education conditions in order to achieve the development of the profession and provide services in this field and the need to make the necessary juridical regulations accordingly.

Among studies made by foreign authors about forensic accounting, there are some empirical studies along with teoretical studies. While some of these authors (Crumbley, 1995; Crumbley, Kratchman and Smith, 2004; Singleton et. al., 2006; DiGabriele, 2007-2010; Kasum, 2009) laid emphasis on the forensic accounting, some (Rezaee and Burton, 1997; Carnes and Gierlasinski, 2001; Rezaee, Crumbley and Elmore, 2003; Ramaswamy, 2007; Carpenter, Durtschi and Gaynor, 2008) made their studies over forensic accountancy education programmes. One of the most important studies about forensic accounting is Crumbley's (1995). Crumbley in his study, emphasized the emergence of forensic accounting, its extent and its importance. Crumbley, Kratchman and Smith (2004) in their study, with reference to the famous detective Sherlock Holmes underlined forensic accountants' need to work as a detective while they practicing their profession. Singleton et. al. (2006) in their study, laid weight on forensic accounting and fraud auditing. In the book they wrote, while they emphasized fraud auditing and basic concepts of forensic accounting, in protection from fraud they concentrated on topics such as responsibility of the auditors, red tags and fraud detection, protection from fraud and control, forensic accounting with the dimension of expert testimony. Di Gabriele (2007), explored whether a forensic accountant has differences from the users of forensic accounting service, academicians and exercisers in terms of convenient skills. Surveys applied by mail to randomly picked 500 person from each group. 102 exercisers, 72 users and 78 academicians be about 252 persons in total have responded the survey. The emerged conclusion of the study was the necessity of determining the convenient skills for the development of curriculum of the forensic accounting. Kasum (2009) in his mixed exploratory research study of bibliotheca and empiric, attempted to computate whether forensic accountants are more needed in private or government sector in struggle with financial crimes experienced in developing countries. In the conclusion of his study, it ensued that government sector needs forensic accountants much more. Di Gabriele (2010) made an empirical study over expert testimony transparency perceptions devoted to forensic accountants, lawyers and academicians in the field of accounting. According to the results of the surveys applied by the author to 85 academicians, 87 forensic accountants and 86 lawyers; while forensic accountants and lawyers have responded differently in all research points, academicians and forensic accountants have differentiated in majority of the results.

Some of the studies made in the literature abroad deal with forensic accountacy education and education curriculums. The study made by Rezaee and Burton (1997) has been applied to 196 academicians and 213 certified fraud examiners (CFE). In conclusion of the research, although the parties agreed on forensic accounting education should be included to the present accounting

curriculum, it ensued that they differentiated in procedure to follow for the education. While fraud auditors asserted that forensic accounting should be taught as a separate lecture, academicians stressed that it should be given within the scope of existing accounting and auditing lectures. Carnes and Gierlasinski (2001) in their study, while underlying forensic accounting skills, they emphasized the supply and demand dimensions of forensic accounting. In conclusion of their study, they indicated that by modifications to be made in the education curriculum of forensic accounting, forensic accountant supply can meet its demand. Rezaee, Crumbley and Elmore (2003) in their study, emphasized the importance, convenience and delivery of forensic accounting education devoted to academicians and exercisers. The results show that; the demand and interest shown to forensic accounting are expected to raise. In this respect, it is emphasized that there is a need of planning of providing forensic accounting education in much more universities. Both responding groups have indicated that forensic accounting education is going to be beneficial and convenient to accounting students, accounting programmes, accounting profession members and to business life. Ramaswamy (2007) in his study, pointed out the increase in the need of forensic accountants in recent years. He also stated that it is needed for universities to prepare education programmes in order to train qualified forensic accountants and meet the potential future needs. Carpenter, Durtschi and Gaynor (2008) laid emphasis over on increasing benefits of forensic accounting lectures about crimes related with skepticism and fraud. The study they made with this purpose, they observed a group of students to be educated for 7 months. In conclusion of the study, they described the performance of the students that received the education to be promising.

Extent of the Profession of Forensic Accountancy

From 1980's on, the need for the profession of forensic accountancy has increased particularly in Western countries. Among the reasons of this situation, increase in the number of applications to courts, complexification of commercial transactions, increase in corruption of enterprise employees and challenges experienced in prevention, increase in enterprise failure rates, increasing need of expert support in courts can be considered (Bozkurt, 2000: 56). In struggle with these mentioned problems, forensic accountants operate in three different areas of activity¹. These areas are;

- Litigation Support Consultancy
- Expert Testimony
- Fraud Auditing/Investigative Accountancy

Litigation Support Consultancy

Litigation support consultancy is one of the most extensive areas that forensic accountants provide service. Litigation support consultancy is - with its most broad definition - prior to or in the course of a litigate the service provided in various subjects to concerning lawyers by a forensic accountant (Bozkurt, 2000: 57). According to the definition of American Institute of Certified Public Accountants (AICPA) litigation support consultancy is the professional assistance provided by non legists to legists in a legal process (Crumbley, 1995: 23). For

¹ Crumbley (1995) and Kaya (2005) in their studies, examied the extent of the profession be about litigation support consultancy and fraud auditing. Due to the importance of expert testimony dimension, our study will examine the extent of forensic accountancy in three major parts.

instance, calculating a loss resulted by breach of a contract is a typical litigtion support (Ulucan and Pektekin, 2009: 65).

