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THE DETERMINANTS OF EXTERNAL AUDITOR SELECTION IN TERMS OF FIRM AND IPO CHARACTERISTICS: EVIDENCE FROM BIST

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THESIS APPROVAL PAGE

DECLARATION

I hereby declare that this doctoral thesis titled as “The determinants of external auditor selection in terms of firm and ipo characteristics: evidence from Bist” has been written by myself in accordance with the academic rules and ethical conduct. I also declare that all materials benefited in this thesis consist of the mentioned resources in the reference list. I verify all these with my honour.

…/…/…….

Ertan ASLAN

Signature

ABSTRACT

Doctoral Thesis

Doctor of Philosophy (PhD)

The Determinants of External Auditor Selection in Terms of Firm and ipo Characteristics: Evidence from Bist

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This study mainly aims to measure the impact of firm characteristics and initial public offering (IPO) characteristics on external auditor selection, by examining a sample from Istanbul Stock Exchange (BIST) Turkish firms over the period 2009 to 2013. It was investigated that the firm's age, firm size, foreign ownership, international diversification, market to book and total asset turnover are positively associated with auditor selection in terms of Big 4/Non-Big 4 diversification. The empirical evidence contradicts the hypothesis that sales growth, loss, return on assets (ROA), leverage and liquidity have an impact on external auditor selection. Also it was determined that the firms which are in the corporate governance index prefer to work with Big 4, but watchlist companies don't. The IPO characteristics such as; IPO age, issue size, prestigious underwriter are positively associated with auditor selection (Big 4/Non-Big 4). The results of this research also indicate that there is a high correlation between firm age and IPO age. This research extends the auditor choice literature by taking firm characteristics and IPO characteristics into account together in terms of auditor selection.

This study could be extended by examining other audit quality determinants such as audit fee and audit firm effects to firms which are in IPO process, for BIST. In addition to all, our results suggest that some of firm characteristics and IPO characteristics serve as a signaling device that enhances

auditor selection.

Keywords: External Audit, Auditor Selection, Firm Characteristics, Initial Public Offering

ÖZET

Doktora Tezi

Firma ve Halka Açılma Özellikleri Açısından Dış Denetim Şirketi Seçimi: BIST Üzerine bir Araştırma

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İngilizce İşletme Anabilim Dalı

İngilizce İşletme Programı

Bu çalışma temel olarak, 2009'dan 2013'e kadar olan dönemde Borsa Istanbul (BIST) Türk şirketleri örnek alınarak, firma karakteristiği ve halka arz karakteristiğinin bağımsız dış denetim şirketi seçimini üzerindeki etkisini ölçmeyi amaçlamaktadır. Firma yaşı, firma büyüklüğü, yabancı ortaklık, uluslararası çeşitlendirme, piyasa-defter değeri ve varlık devir hızının kaliteli 4 Büyükler-Diğerleri ayrımında, bağımsız dış denetim şirketi seçimi ile pozitif ilişkisi incelenmiştir. Ampirik bulgular, satışlardaki büyüme, zarar, varlıkların getirisi, borçluluk ve likiditenin bağımsız dış denetim şirketi seçimini etkilediği hipotezi ile çelişmektedir. Ayrıca kurumsal yönetim endeksinde yer alan firmaların 4 büyükler ile çalışmayı tercih ettiği ama gözaltı pazarı firmalarının bunu tercih etmediği saptanmıştır. Halka açılma karakteristiği olarak; halka arz yaşı, halka arz büyüklüğü, prestijli aracı kurumun bağımsız dış denetim şirketi seçimi ile pozitif ilişkisi bulunmaktadır (4 Büyükler-Diğerleri). Bu araştırmanın sonucu, firma yaşı ile ve halka arz yaşı arasında yüksek bir korelasyon olduğu sonucunu göstermektedir. Bu araştırma bağımsız dış denetçi seçimi açısından firma özelliklerini ve halka arz özelliklerini birlikte dikkate alarak bağımsız dış denetim literatürünü genişletmektedir.

BIST firmaları için bu çalışma, diğer bağımsız denetim kalitesini etkileyen bağımsız dış denetim ücreti ve bağımsız dış denetimin halka arz sürecindeki firmalara etkisi araştırılarak genişletilebilir. Birlikte değerlendirildiğinde elde edilmiş olan sonuçlar, bazı firma karakteristiklerinin ve halka açılma durumunun, bağımsız denetçinin seçimini geliştirdiğine dair

sinyal aracı olarak hizmet ettiğini göstermektedir.

Anahtar Kelimeler: Dış Denetim, Dış Denetim Firması Seçimi, Firma Özellikleri, Halka Arz

YÖK

THE DETERMINANTS OF EXTERNAL AUDITOR SELECTION IN TERMS OF FIRM AND IPO CHARACTERISTICS: EVIDENCE FROM BIST

CONTENTS

ABBREVIATIONS

AAA	American Accounting Association
AICPA	American Institute of Certified Public Accountants
BIST	Istanbul Stock Exchange
BRSA	Banking Regulation and Supervision Agency
CEO	Chief Executive Officer
CFE	Certified Fraud Examiner
CPA	Certified Public Accountant
CMB	Capital Markets Board
EU	European Union
FASB	Financial Accounting Standards Board
FRC	Financial Reporting Council
GAAP	Generally Accepted Accounting Principles
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IAASB	The International Auditing and Assurance Standards Board
IFAC	International Federation of Accountants Association
IFRS	International Financial Reporting Standards
IPO	Initial Public Offering
ISA	International Standards on Auditing
POA	Public Oversight, Accounting and Auditing Standards Authority
ROA	Returns on Assets
UK	United Kingdom
USA	United States

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INTRODUCTION

Financial crises and accounting scandals have affected most of the world economies. In 1998, Waste Management Company scandal reported $1.7 billion in fake earnings to meet stockholders expectation. In 2001, Enron Scandal caused shareholders to lose $74 billion, employees to lose their jobs and employees and investors to lose their retirement accounts. In 2002, World.Com scandal caused $11 billion inflated assets, 30.000 employees lost their jobs and investors to lose $180 billion. Same year, CEO and CFE of Tyco Company stole $150 million from company and the company income inflated to $500 million. In 2003 Healthsouth Company Scandal, $1.4 billion earnings are misstated. In 2003, Freddie Mac inflated $5 billion in fake earnings. In 2005 American Insurance Group Scandal, bid-rigging and stock price manipulation and the other actions followed by $3.9 billion massive accounting fraud. In 2008 Lehman Brothers scandal, it was hidden $50 billion in loans disguised as sales. Same year Bernie Madoff investors lost $64.8 billion. In 2009, $1.5 billion revenue was fake in Satyam company (http://www.accounting-degree.org/scandals/, 29.06.2014).