Forensic accountants can of help to lawyers in collecting the necessary data and in analysing the collected data. In a legal process interpreting on facts and evidences, examining them and providing expert opinion on data to be presented to the court are among the duties of forensic accountants (Crumbley, 1995: 23).

Service areas of litigation support consultancy are notably broad. Some of them are (Bozkurt, 2000: 57);

- All kinds of corruption litigates,
- Enterprise assessments,
- Damage and loss estimations,
- Insurance disputes,
- Rising problems from contracts,
- Rising problems concerning patent, right and trademarks,
- Parting or merger litigates concerning enterprises,
- Bankruptcy litigates,
- Financial disputes concerning divorces,
- Inter-enterprise problems.

Expert Testimony

The facts that increasing number of economics originated litigates and matters in dipute having become more complex in recent years, have increased the need of expert testimony of forensic accountants. Expert testimony is a means call upon by judges in courts for a litigate to be carried on and to be concluded more reliable (Bozkurt, 2000: 58). The function of export testifiers here is in the form of technical support. Technical way in question emerges in presenting financial aspect of whatsoever event, in analysing tax concerning transactions, in taking position against the expert testifier of the other party, in interpreting information on documents (Kaya, 2005: 54).

Incumbent duties of forensic accountants while they provide export testimony service are (Bozkurt, 2000: 58);

- While making necessary investigations about the litigious question, collecting various data,
- Having an opinion based on the results of analysis made with this data,
- Reflecting the opinion formed to the judges and lawyers in the court in an illuminating and pragmatic way.

Responsibility of forensic accountants in the duty of expert testimony is tremendous. In this respect, forensic accountants should act impartial, objective and independent in their practices. They should be in a creative, soother and commonsensical status, they should explain technical matters in a clear way and they should communicate well with both parties while they fulfil their duty (Bozkurt, 2000: 58).

Fraud Auditing/Investigative Accountancy

With its most general definition fraud is falsifying enterprise transaction record documents on purpose with a specific purpose (Erol, 2008: 230). In recent years experienced increase in fraud cases in enterprises, bring forward the need of expert support in this matter. It would be wrong to expect success in struggle with fraud from accountants, independent auditors and internal auditors that received training according to the existing curriculum. The need for expert support regarding this matter is provided by persons who are called "fraud auditors or investigative accountants" (Bozkurt, 2000: 58).

Investigative accountancy in general deals with examining crimal matters. For instance; worker theft, real estate fraud, insurance fraud, bribery, investigations regarding crime practice are in the extent of investigative accountancy (Pazarçeviren, 2005:5).

Nowadays most encountered fraud subjects are (Bozkurt, 2000: 58);

- Fraud made by employees against their own enterprise/employer,
- Fraud made by white collar employees,
- Financial statement fraud made by top managers of enterprises in order to mislead those concerned,
- Fraud made concerning investments,
- Commercial bribes and commissions,
- Fraud concerning bank transactions and electronical funds transfer (EFT),
- Credit card, computer and internet frauds.

When the activity that forensic accountancy contains taken into consideration, importance of the features that forensic accountants need to have emerges. Forensic accountants in contradistinction to normal accountants or auditors, need to bear a number of features and need to have extensive information on some specific subjects (Pazarçeviren, 2005: 10).

Features of Forensic Accountants

Due to the reason that forensic accountants specialize in different areas, it is quite hard to specify the qualifications that a forensic accountant needs to have (Kaya, 2005: 57). We can sort the parties that can need a forensic accountant as lawyers, police forces, insurance companies, banks, courts, business world, government representatives and corporate bodies that are affiliate to the government (Pazarçeviren, 2005: 4). Forensic accountant needs to have some specific knowledge in some certain subjects in order to meet the needs of those entities, corporations and establishments. Some of them are (Bozkurt, 2000: 59);

- Intense accounting knowledge,
- Auditing,
- Statistics,
- Computer applications,
- Law,
- Psychology,
- Research techniques,
- Criminology,
- Business management.

Crumley (1995) in his study defines the forensic accountant as a person who "does not accept the apparent worth of the records, instead looks for the background, has a doubt about documents, investigates the real intention, prepares the expert report, by making interviews with individuals reveals the truth with all its details particularly when there is a possibility that some people lie" (Crumbley,1995: 24). As it can be well understood from the definition, forensic accountants needs to focus more on backgrounds of the events instead of apparent side of them. In general we can sort the individual features that a forensic accountant needs to bear as (Bozkurt, 2000: 60; Pazarçeviren, 2005: 10);

- Curiosity: A forensic accountant should be interested in and curious about developments in his profession and he needs to use his professional skepticism.
- Persistency: The forensic accountant should not instantly give up due to encountered challenges, rather he needs to be persistent in proving the stand he defends.
- Creativity: The forensic accountant should be as much as creative as possible he can along with general principles and rules that he needs to obey, and should approach to the events from different perspectives.
- Perception: The forensic acocuntant should evaluate each case both in general and in detail. He should preserve his calmness under pressure, should have a good business perception, should have a sound judgement skill and should make plain, analytical and sensible reasoning dominant over his decisions.
- Skill: A forensic accountant should be successful in written and in verbal communication and should form human relations in a healthy way.

As a result, for persons who want to be forensic accountants it is not sufficient to have just an intense accounting knowledge. Even though they have some specific knowledge, in order to be successful in the profession they also need to carry the individual features mentioned above.

The Training of Forensic Accountants and Being a Forensic Accountancy Profession Member

With the commence of effective implementation of forensic accountancy, debates over forensic accountancy training has started. The authors who make researches about forensic accountancy training (Rezaee and Burton, 1997; Carnes and Gierlasinski, 2001; Rezaee, Crumbley and Elmore, 2003; Ramaswamy, 2007) do not reach a consensus over how forensic accountancy training should be done.

Forensic accountancy traing can be included to the university curriculum by adding necessary lectures on normal undergraduate programme or by forming a separate graduate programme or by opening a course programme (Bozkurt, 2000: 60). Rezaee and Burton (1997) in their study, stated which important subjects should be included to forensic accountancy training curriculum. Some of those subjects are; basic concepts of fraud, financial fraud and the responsibility of accountants, internal control assessment and statistical sample, red tags, fraud types, efficient report writing techniques, fraud inspection and prevention from fraud theory, fraud auditing technique, legal system information, process of financial reporting and its analysis, rules of morality and business ethics (Rezaee and Burton, 1997: 486).

In the profession of forensic accountancy training is just a prerequisite. As one of the countries that the profession is applied effectively, in U.S. to be a certificated forensic accountant one must pass through several phases (Bozkurt, 2000: 60);

- Undergraduate education
- Professional experience for two years
- Being successful in U.S. active ACFE exams covering four major parts as financial transactions, researching, legal elements and criminology.

ACFE organises training and seminars, and makes publications about forensic accountancy and fraud auditing. With its registered professional members close to 25,000 it is regarded as the most important institution in the globe that is active in this field (Bozkurt, 2000: 61).

Results of the Research

In this research, measurement of accounting instructors' awareness against the profession of forensic accountancy - that has no application in Turkey yet - is aimed. The scope of the research contains instructors assigned in Turkish Universities' accounting-finance field. In consequence of the surveys made, 144 instructors' opinions have been taken. In evaluating the survey results packaged software of SPSS 15 has been benefited from. Our survey is consisted of 2 parts. In the first one questions asked for instructors' demographic features. In the second part, it is attempted to examine instructors' opinions about the profession of forensic accountancy by using likert scale. To determine the survey's reliability, confidence test has been applied. For each question separate frequencies and percentage distributions has been found. With the aim to present the relationships and differences among variables, one way ANOVA (ANalysis Of VAriance) test has been applied.

The reliability of the scale is found with the aid of Cronbach Alfa coefficient that is calculated through Alfa (a) method which is one of the models used in reliability analysis. Depending on the Alfa coefficient, if reliability of the scale is $0.60 \le \alpha < 0.80$ then scale is fairly reliable. With its 0.67 scale, our study is then proven to be fairly reliable (Kalaycı, 2008: 405).

Among instructors subject to our research 67.4% are male and 32.6% are female. Among instructors participating in our survey 9% are professors, 11.1% are associate professors, 34.7% are assistant professors, 20.8% are lecturers and 24.3% are research assistants. Among our instructors 4.2% have a bachelor's degree, 22.2% have a master's degree and 73.6% have a ph.d. degree. Among instructors subject to our research 17.4% are between the ages of 20-29, 51.4% are between the ages of 30-39, 19.4% are between the ages of 40-49 and 11.8% are 50 years old or above. If we take our instructors' working years into consideration, then 18.8% have between 1-5 years, 28.5% have between 6-10 years, 27.8% have between 11-15 years and 25% have 16 years or above professional experience.

Demographi	cal	Frequency	%
Features			
Gender	Female	47	32.6
	Male	97	67.4
Working	1-5 years	27	18.8
Years	6-10 years	41	28.5
	11-15 years	40	27.8
	16 years and above	36	25.0
Title	Prof.Dr.	13	9.0
	Assoc.ProfDr.	16	11.1
	Assist.Prof.Dr.	50	34.7
	Lecturer	30	20.8
	Research Assist.	35	24.3
Age	20-29	25	17.4
	30-39	74	51.4
	40-49	28	19.4
	50 and above	17	11.8
State of	Bachelor's Degree	6	4.2
Education	Master's Degree	32	22.2
	Ph.D. Degree	106	73.6
	Total	144	100

Table 3: Demographical Features

While the results are interpreted, the choices of "absolutely disagree and disagree" are going to be interpreted as "disagree" and the choices of "absolutely agree and agree" are going to be interpreted as "agree".