The need for an explanation of audit quality has become a vital argument especially after these crises and accounting scandals. In the last 15 years, many important innovations occurred in the framework on regulations of accounting and auditing profession. Most important innovation in this concept is that auditing profession turned from a self-regulatory profession to a profession regulated under the public oversight. New and developing trends on regulations emphasize the importance of dialog between accounting and auditing regulators and public authorities because there is a need for appropriate balance between self-regulations and public regulations.

Objective of public oversight in respect to audit is;

- Contributing to maintain increase in performance and quality of audit profession.

- Contributing to maintain objectiveness, independence and impartiality of audit profession.

- Making sustainable confidence for audit profession and auditors, at national and international level.

By scandals mentioned above, public confidence to audit reports decreased and the need of public oversight has emerged. Public oversight is a public service function and it oversees public interest. Public oversight is an oversight of auditing and involves inspection of audit firm and auditors.

Public oversight for auditing was first established as an oversight organization part of the Financial Supervisory Authority of Norway (FSA) in Norway. In USA, it was began with the 2002 Sarbanes-Oxley Act. In 2006, in accordance with the amendment of 2006/43 EC Directive No. 8, Public oversight is implemented by all Europe Union countries. To be valid in the EU, auditor licenses which are accredited in Non-EU countries, third countries regulation was made with the decision of the EU Commission on 29 July 2008. Public oversight regulation is implemented in many countries around the world (Inoue, 2006).

The issue of auditing has been of interest to academics, researchers and industry experts due to its strategic implication on firms' value, credibility of financial reporting and monitoring cost of management activities (Joher et. al., 1999:20). Developments in the global economy, financial developments and expansion quite increased the need for external audit. Especially due to the economic and financial crises, auditing has been evolving since the last 15 years.

Within the implementation of Basel II criteria in banking sector, requirement of preparing financial statements in compliance with International Financial Reporting Standards and increase of Small and Medium-Sized Enterprises (SME) loans caused external audit to become widespread.

Audit is a comparison and judgment activity. American Accounting Association (AAA) has a widely used definition regardless of the type of audit. AAA defines auditing as "A systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the results to interested users." (Silvoso, 1972:18)

Auditing is more significant for global companies. Global companies require global accounting language of auditing and assurance more than local companies.

Global accounting language provides common measures and presentation. It provides that companies all over the world use the same language and in this way understand each other. International Financial Reporting Standards (IFRS) aim to establish a global accounting language. Countries implement global accounting language by their GAAP.

The prominent issues are within the frame of global accounting and auditing:

- International accounting standards
- International auditing and assurance standards
- International quality control standards
- International ethics standards
- International education standards
- Public oversight system
- Discipline
- Digital media and network

There are various companies and organizations in the world, within the frame of global accounting and auditing;

- Profit making institutions and organizations,
- Non-profit institutions and organizations (non-governmental organizations (NGO) etc.)
- Public institutions and organizations, political parties, local administrations.

International auditing regulations cover profit making institutions and organizations that are specially public companies and public related companies.

Auditing is a reasonable financial assurance service. According to ISA 200 (Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing) to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, thereby enabling the auditor to express an opinion on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework (IAASB Handbook Volume 1, 2014:76).

Financial statements are prepared in compliance with international accounting standards. Auditing and accuracy of these financial statements are provided by International Auditing and Assurance Standards.

The growing need for more transparent and fairly presented financial reports enhances the importance of external auditing and audit quality. Audit quality is a concept that is structured by various factors such as audit firm leadership, knowledge/experience/tenure of the auditor, variety of services offered by the audit company, size in terms of being a Big 4 or Non-Big 4 and reporting quality (both financial reports and auditor reports). After big financial statement frauds like Enron, WorldCom, Sunbeam, Tyco, Waste Management, Xerox; Sarbanes Oxley Act of 2002 were enacted by the USA Congress. Because of especially Enron and related collapse of Arthur Andersen, audit quality became a characteristic of the audit company that needs to be criticized.

Firms' auditor selection process is complex and affected by a number of factors. Some of these factors might significantly include firm characteristics and IPO characteristics. There is a strong relationship between audit quality and auditor selection process. In recent years, due to the changes in the capital market environment auditor selection began to play a significant role, especially in IPOs in terms of underpricing.

This research is derived from "Do Big-4 audit firms really provide higher audit quality service? or Are the firms which audited by Big-4 high-quality?" question. Our main hypotheses tests whether there is a relationship between firm characteristics, IPO characteristics and the likelihood of selecting a Big 4 auditor.

We employed probit regression analysis in this study. The modeling of the probability of Big- 4 auditor selection with selected firm characteristics and IPO characteristics is possible with the use of the probit model. Result of this study is a signal that if high-quality firms prefer to be audited by Non-Big4 auditors, Non-Big4 auditors can provide higher quality service as much as Big4.

The main purpose of this study is to measure the impact of firm characteristics and IPO characteristics on external auditor selection, by examining a sample from BIST firms over the period 2009 to 2013. The study concentrates on determining the level of association between the client characteristics, IPO characteristics and auditor selection. It is the first study that highlights the interaction between audit quality, client characteristics, IPO characteristics and auditor selection in Turkey.

This study examines whether there is a relationship between firm and IPO characteristics (Firm age, firm size, liquidity, leverage, ROA, loss, corporate governance, foreign ownership, growth, international diversification, watchlist, market to book, total asset turnover, proceeds, standard return, prestige) and the choice of a Big-4 auditor.

DeAngelo (1981) defines the audit quality as the ability of the auditor in determining and reporting of a breach in the accounting system of the client. Also, Watts and Zimmerman (1981) argues that the ex-ante value of an audit depends on the auditor's incentives to disclose selectively ex post.

This study defines audit selection in terms of audit quality and is the first to test the relation among audit selection, firm characteristics and IPO characteristics empirically. Previous researches find that there is a positive relationship between audit firm size and audit quality (DeAngelo, 1981; Palmrose, 1988; DeFond, 1992; Teoh and Wong, 1993; Becker et al., 1998). The demanded audit quality forces the companies to work with Big 4, which means that they prefer big audit firms because of their reputation. This study discusses the results from the perspective of quality of Big-4 audit firms. Furthermore, this study supports findings that audit quality is positively related to firm characteristics and IPO characteristics as well as audit firm size.