		Frequency	%
To be successful in the profession of forensic accountancy, an	Absolutely Agree	28	19.4
intense accounting education is sufficient.	Agree	50	34.7
	Neutral	12	8.3
	Disagree	48	33.3
	Absolutely Disagree	6	4.2
In terms of infrastructure, our country is ready for the application	Absolutely Agree	3	2.1
of the profession of forensic accountancy.	Agree	19	13.2
	Neutral	47	32.6
	Disagree	68	47.2
	Absolutely Disagree	7	4.9
Specific knowledge and experience of forensic accountants plays	Absolutely Agree	64	44.4
an important role to be successful in the profession.	Agree	77	53.5
	Neutral	-	-
	Disagree	2	1.4
	Absolutely Disagree	1	.7
With the application of forensic accountancy in our country,	Absolutely Agree	40	27.8
the profession of accountancy will have gain prestige.	Agree	72	50.0
	Neutral	21	14.6
	Disagree	8	5.6
	Absolutely Disagree	2	1.4
As the service of expertise in our country is at sufficient level,	Absolutely Agree	3	2.1
there is no need for the service of "litigation support consultancy".	Agree	7	4.9
	Neutral	24	16.7
	Disagree	90	62.5
	Absolutely Disagree	20	13.9
In struggling against the crime of laundering,	Absolutely Agree	20	13.9
forensic accountants are expected to raise the success ratio.	Agree	76	52.8
	Neutral	41	28.5
	Disagree	4	2.8
	Absolutely Disagree	1	.7
Legal reforms made on frauding in our country are at sufficient	Absolutely Agree	2	1.4
level.	Agree	10	6.9
	Neutral	24	16.7
	Disagree	91	63.2
	Absolutely Disagree	15	10.4

Table 4: Questions Concerning the Profession of Forensic Accountancy

		Frequency	%
In the subject of struggle against frauding, accountants and	Absolutely Agree	1	.7
uditors that are trained according to the general standards re sufficient.	Agree	10	6.9
are sufficient.	Neutral	23	16.0
	Disagree	94	65.3
	Absolutely Disagree	14	9.7
Forensic accountants are expexted to provide support for	Absolutely Agree	16	11.1
internal controlling activities.	Agree	88	61.1
	Neutral	21	14.6
	Disagree	18	12.5
	Absolutely Disagree	1	.7
In our country there is a need for institutions and organizations	Absolutely Agree	51	35.4
that can direct the profession into activities like seminars,	Agree	81	56.3
publications, etc.	Neutral	5	3.5
	Disagree	5	3.5
	Absolutely Disagree	2	1.4
With the training and seminars will be given by concerning	Absolutely Agree	49	34.0
institutions, awareness of the profession can be created.	Agree	91	63.2
	Neutral	1	.7
	Disagree	1	.7
	Absolutely Disagree	2	1.4
For the profession of forensic accountancy to be successful	Absolutely Agree	27	18.8
	Agree	77	53.5
change their training programmes.	Neutral	25	17.4
	Disagree	13	9.0
	Absolutely Disagree	2	1.4
For the profession of forensic accountancy to achieve a	Absolutely Agree	44	30.6
professional structure, certification activities will need to	Agree	86	59.7
be done by competent authorities in our country.	Neutral	8	5.6
	Disagree	4	2.8
	Absolutely Disagree	1	.7
The profession of forensic accountancy will create an innovational	Absolutely Agree	47	32.6
effect to the profession of accountancy.	Agree	73	50.7
	Neutral	14	9.7
	Disagree	9	6.3
	Absolutely Disagree	1	.7

• Among instructors subject to our research 52.1% think that in terms of infrastructure Turkey is not ready for the application of the profession of forensic accountancy, while 15.3% think that she is ready for it. In this subject 32.6% of our instructors remained indecisive.

- 77.8% of the instructors think that with the application of forensic accountancy in Turkey, the profession of accountancy will have gain prestige.
- Among instructors subject to our research 91.7% substantial majority indicated that in Turkey there is a need for institutions and organizations that can direct the profession into activities like seminars, publications, etc.
- 97.2% of the instructors indicated that with the training and seminars given by concerning institutions, awareness of the profession can be created.
- Among instructors subject to our research 72.3% indicate that for the profession of forensic accountancy to be successful in the long-run, higher education institutions need to change their training programmes while 10.4% assert that there is no need to change and 17.4% remained indicisive in this subject.
- 83.3% of instructors indicate that the profession of forensic accountancy will create an innovational effect to the profession of accountancy.
- Among instructors subject to our research 75% assert that in the subject of struggle against frauding, accountants and auditors that are trained according to the general standards are not sufficient.
- 54.1% of the instructors think that to be successful in the profession of forensic accountancy, an intense accounting education is sufficient, while 37.5% assert that it is not sufficient. 8.3% of them remained indicisive in this subject.

Basic assumption of the one way ANOVA test is the homogeneity of the variances. Among our variables descriptive statistics of those have homogenous variances are as follows:

				Standard	Standard	95% Confic	lence Interval
		Ν	Mean	Deviation	Error	Low Limit	High Limit
In terms of infrastructure,	Prof.	13	3.3077	1.10940	.30769	2.6373	3.9781
our country is ready for	Assoc. P.	16	3.3125	1.07819	.26955	2.7380	3.8870
the application of the profession of forensic	Assist. P.	50	3.3000	.73540	.10400	3.0910	3.5090
accountancy.	Lecturer	30	3.2333	.81720	.14920	2.9282	3.5385
5	R. Assist.	35	3.7429	.78000	.13184	3.4749	4.0108
	Total	144	3.3958	.85459	.07122	3.2551	3.5366
To be successful in the	Prof.	13	2.7692	1.42325	.39474	1.9092	3.6293
profession of forensic	Assoc. P.	16	3.0000	1.36626	.34157	2.2720	3.7280
accountancy, an intense accounting education is	Assist. P.	50	2.6400	1.13856	.16102	2.3164	2.9636
sufficient.	Lecturer	30	2.6333	1.27261	.23235	2.1581	3.1085
	R. Assist.	35	2.6000	1.26491	.21381	2.1655	3.0345
	Total	144	2.6806	1.23839	.10320	2.4766	2.8845
Specific knowledge and	Prof.	13	1.6154	.50637	.14044	1.3094	1.9214
experience of forensic	Assoc. P.	16	1.7500	1.00000	.25000	1.2171	2.2829
accountants plays an important role to be	Assist. P.	50	1.5000	.50508	.07143	1.3565	1.6435
successful in the profession.	Lecturer	30	1.6333	.66868	.12208	1.3836	1.8830
	R. Assist.	35	1.6571	.63906	.10802	1.4376	1.8767
	Total	144	1.6042	.63926	.05327	1.4989	1.7095

Table 5: Descriptive Statistical Data

				Standard	Standard	95% Confide	ence Interval
		Ν	Mean	Deviation	Error	Low Limit	High Limit
In struggling against	Prof.	11	2.4545	.68755	.20730	1.9926	2.9164
the crime of laundering,	Assoc. P.	16	2.8125	1.04682	.26171	2.2547	3.3703
forensic accountants are expected to raise the	Assist. P.	50	2.1600	.65027	.09196	1.9752	2.3448
success ratio.	Lecturer	30	2.1333	.62881	.11480	1.8985	2.3681
	R. Assist.	35	2.0571	.72529	.12260	1.8080	2.3063
	Total	142	2.2254	.74752	.06273	2.1013	2.3494
Legal reforms made on	Prof.	11	3.6364	.80904	.24393	3.0928	4.1799
frauding in our country	Assoc. P.	16	3.6875	1.01448	.25362	3.1469	4.2281
are at sufficient level.	Assist. P.	50	3.8600	.75620	.10694	3.6451	4.0749
	Lecturer	30	3.5667	.89763	.16388	3.2315	3.9018
	R. Assist.	35	3.8286	.61767	.10440	3.6164	4.0407
	Total	142	3.7535	.79168	.06644	3.6222	3.8849
In the subject of struggle	Prof.	11	3.9091	.83121	.25062	3.3507	4.4675
against frauding,	Assoc. P.	16	3.9375	.92871	.23218	3.4426	4.4324
accountants and auditors that are trained according	Assist. P.	50	3.7400	.75078	.10618	3.5266	3.9534
to the general standards	Lecturer	30	3.6667	.71116	.12984	3.4011	3.9322
are sufficient.	R. Assist.	35	3.8000	.67737	.11450	3.5673	4.0327
	Total	142	3.7746	.74752	.06273	3.6506	3.8987
In our country there is a	Prof.	13	1.8462	.80064	.22206	1.3623	2.3300
need for institutions and	Assoc. P.	16	1.8750	1.20416	.30104	1.2333	2.5167
organizations that can direct the profession into	Assist. P.	50	1.7400	.59966	.08480	1.5696	1.9104
activities like seminars,	Lecturer	30	1.8333	.79148	.14450	1.5378	2.1289
publications, etc.	R. Assist.	35	1.7714	.80753	.13650	1.4940	2.0488
	Total	144	1.7917	.78335	.06528	1.6626	1.9207
For the profession	Prof.	12	2.0833	.79296	.22891	1.5795	2.5872
of forensic accountancy to achieve a professional structure, certification activities will need to be	Assoc. P.	16	2.0000	1.09545	.27386	1.4163	2.5837
	Assist. P.	50	1.8200	.62890	.08894	1.6413	1.9987
	Lecturer	30	1.6667	.71116	.12984	1.4011	1.9322
done by competent	R. Assist.	35	1.8000	.58410	.09873	1.5994	2.0006
authorities in our country.	Total	143	1.8252	.71517	.05981	1.7069	1.9434

Results of the homogeneity of the variances test (Levene test) are as below. As the p values (Sig.) here are greater than 0.05, it is said that variances are homogenous. Thus, as they satisfy the basic assumption of the analysis of variance, it can be said that the results that will be yielded from the analysis of variance are robust (Kalaycı, 2008: 138).

	Levene Statistic	df1	df2	p(Sig.)
In terms of infrastructure, our country is ready for the application of the profession of forensic accountancy.	1.932	4	139	.109
To be successful in the profession of forensic accountancy, an intense accounting education is sufficient.	1.305	4	139	.271
Specific knowledge and experience of forensic accountants plays an important role to be successful in the profession.	.747	4	139	.562
In struggling against the crime of laundering, forensic accountants are expected to raise the success ratio.	1.204	4	137	.312
Legal reforms made on frauding in our country are at sufficient level.	1.479	4	137	.212
In the subject of struggle against frauding, accountants and auditors that are trained according to the general standards are sufficient.	.087	4	137	.986
In our country there is a need for institutions and organizations that can direct the profession into activities like seminars, publications, etc.	1.740	4	139	.145
For the profession of forensic accountancy to achieve a professional structure, certification activities will need to be done by competent authorities in our country.	.600	4	138	.664

Table 6: Homogeneity of the Variances Test

Accept or reject table of the hypotheses we formed along with analysis of variance table concerning variables that have homogenous variances are given as below:

Table 7: Analysis of Variance Table-ANOVA

		Sum of Squares	Degrees of Freedom (df)	Mean Squares	F	p(Sig.)	Accept/ Reject
Between the groups, there are no difference among the people who think that in terms of infrastructure, Turkey is ready for the application	Between Groups	5.678	4	1.420	1.99 8	.098	
of the profession of forensic accountancy (H_{01}) .	Within Groups	98.759	139	.710			Accept
	Total	104.438	143				
Between the groups, there are no difference among the people who think that to be successful in the profession of forensic accountancy, an	Between Groups	2.111	4	.528	.338	.852	
intense accounting education is sufficient (H_{02}) .	Within Groups	217.194	139	1.563			Accept
	Total	219.306	143				
Between the groups, there are no difference among the people who think that specific knowledge and experience of forensic accountants plays an important role to be successful in the profession (H_{03}) .	Between Groups	1.008	4	.252	.610	.656	
	Within Groups	57.429	139	.413			Accept
	Total	58.438	143				

		Sum of Squares	Degrees of Freedom (df)	Mean Squares	F	p(Sig.)	Accept/ Reject	
Between the groups, there are no difference among the people who expect that in struggling against the crime of laundering, forensic	Between Groups	7.552	4	1.888	3.63 1	.008	- F	
accountants will raise the success ratio (H_{04}) .	Within Groups	71.237	137	.520			Reject	
	Total	78.789	141					
Between the groups, there are no difference among the people who think that legal reforms made on frauding in Turkey	Between Groups	2.032	4	.508	.806	.523		
are at sufficient level (H_{05}) .	Within Groups	86.341	137	.630			Accept	
	Total	88.373	141					
Between the groups, there are no difference among the people who think that in the subject of struggle against frauding,	Between Groups	1.055	4	.264	.465	.761		
accountants and auditors that are trained according to the general standards are sufficient(H_{06}).	Within Groups	77.733	137	.567			Accept	
	Total	78.789	141					
Between the groups, there are no difference among the people who think that in Turkey there is a need for institutions and	Between Groups	.350	4	.087	.139	.968		
organizations that can direct the profession into activities like seminars, publications, etc. (H_{07}) .	Within Groups	87.400	139	.629			Accept	
	Total	87.750	143					
Between the groups, there are no difference among the people who think that for the profession of forensic accountancy to achieve a professional structure, certification activities will need to be done by competent authorities in Turkey (H_{08}).	Between Groups	2.066	4	.517	1.01 0	.404		
	Within Groups	70.563	138	.511			Accept	
	Total	72.629	142					

* If p< 0,05 then reject Ho.

As it can be understood from Table 7, HA4 has been rejected. In other words "There are difference among the groups who expect that in struggling against the crime of laundering, forensic accountants will raise the success ratio". We will use Turkey test - one of the most commonly used Post Hoc tests - in order to find the groups from which differences existing among groups originated.

Table 8: Multiple Comparison Test

Tukey HSD

			Mean Difference	Standard		95% Confide	nce Interval
Dependent Variables	(I) Title	(J) Title	(I-J)	Error	p(Sig.)	Low Limit	Low Limit
Between the groups,	Prof.	Assoc. P.	35795	.28244	.712	-1.1387	.4228
there are no difference		Assist. P.	.29455	.24015	.736	3693	.9584
among the people who expect that in struggling		Lecturer	.32121	.25417	.714	3814	1.0239
against the crime of		R. Assist.	.39740	.24925	.504	2916	1.0865
laundering, forensic	Assoc.	Prof.	.35795	.28244	.712	4228	1.1387
accountants will raise	Prof.	Assist. P.	.65250(*)	.20712	.017	.0799	1.2251
the success ratio (H_{A4})		Lecturer	.67917(*)	.22323	.023	.0621	1.2963
		R. Assist.	.75536(*)	.21761	.006	.1538	1.3569
	Assist.	Prof.	29455	.24015	.736	9584	.3693
	Prof	Assoc. P.	65250(*)	.20712	.017	-1.2251	0799
		Lecturer	.02667	.16653	1.000	4337	.4870
		R. Assist.	.10286	.15892	.967	3365	.5422
	Lecturer	Prof.	32121	.25417	.714	-1.0239	.3814
		Assoc. P.	67917(*)	.22323	.023	-1.2963	0621
		Assist. P.	02667	.16653	1.000	4870	.4337
		R. Assist.	.07619	.17941	.993	4198	.5722
	Research	Prof.	39740	.24925	.504	-1.0865	.2916
	Asist.	Assoc. P.	75536(*)	.21761	.006	-1.3569	1538
		Assist. P.	10286	.15892	.967	5422	.3365
		Lecturer	07619	.17941	.993	5722	.4198

* The mean difference is significant at the .05 level.

• Associate professors, with regard to research assistants, lecturers and assistant professors, expect more that in struggling against the laundering, forensic accountants will raise the success ratio. But within professors and among other groups there is no significant difference in this subject.