The first part of the study gives an overview about external audit. In the second part; audit, client characteristics and IPO characteristics are described within a detailed literature review. Also, the study seeks the way to analyze both the client characteristics and IPO characteristics in one analysis, at the same time by comparing the big 4 / non-big 4 selection. In the third part, the sample, research design and the methodology of the analysis are described and the findings are discussed. Finally, comments about the results and their effect were discussed.

CHAPTER ONE
EXTERNAL AUDIT

1.1. OVERVIEW OF EXTERNAL AUDIT

In this part, historical development of auditing and accounting, auditing and public oversight organizations in the world are explained to give an overview about external audit.

1.1.1. History of Auditing

Development of auditing follows development of accounting throughout history. From BC 522 to BC 486, in ancient Persia, King Darius has auditors to check governors' behavior (Reza, 2013:1).

There are historical researches that try to find the origin of audit. One of them is based on audit history on Zhou Dynasty which is founded in China, around BC 1100 (China Audit Society, 1991:254). Sharkansky determined that audit started in Ninova city, around BC 3000 (Sharkansky, 1991:5). The audit profession in terms of auditing of public accounts goes back to ancient Egypt, Greek and Roman civilizations (Khan,1995:15).

The term "audit" is derived from Latin "audit" and the term "auditor" is derived from Latin "auditus". "Auditus" means a hearing. During the period of civilization, hearings were significant because the literacy rate was very low. During the period of the ancient Roman Empire, details of Empire's accounts were read and then authorities gave verbal approval to these hearings (Lawrence and Dittenhofer, 2002:3).

By the early 19th century, auditors acting as independent outside experts were frequently called upon to investigate and report on business failures or to settle business disputes (Long, 2013:3).

The birth of accounting begins with Lucca Pacioli's double entry. Lucca Pacioli is known as “father of accounting” in the world. Although it is accepted that accounting has begun with Lucca Pacioli in 1943, "ladder-method" was implemented in İlhanik Empire 300 years ago. Auditing has begun with industrial revolution but real improvement is based on economic crises.

In the first years of revolution, auditing has started with internal auditing. Auditing field focused mostly on productivity and profitability issues. Auditing started in England, spread to Western Europe and then America. The second industrial revolution years were mass production period in the industry; especially in the steel, railroad, electricity and chemical. "Economies of scale" came to the fore because of the need for reducing unit costs. Therefore, the merger movements of big companies have started.

Modern auditing has begun with "Joint Stock Companies Act" which was passed by British parliament in 1844. According to this Act financial statements and balance sheets has to be audited whether auditor is independent or not. A new Companies Act. that passed in 1900, required an independent auditor (Lee and Parker, 2014:23-34).

1929 economic crisis started in USA, but affected all the countries of the world. One of the results of this crisis is that auditing drew all attention. Also, accuracy and reliability of financial statements and prevention of frauds, errors came into prominence. This crisis has been a milestone for external auditing in the USA. External auditing, which was non-mandatory until this crisis, has become mandatory by "Securities Exchange Act in the USA" that was issued in 1934.

Germany, after the first world war, dealt with economic problems, too. Then Germany issued "Company Law" in 1931. Annual external auditing has become mandatory for large public companies. The American Institute of CPAs (AICPA) regulated 10 Generally Accepted Auditing Standards (GAAS) in 1947. These improvements created a roof for auditing and came till today with small changes.

After Second World War, "materiality concept" became important in the field of auditing. AICPA added "analysis and review" part to auditing method list, in 1950. Especially auditing of income accounts required not only testing, but also doing analysis and comparisons. In the beginning, sampling method was accepted as a "non-statistical method" in risk assessment. Afterwards, "the selection of statistical samples" method was chosen to represent whole performance of the company. Thus, "statistical sampling method" was adopted in the auditing approach. In the 1960s, "statistical sampling method" has been determined as an analytical auditing approach by the big audit firms of USA and England.

After the increase of oil price between the years 1973-1980, risk-based approach (or risk focused approach) came into prominence in the auditing field. This approach focused on participation risk, control risk and management for taking necessary precautions.

1997 Asia, 1998 Russia, 1999 Brazil crises and 1980-82 recession affected auditing field considerably. Developed Asian countries were performed high growth and became more industrialized between the years 1960-1990. But this degree of freedom affected Four Asian Tiger adversely. Growing crisis spread to Russia, Brazil, Argentina and other Latin America countries. Asian local auditing standards were implemented in these countries. The Big 6 international accounting firms (Arthur Andersen L.L.P. ("Andersen"), Coopers & Lybrand L.L.P. ("Coopers"), Deloitte & Touche L.L.P. ("Deloitte & Touche"), Ernst & Young L.L.P. ("Ernst & Young"), KPMG Peat Marwick L.L.P. ("KPMG") and Price Waterhouse L.L.P. ("Price Waterhouse")) implementing these standards were criticized. The accounting firms performing auditing in these countries provided unqualified reports to many Asian companies and banks, a few months ago before crisis. 1977 Asian crisis provided that corporate governance needs to draw attention. Organization for Economic Cooperation and Development (OECD) issued principles of corporate governance in 1999 and revised it in 2004 (Rudolf, 2011:4).

In 2001, natural gas pipeline company and energy giant Enron went bankruptcy. Waste Management, Sunbeam, the Baptist Foundation of Arizona bankruptcies and the largest bankruptcy of internet service provider Wold.Com followed Enron. One of these major audit firms, Arthur Anderson the auditor of these companies folded. These scandals caused a crisis of confidence about audit firms. These scandals eroded public confidence and cost billions of dollars to investors. Lots of employees lost their job. For reassurance, "Sarbanes-Oxley Act" was issued in 2002. This act came into force as a reaction act. “Public Company and Accounting Reform and Investor Protection Act” and “Corporate and Auditing Accountability and Responsibility Act” brought new regulations to the auditing field. These acts include the regulation of audit firms' registration, obligation of financial information accuracy to management, heavy penalties to management and more independency for external audit. In this context, by this law, Company Accounting Oversight Board (PCAOB) was established for public companies. Similar laws were enacted in other countries such as Japan, Germany, France, Italy, Australia, Israel, India, South Africa and Turkey.