	Ν	Subset for $alpha = .03$		
Title	1	1	2	
R. Assist.	35	2.0571		
Lecturer	30	2.1333		
Assist. P.	50	2.1600		
Prof.	11	2.4545	2.4545	
Assoc. P.	16		2.8125	
Sig.		.380	.489	

Means for groups in homogeneous subsets are displayed.

a Uses Harmonic Mean Sample Size = 21.248.

b The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

• While professors and associate professors constitute one group, again professors, assistant professors, lecturers and research assistants were included in a single group within formed subgroups among those who think that in the subject of struggle against laundering, forensic accountants will raise the success ratio. In other words associate professors are different than assistant professors, lecturers and research assistants.

Conclusion

In recent years, experienced transformation and development caused some innovations to be experienced in the profession of accounting. The innovation in the field of accounting auditing is the profession of forensic accountancy. To meet the changing conditions and the need that these conditions give rise, the profession of forensic accountancy has been initiated to apply in the world, while in Turkey it has not been applied yet. In the scope of our study, a survey study aimed at measuring accounting instructors' awareness against this new profession that has not been applied yet, has been made. In consequence of this survey study, the following results have been obtained;

Instructors think that in terms of infrastructure, Turkey is ready for the application of the profession. However they expressed that there is a need for institutions and organizations that can direct the profession into activities like seminars, publications, etc. At the same time they indicated that for being successful in the long-run, higher education institutions need to change their training programmes. Despite, instructors found an intense accounting education sufficient in order to be successful in the profession of forensic accounting, they stated that in the subject of struggle against frauding, accountants and audiotors that are trained according to the general standards are not sufficient.

Instructors assert that with the application of the profession in Turkey, the profession of accountancy will have gain prestige and the profession of forensic accountancy will create an innovational effect to the profession of accountancy. Besides the ratio of those think that with the training and seminars will be given by concerning institutions, awareness of the profession can be created, is pretty high.

At the same time instructors expect that, in the subject of struggle against the crime of laundering, forensic accountants will raise the success ratio. Associate professors, with regard to research assistants, lecturers and assistant professors, expect more that in struggling against the laundering, forensic accountants will raise the success ratio.

Consequently, instructors stated that with the application of the profession of forensic accountancy in Turkey and through organizing activities like seminars, publications, etc. with the support of concerning institutions, organizations, universities and concerning trade associations, awareness against this profession can be constituted. General opinion is; the profession of forensic accountancy will have postive effects to the profession and to the profession members.

Bibliography

Bozkurt, Nejat (2000); "Muhasebe ve Denetim Mesleğinde Yeni Bir Alan "Adli Muhasebecilik", *Yaklaşım Dergisi*, Yıl 8, Sayı 94, Ekim, s 56-61.

Carnes Kay C., Gierlasinski Norman J. (2001)"Forensic accounting skills: will supply finally catch up to demand?", Managerial Auditing Journal 16/6 pp. 378-382

Carpenter Tina D., Durtschi Cindy, Gaynor Lisa Milici (2008) "The Incremental Benefits of a Forensic Accounting Course on Skepticism and Fraud-Related Judgments" July 2008 <u>http://ssrn.com/abstract=1223662</u> (Access Date: 22.03.2010)

Crumbley, D. L, (1995); "Forensic Accountants Appearing in the Literature", *New Accountant*, Glen Head, Apr., Vol. 10, Is. 7, s. 23-25. http://www.bus.lsu.edu/accounting/faculty/lcrumbley/forensic.html (Erişim tarihi: 10.03.2010).

Crumbley, D. L., Kratchman. H. S., Smith L.M. (2004); "Sherlock Holmes and Forensic Acoounting". *acct.tamu.edu/kratchman*, s. 1.

Çankaya Fikret ve Gerekan Bilal (2009), "Hile Denetçiliği Mesleği ve Sertifikalı Hile Denetçiliği Mesleki Standartları ve Ahlak Kurulları", Muhasebe ve Denetime Bakış, Nisan 2009, Yıl:9, Sayı: 28, ss.93-108

DiGabriele James A. (2010)"An Empirical View of the Transparent Objectivity of Forensic Accounting Expert Witnesses" <u>http://ssrn.com/abstract=1534705</u> (Access Date: 22.03.2010)

DiGabriele James A. (2007), "Fishbowl the Forensic Accountant: Are there differences in the views of the relevant skills of a forensic accountant among practitioners, academics and, users of forensic accounting services?" January 2, 2007 <u>http://ssrn.com/abstract=1522488</u> (Access Date: 22.03.2010)

Erol, Mikail (2008). "İsletmelerde Yaşanan Yolsuzluklara(Hata ve Hileler) Karşı Denetimden Beklentiler", Süleyman Demirel Üniversitesi IIBF Dergisi, 2008, 13 (1), 229-237.

Kalaycı Şeref (2008), SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri, 3. Baskı, Asil Yayın Dağıtım, Ankara.

Kasum Abubakar Sadiq (2009) "The Relevance of Forensic Accounting to Financial Crimes in Private and Public Sectors of Third World Economies: A Study From Nigeria", The 1st International Conference on Governance Fraud Ethics and Social Responsibility (15 April 2009)

Kaya, Uğur (2005), "Muhasebe Mesleğinde Adli Muhasebe Uzmanlığı ve Türkiye Açısından Gerekliliği", MÖDAV Muhasebe Bilim Dünyası Dergisi, C:7, Sayı: 1, Mart 2005, ss.49-64.