Also in 2007 and 2008 big financial crises affected external auditing. Mortgage crisis that emerged in the United States and Europe caused a massive loss of the assets. In 2008, Lehman Brothers and Washington Mutual went bankruptcy. Investment bank Bear Stearns could not be saved, too. Implementation of "fair market value" was accepted as one of the reasons of these crises. Financial Accounting Standards Board (FASB) issued FAS 157 "Fair Value Measurements" regulation. Then, in 2011, IASB issued IFRS 13 "Fair Value Measurement". This standard explains how the companies will determine fair value in financial reporting. At the same time, this standard emphasizes the responsibilities of audit firms related to fair value determination of audit firms. In addition, this standard imposes the importance of all related topics about fair value determination. Nowadays, there are three organizations that were authorized to set standards:

- International Accounting Standards Board (IASB),
- International Federation of Accountants Association (IFAC),
- Financial Accounting Standards Board (FASB)

These standard setting organizations and their standards will be explained the next section.

Historical development of auditing indicates that objective of auditing, the role of auditors and audit function are evolving all times because of contextual factors and social consent. Brief explanation about evolution of auditing is stated in Lee T.H. and Azham M.A. study published in 2008 (Lee and Azham, 2008:7):

> *A review of the historical development of auditing indicates that the objective of auditing and the role of auditors are constantly changing. They are highly influenced by contextual factors such as the critical historical events (e.g. the collapsed of big corporations), the verdict of the courts, and technological developments (e.g. advancement of computing systems and Computer Assisted Audit Techniques (CAATs)). It can be observed that any major changes in these*

contextual factors are likely to cause a change in the audit function and the role of auditors. As a result, auditing is seen to be evolving at all times.

Also audit function in a market economy ultimately evolved by social consent because (Mautz, 1975:2):

Society either accepts or rejects the role of a professional group assumes for itself, in time the group either finds a role acceptable to society or the group disappears. As conditions and apparent needs change, society may reject roles formerly considered accepted so professional groups must continually be alert to the desirability of role modification and revision.

1.1.2. Auditing Process

As can be seen in Figure 1, the auditing process generally consists of five steps: planning, risk assessment, gathering evidence, evaluating evidence and issuing a report.

Figure 1: Auditing Process

PLANNING	→	RISK ASSESSMENT	→	GATHERING EVIDENCE	→	EVALUATING EVIDENCE	→	ISSUING A REPORT

Source: 2014-IAASB Handbook of International Quality Control, Auditing, Review, Other Assurance and Related Services Pronouncements, Volume 1,2,3.

First, the auditor accepts client or confirms the continuance of an existing client, develops a program and schedules an audit procedure. According to International Standards on Auditing, the audit planning includes understanding the entity and its environment, including its internal control. Then auditor assesses the risk of material misstatement in the financial statements and design audit procedures to respond to the assessed risk. Auditor needs to be well informed about industry, regulatory, and other external factors. Then auditor gathers sufficient and appropriate evidence for making a decision in the end of the auditing process. Auditor tests client's internal control in this step. Evidence gathering procedure includes;

- Inspection of documents and records,
- Inspection of tangible assets,
- Observation,
- Enquiry,
- Confirmation,
- Recalculation,
- Reperformance,
- Analytical procedures.

When gathering and evaluating evidence, auditor must have professional scepticism and judgment.

The last step includes auditor opinion based on the findings of the other steps. AICPA's Auditing Standards Board defines various audit opinions as (http://www.aicpa.org, 20.07.2015)

> ***Unqualified opinion:*** *An unqualified opinion states that the financial statements present fairly, in all material respects, the financial position, results of operations, and cash flows of the entity in conformity with generally accepted accounting principles.*
>
> ***Explanatory language added to the auditor's standard report:*** *Certain circumstances, while not affecting the auditor's unqualified opinion on the financial statements, may require that the auditor add an explanatory paragraph (or other explanatory language) to his or her report.*
>
> ***Qualified opinion:*** *A qualified opinion states that, except for the effects of the matter(s) to which the qualification relates, the financial statements present fairly, in all material respects, the financial position, results of operations, and cash flows of the entity in conformity with generally accepted accounting principles.*
>
> ***Adverse opinion:*** *An adverse opinion states that the financial statements do not present fairly the financial position, results of operations, or cash flows of the entity in conformity with generally accepted accounting principles.*
>
> ***Disclaimer of opinion:*** *A disclaimer of opinion states that the auditor does not express an opinion on the financial statements.*

The association between auditor opinion and auditor change has been a particular focus of auditor switching literature as mentioned in Chapter 2 Literature Review.

1.1.3. Accounting, Auditing and Public Oversight Organizations in the World

In this part accounting, auditing and public oversight organizations in the world are described and key auditing organizations are explained.

Accounting, auditing and public oversight organizations in the world are:

- International Accounting Standards Board (IASB)

- Financial Accounting Standards Board (FASB)

-The International Auditing and Assurance Standards Board (IAASB)

-The International Accounting Education Standards Board (IAESB)

-The International Ethics Standards Board for Accountants, Ethics Board (IESBA)

- International Public Sector Accounting Standards Board (IPSASB)

- The Public Company Accounting Oversight Board (PCAOB)

- The Public Oversight Board (POB)

- Public Interest Oversight Board (PIOB)

- Financial Stability Board (FSB)

- International Forum of Independent Audit Regulators (IFIAR)

- International Federation of Accountants Association (IFAC)

- U.S. Securities and Exchange Commission (SEC)

- International Organization of Securities Commission (IOSCO)

- Association of Certified Fraud Examiners (ACFE)

- Forum of Firms (FOF)

- Transnational Auditors Committee (TAC)

- Global Public Policy Committee (GPPC)

- International Association of Accounting Education and Research (IAAER)

- Association of Chartered Certified Accountants (ACCA)

- International Association of Insurance Supervisors (IAIS)

- Organization for Economic Co-operation and Development (OECD)
- World Bank (WB)
- Basel Committee of Banking Supervision Basel
- European Commission
- European Financial Reporting Advisory Group (EFRAG)
- European Accounting Association (FEE)
- The Federation of Mediterranean Accountants (FCM)
- Asian-Oceanian Standard-Setters Group (AOSSG)
- Group of Latin-American Standard-Setters (GLASS)

1.1.3.1. International Federation of Accountants Association (IFAC)

In the beginning, major part of accounting and auditing practices were created by The American Institute of CPAs (AICPA) in U.S.A. European countries and other countries had their own accounting and auditing practices. Even some of the companies had their own accounting, reporting and auditing practices. They still exist in some countries. In 1997, at 11th World Congress of Accountants in Munich, IFAC was established by 63 members from 51 countries, and then International Accounting Standards Committee (IASC) was established. Its memorandum was revised in 2013.