Pazarçeviren Selim Yüksel (2005), "Adli Muhasebecilik Mesleği", ZKÜ Sosyal Bilimler Dergisi, Cilt 1, Sayı 2, 2005, s. 1–19

Ramaswamy, Vinita (2007), "New Frontiers: Training Forensic Accountants Within The Accounting Program" Journal of College Teaching & Learning – September 2007 Volume 4, Number 9

Rezaee Zabilloh, Burton E.James (1997), "Forensic Accounting Education: insights from academicians and certified fraud examniner practitioners", Managerial Auditing Journal, 12/9, 479-489.

Rezaee Zabihollah, Crumbley D. Larry, Elmore Robert C. (2003), "Forensic Accounting Education: A Survey of Academicians and Practitioners", October, <u>http://ssrn.com/abstract=518263</u> (Access Date: 22.03.2010).

Singleton Tommie, Singleton, Aaron, Bologna Jack ve Linquist Robert (2006) *Fraud Auditing and Forensic Accounting*, 3.Edition, JohnWiley & Sons Inc., 2006, USD.

Toraman Cengiz, Abdioğlu Hasan, İşgüden Burcu (2009) "Aklama Suçunun Önlenmesine Yönelik Çabalar: Adli Muhasebecilik Mesleği ve Uygulamaları" Afyon Kocatepe Üniversitesi, İ.İ.B.F. Dergisi, C.X I,S I.

Ulucan Özkul, Fatma ve Pektekin, Pınar (2009) "Muhasebe Yolsuzluklarının Tespitinde Adli Muhasebecinin Rolü ve Veri Madenciliği Tekniklerinin Kullanılması", MÖDAV, Sayı 4, s. 57-88

http://fvs.aicpa.org/Resources/Antifraud+Forensic+Accounting/Forensic+Accounting/

Education and Traning in Fraud and Forensic Accounting: A Guide for Educational Institutions, Stakeholder Organizations, Faculty, and Students <u>http://www.ncjrs.gov/pdffiles1/nij/grants/217589.pdf</u> (Access Date: 22.03.2010)

Stance of Accounting Instructors to Forensic Accountancy Profession: Example of Turkey

It is known that concerning accounting instructors have information about the profession of forensic accountancy. The results that we will obtain in our study, is aimed to be measured according to the information given in the information note, thus there was a need to put "a standard information note". We thank you for your support to our research.

Doç. Dr. Cemal ELİTAŞ-Arş. Grv. Mehtap KARAKOÇ-Arş. Grv. M.Emre GÖRGÜLÜ Information Note: The profession of forensic accountancy is known with its original name "Forensic Accounting". The word forensic with its lexical meaning can be explained as "belonging to the court", "accepted as a standard in juridical cases". This profession was translated into our language as "adli muhasebe-forensic accounting" and is regarded as a new field in the profession of accounting and auditing. Forensic accountants can provide; litigation support consultancy, fraud auditing or investigative accountancy and expert testimony services.

1. Did you read the information	note? ()Yes	()No	•
2. Gender?	()Male	()Female	
3. Age interval?	()20-29()30-39()40-4	19 ()50 and above	
4. State of education?	()Bachelor's Degree	()Master's Deg	gree ()Ph.D.
5. Title?	()Prof.Dr. ()Asso	oc.Prof.Dr.	()Assist.Prof.Dr.
6. Working years?	()1-5 years	()6-10 years	()11-15 years ()16 yıl and above
7. For the questions below there	e is a 5-step scale ranged from	m "Absolutely D	isagree" to "Absolutely Agree".

Please after reading each possibility, mark the step stating your participation with "X".

	1	2	3	4	5
	Absolutely	Agree	Neutral	Disagree	Absolutely
	Agree			_	Disagree
To be successful in the profession of forensic accountancy, an					
intense accounting education is sufficient.					
In terms of infrastructure, our country is ready for the					
application of the profession of forensic accountancy.					
Specific knowledge and experience of forensic accountants					
plays an important role to be successful in the profession.					
With the application of forensic accountancy in our country,					
the profession of accountancy will have gain prestige.					
As the service of expertise in our country is at sufficient					
level, there is no need for the service of					
"litigation support consultancy".					
In struggling against the crime of laundering,					
forensic accountants are expected to raise the success ratio.					
Legal reforms made on frauding in our country are at					
sufficient level.					
In the subject of struggle against frauding, accountants and					
auditors that are trained according to the general standards					
are sufficient.					
Forensic accountants are expexted to provide support for					
internal controlling activities.					
In our country there is a need for institutions and organizations					
that can direct the profession into activities like seminars,					
publications, etc.					
With the training and seminars will be given by concerning					
institutions, awareness of the profession can be created.					
For the profession of forensic accountancy to be successful					
in the long-run, higher education institutions will need to					
change their training programmes.					
For the profession of forensic accountancy to achieve a					
professional structure, certification activities will need to					
be done by competent authorities in our country.					
The profession of forensic accountancy will create an					
Innovational effect to the profession of accountancy.					