Today, the number of members and associates reaches over 175 with the participation of 130 countries. The number of accountants is approximately 2,8 million, represented by IFAC. This organization acts like the spokesman of accounting profession around the world.

In Turkey, Turkey Accounting Professionals Association (TMUD) is a founding member of this organization. Council of Ministers of the Government of the Republic of Turkey confirmed this membership in 1979. TÜRMOB has become a member of IFAC in 1994.

With the establishment of IFAC, auditing profession became more global. The goal of IFAC is to develop accounting profession under the public interest. Within this goal, IFAC's activities are as follows;

- Making high quality standards; international accounting standards, auditing and assurance standards, accounting standards for public companies education standards and ethic standards. (Leadership Function)

- Making the standards easier to adopt and contributing to accounting profession and related organizations. (Facilitator Function)

- Being spokesman of public interest (Transparency Ensuring Function)

IFAC's current strategic plan is to strengthen and expand its leadership under changing and developing world conditions. The boards that have been established regarding these activities are as follows;

- International Public Sector Accounting Standards Board (IPSASB): It sets international public sector accounting standards (IPSAS) for public sector.
- International Auditing and Assurance Standards Board (IAASB): It sets international standards on auditing, assurance engagements and related services.
- The International Accounting Education Standards Board (IAESB): It develops international education standards.
- International Ethics Standards Board for Accountants, Ethics Board (IESBA): It develops the international code of ethics for professional accountants.
- Public Interest Oversight Board (PIOB): It oversees IFAC's standard-setting activities, particularly with respect to auditing, assurance, ethics and independence. The PIOB also oversees IFAC's compliance activities.

1.1.3.2. The International Auditing and Assurance Standards Board (IAASB)

In 1978, after one year IFAC has been established, International Auditing Practices Committee (IAPC) has been formed. At the beginning, it focused on the following three areas:

- Subject and scope of financial reports audit

- Auditing contracts

- General auditing guide

IAPC auditing guide that was published in 1991 has become the basis of International Standards on Auditing (ISAs) for ensuing years.

IAPC has been restructured and its name was changed as "The International Auditing and Assurance Standards Board" (IAASB). In 2004, IAASB has begun its "Clarity Project" to clarify auditing standards. This project was completed in 2009 and a handbook was published in 2010. The goals of IAASB are:

- Serving to public interest by setting high-quality auditing, assurance, and other related standards.

- Facilitating the convergence of international and national auditing and assurance standards.

- Enhancing the quality and consistency of practice throughout the world and strengthening public confidence in the global auditing and assurance profession.

With the clarity project, 36 newly updated and clarified ISAs and a clarified International Standard on Quality Control (ISQC) are made ready for access of auditors worldwide.

The IAASB developed and approved the "IAASB's Work Plan for 2015–2016" document. According to this document (The IAASB's Work Plan for 2015–2016, 2014:2);

> *This IAASB develops auditing and assurance standards and guidance for use by all professional accountants under a shared standard-setting process involving the Public Interest Oversight Board, which oversees the activities of the IAASB, and the IAASB Consultative Advisory Group, which provides public interest input into the development of the standards and guidance.*

1.1.3.3. International Forum of Independent Audit Regulators (IFIAR)

In 2006, IFIAR has been established by 18 external auditing regulators and it became a very important membership organization for external auditing regulators. Number of IFIAR members reached 51 in a very short time. These members are from jurisdictions in Africa, the Americas, Asia-Pacific, Europe, and the Middle East. IFIAR members have the authority to regulate external audit in their own country. From Turkey, The Capital Markets Board of Turkey (CMB) and Public Oversight, Accounting and Auditing Standards Authority (POA) are members of IFIAR. In accordance with IFIAR contract, IFIAR's main objectives are;

- Increasing external auditing oversight globally, thereby improving audit quality and providing that members serve to greater public interest.
- Protecting investors by enhancing reliability of financial reporting.

IFIAR has constituted Member of the Monitoring Group (MG) in 2001. This group is a subsidiary of PIOB.

The three work areas that IFIAR focuses are:

- Sharing information (by combining audit firms and auditors within the frame of audit market and independent auditing practices).
- Improving cooperation (along with continuity regulative activities.)
- Providing dialogue platform (for organizations related to international auditing standards)

For carrying out these objectives, IFIAR determined 11 main principles. IFIAR organizes meetings twice a year. In addition, IFIAR has established many working groups. Currently active 6 IFIAR working groups are; Enforcement Working Group (EWG), Global Public Policy Committee Working Group (GPPCWG), Inspection Workshop Working Group (IWWG), International Cooperation Working Group (ICWG), Investor and Other Stakeholders Working Group (IOSWG), Standards Coordination Working Group (SCWG)

In addition to the principal members, the following 6 organizations are involved in as observers in the meetings of IFIAR:

- Financial Stability Board (FSB)
- Public Interest Oversight Board (PIOB)
- International Organization of Securities Commission (IOSCO)
- Basel Committee of Banking Supervisors International Association of Insurance Supervisors (IAIS)
- World Bank
- European Commission

According to IFIAR, initiatives to improve audit quality are (IFIAR Report on 2014 Survey of Inspection Findings, 2015:17-19):

> *Audit firms should pursue initiatives to improve audit quality and the consistency of audit execution across their firms. This often begins with a thorough evaluation and understanding of the root causes undermining consistent audit quality.*
>
> *The measures described below illustrate initiatives that have been discussed by various IFIAR Members with the network firms in their jurisdictions, as well as between the global firm representatives and IFIAR Members through the GPPC Working Group. Some audit firms have undertaken actions similar to those mentioned below; these actions are not uniform across firms or across jurisdictions, either in nature or extent. IFIAR will continue to urge action across the global network firms, with the objective of achieving sustainable, consistent audit performance.*
>
> *Firms should consider developing action plans, focusing on areas such as the examples below:*
>
> *(a) the culture of the firm, including messages from the leadership of the firm focused on audit quality and consultation on complex audit issues;*
>
> *(b) the experience and expertise of partners and staff, including consideration of effective use of experts;*
>
> *(c) timely supervision and review, including greater senior-level involvement in working with audit teams in the planning and execution of audits, and new or increased real-time quality reviews of engagements; and*
>
> *(d) accountability, including impacts on remuneration of engagement partners and review partners for poor audit quality, often extending to firm leadership.*
>
> *Action plans should be regularly reviewed and updated as to matters such as:*
>
> *(a) timely and effective implementation;*
>
> *(b) effectiveness in practice through quality review results and other measures of audit quality; and*

> *(c) the need for new initiatives because earlier initiatives may become less effective over time.*
>
> *Firms should review their staff structures as to whether changes are needed to ensure the firm has access to resources with appropriate experience and expertise for increasingly complex audits. Increasing complexity in financial reporting requirements, company business models and judgments on accounting estimates mean that audits require audit staff with a range of experiences and expertise. Many audits involve a number of types of experts, including, for example, valuation specialist, actuaries, geologists, and in the areas of financial instruments and information technology.*
>
> *While auditors have the primary responsibility for audit quality, there are actions that others can take to promote and support audit quality. For example, non-executive directors in many jurisdictions are charged with recommending audit firm appointments and setting audit fees. Audit committees can assess the commitment of the auditors to audit quality and their level of professional skepticism, monitor how the audit draws on experts in complex aspects of the audit, and have good two-way communication with the auditor about concerns and risk areas.*

IFIAR's GPPC Working Group, has permanent dialogue with the six large international audit networks for improving audit quality on a global basis.

1.1.3.4. Public Company Accounting Oversight Board (PCAOB)

In 2002, established with Sarbanes-Oxley Act, PCAOB is a non-profit, private sector organization that oversees the audits of public companies.

Since 2010, with the aim of improving the confidence of investors, PCAOB has been a public oversight organization which has overseen the reports of broker-dealers, in compliance with the federal securities laws. PCAOB has no enforcement authority on the companies whose securities are not publicly traded. In USA, all regulations and standards of the PCAOB must be approved by the SEC. With the establishment of PCAOB, it was adopted that the public companies are subject to the public oversight. Previously, the audit profession was a self-regulatory profession. Under Section 101 of the Sarbanes-Oxley Act, PCAOB has 4 main functions in overseeing:

- Registration; (registration of public accounting firms)
- Inspection; (conducting inspections of registrants)
- Setting standards; (setting auditing, quality control, ethics, independence and other standards)
- Enforcement; (conducting investigations and disciplinary proceedings, and imposing sanctions)

PCAOB has approximately 2100 firm members including 18 Turkish firm members.

1.1.3.5. European Commission

In European Union, auditing regulations was made in numbered 8 EU directive that accepted in 1984. In summary, numbered 8 EU directive provides these regulations to each country member (Yavuz, 2011:150):

- Each country member determines authority organizations that is responsible for approving legal auditors and audit firms,
- Each country member organizes effective public oversight and provides that all auditors and audit firms subject to public oversight,
- All auditors and audit firms register electronically and each country has its own member forms investigation and enforcement system,
- All legal auditors and audit firms subject to a quality assurance and each country member provides the public oversight on this quality assurance system,
- Legal auditors join to continuous education program.

The standards adopted in EU are largely parallel to IFAC standards. In 1994, some changes were made in this field. On 01.01.2005, the application of IFRS standards was accepted by listed companies. This directive was revised in 2006 and some regulations were added to increase reliability of financial statements. These regulations related to; public oversight, quality assurance on auditing, the privacy of customer information, transparency of audit firm, audit committees, audit fee descriptions, auditor's independence and objectivity, auditor's responsibility, international auditing standards compliance and third country auditors registration.

European Union, in accordance with the amendment of numbered 4 and 7 directives, which requires that financial information and reports have to be compatible with application of global accounting standards.

1.1.3.6. Other Organizations Related to Audit

The International Accounting Education Standards Board (IAESB) aims to increase public confidence by setting Education Standards for Professional Accountants (IESs). These standards provide that accounting professionals acquire and maintain the skills which are necessary to work as an expert auditor.

The International Ethics Standards Board for Accountants (IESBA) is an independent organization that sets ethical standards. IESBA make regulations worldwide in relation to independence of auditors. The objective of IESBA was stated as (2015 Handbook of the Code of Ethics for Professional Accountants, 2015:1):

> *The objective of the IESBA, as outlined in its terms of reference, is to serve the public interest be setting high-quality ethics standards for professional accountants. The IESBA's long-term objective is convergence of the "Code of Ethics for Professional Accountants" ethical standards for professional accountants, including auditor independence standards, with those issued by regulators and national standard setters. Convergence to a single set of standards can enhance the quality and consistency of services provided by professional accountants throughout the world and can improve the efficiency of global capital markets.*

Code of Ethics for Professional Accountants involves Fundamental Principles that a professional accountant shall comply. Furthermore, threats, safeguards and ways to eliminate or reduce threats are stated in this code.

Fundamental Principles in this code are;

- Integrity,

- Objectivity,

- Professional Competence and Due Care,
- Confidentiality and Professional Behavior.

Threats in this code are;

- Self-interest threats,
- Self-review threats,
- Advocacy threats,
- Familiarity threats,
- Intimidation threats.

Safeguards in this code consist of two categories: safeguards created by the profession, legislation or regulation and safeguards in the work environment. Safeguards created by the profession, legislation or regulation are;

- Educational, training and experience requirements for entry into the profession,
- Continuing professional development requirements,
- Corporate governance regulations,
- Professional standards,
- Professional or regulatory monitoring and disciplinary procedures,
- External review by a legally empowered third party of reports, returns, communications or information produced by a professional accountant.

1.2. AUDIT QUALITY IN GENERAL

Crises and corruptions in the world highlighted that the most of the problems regarding external audit arise due to lack of audit quality. In this part, framework for audit quality, standards related to audit quality and future of auditing are explained.

1.2.1. Framework for Audit Quality

A framework for audit quality", issued by IAASB in February 2014, is a consultation paper. The best explanation of this framework is stated in Rene Herman CA study published in 2013 (Herman, 2013:46):

International Audit Standards provide a foundation by supporting high-quality audits, but are only one of several components influencing audit quality. Other influences include user perceptions, the skills and competencies of auditors, the actions of others in the financial reporting supply chain, and the legal, regulatory and business environment.

Audit quality is a multifaceted and diverse topic that currently has no single agreed universal definition. There are a number of factors that make it challenging to describe and evaluate the quality of an audit, including that:

- *The existence, or lack of material misstatements in the audited financial statements provides only a partial insight into audit quality*
- *The nature of audits varies significantly and is judgmental*
- *There is limited transparency about the work performed and audit findings*
- *Perspectives of audit quality vary among stakeholders. This means that different stakeholders may identify different issues as being most pertinent when attempting to enhance audit quality. For example:*

- Client management might focus on such things as the efficiency of the audit process and the quality, timeliness and usefulness of communications from audit team

- Audit committees might focus on the robustness of the audit, the independence of the auditor and whether communications between auditor and the audit committee are effective

- Regulators might focus on evidence of compliance with the Auditing Standards and the rigour demonstrated by auditor in dealing with complex accounting issues.

The IAASB recognizes these complexities and has undertaken a project to develop an international audit quality framework.

The IAASB seeks comments in response to a number of questions through this "a framework for audit quality" consultation paper ((IAASB Handbook Volume 1, 2014:2).

The non-authoritative Framework for Audit Quality describes the input, process and output factors that contribute to audit quality at the engagement, audit firm and national level, for financial statement audits. The Framework also demonstrates the importance of appropriate interactions among stakeholders and the importance of various contextual factors.

IAASB's Publication: "A Framework for Audit Quality: Key Elements that create an Environment for Audit Quality" is summarized by IFAC (https://www.ifac.org/system/files/uploads/IAASB/Audit-Quality-At-a-Glance-2.pdf, (20.10.2015):

Global financial stability is supported through high-quality reporting. Audits can help foster trust in the quality of reporting. This highlights the importance of audit quality—a topic of relevance to all stakeholders in the financial reporting supply chain.

With this in mind, the IAASB developed its publication, A Framework for Audit Quality: Key Elements that Create an Environment for Audit Quality, which describes in a holistic manner the different elements that create the environment for audit quality at the engagement, firm, and national levels, as well as relevant interactions and contextual factors. The objectives of the Framework for Audit Quality include:

- Raising awareness of the key elements of audit quality

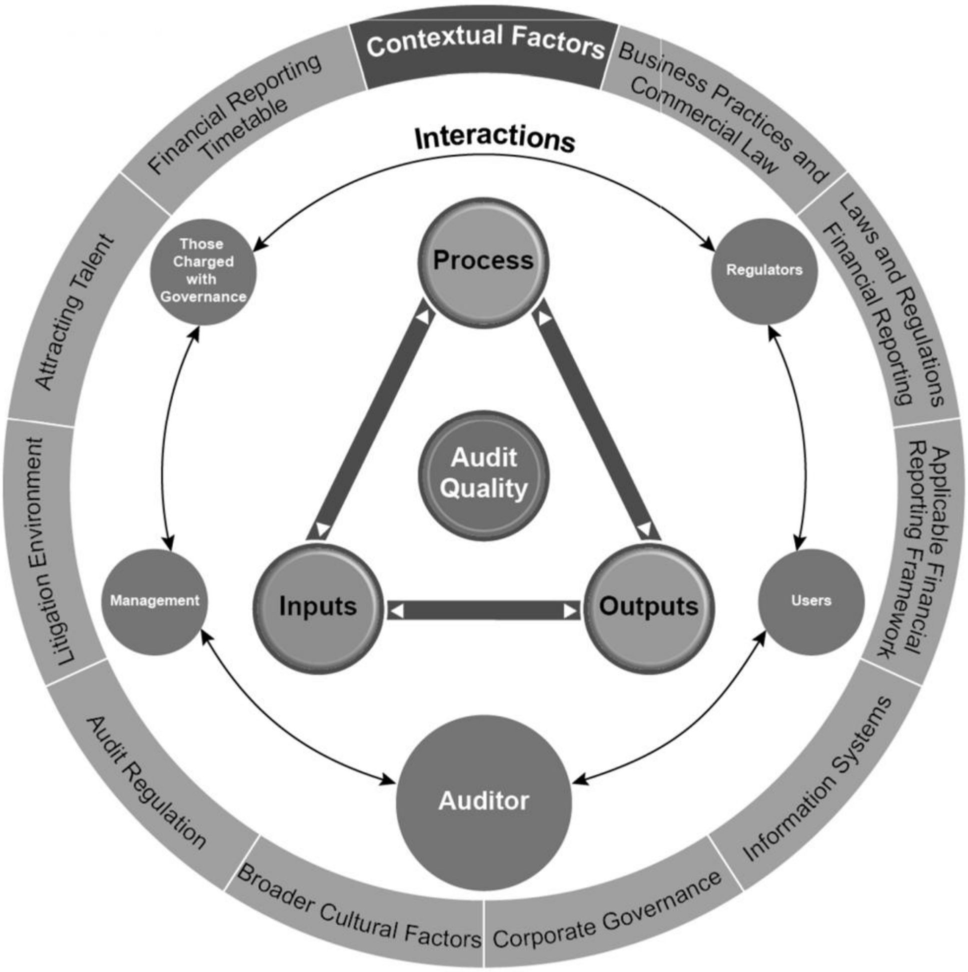
- Encouraging key stakeholders to explore ways to improve audit quality

- Facilitating greater dialogue between key stakeholders on the topic.

As can be seen in Figure 2 the elements of the framework for Audit Quality:

- Inputs
- Processes
- Outputs
- Interactions
- Contextual Factors

Figure 2: Interactions Between Elements of Framework for Audit Quality



Source: IAASB, A Framework for Audit Quality, 2014, p.1

The Framework distinguishes of the following elements (IAASB Handbook Volume 3, 2014:7-9):

Inputs

Inputs are grouped into the following input factors:

a. The values, ethics and attitudes of auditors, which in turn, are influenced by the culture prevailing within the audit firm; and

b. The knowledge, skills, and experience of auditors and the time allocated for them to perform the audit.

Within these input factors, quality attributes are further organized between those that apply directly at:

a. The audit engagement level;

b. The level of an audit firm, and therefore indirectly to all audits undertaken by that audit firm; and

c. The national (or jurisdictional) level and therefore indirectly to all audit firms operating in that country and the audits they undertake.

In A Framework For Audit Quality Handbook, Appendix 2 describes, in more detail, the quality attributes of input factors for the engagement, firm, and national levels.

The inputs to audit quality will be influenced by the context in which an audit is performed, the interactions with key stakeholders and the outputs. For example, laws and regulations (context) may require specific reports (output) that influence the skills (input) utilized.

Process

The rigor of the audit process and quality control procedures impact audit quality. Appendix 2 describes in more detail the quality attributes of this process factor for engagement, firm and national levels.

Outputs

Outputs include reports and information that are formally prepared and presented by one party to another, as well as outputs that arise from the auditing process that are generally not visible to those outside the audited organization. For example, these may include improvements to the entity's financial reporting practices and internal control over financial reporting, that may result from auditor findings.

The outputs from the audit are often determined by the context, including legislative requirements. While some stakeholders can influence the nature of the outputs, others have less influence. Indeed, for some stakeholders, such as investors in listed companies, the auditor's report is the primary output.

Key Interactions within the Financial Reporting Supply Chain

While each separate stakeholder in the financial reporting supply chain plays an important role in supporting high-quality financial reporting, the way in which the stakeholders interact can have a particular impact on audit quality.

These interactions, including both formal and informal communications, will be influenced by the context in which the audit is performed and allow a *dynamic relationship to exist between inputs and outputs. For example, discussions between the auditor and the audit committee of a listed company at the planning stage can influence the use of specialist skills (input) and the form and content of the auditor's report to those charged with governance (output). In contrast, for privately owned businesses, there may be close proximity to the owners during the course of the audit. In these circumstances, there may be frequent informal communications, which contribute to audit quality.*

Contextual Factors

There are a number of environmental – or contextual – factors, such as laws and regulations and corporate governance, which have the potential to impact the nature and quality of financial reporting and, directly or indirectly, audit quality. Where appropriate, auditors respond to these factors when determining how best to obtain sufficient appropriate audit evidence.

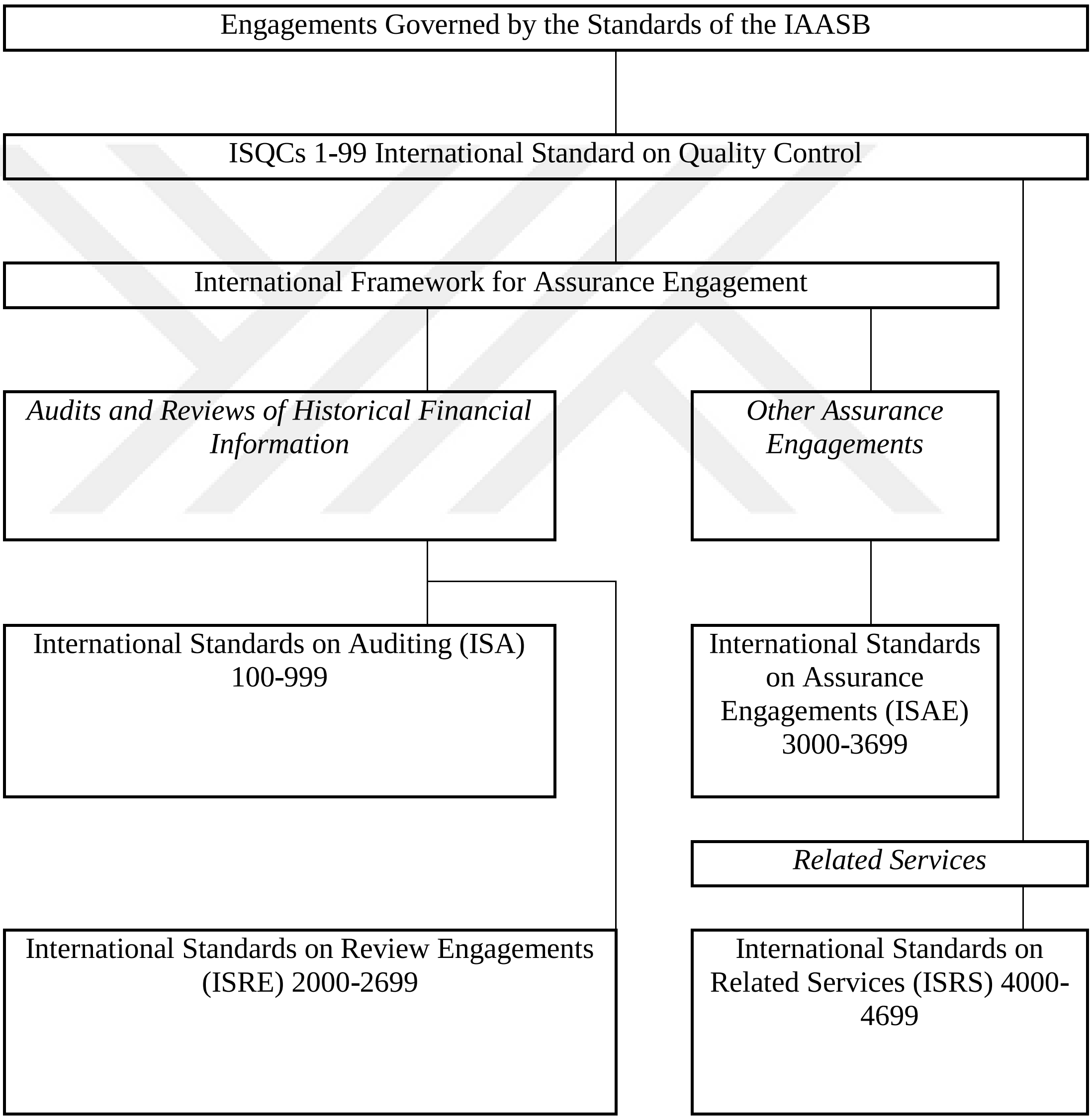
1.2.2. International Standards on Auditing

While significant developments were experienced in international accounting standards field, 2001 world crisis and corruptions that revealed in many large companies, especially Enron scandal caused auditing standards to become important. High quality auditing standards and quality control standards came into prominence in auditing field. Ethic standards and education standards were improved by organizations related to auditing. Fraud auditing and discipline has become more important. Public oversight and public interest concepts have become crucial. Doubtlessly, auditor's independence and professional institutionalization process have also made a significant contribution to this. The concepts of transparency and reliability has been emphasized more. The developments through globalization, increase in the volume of the world trade, economic crises, accounting and auditing frauds has caused knowledge-based economy to become more important. As the complementaries of knowledge-based economy, "professional ethics, independence, continuous professional training and qualification" require that accounting and auditing system has to be supported by high standards.

In addition, the creation of accurate, fair, transparent, unbiased and independent financial reports is an inevitable outcome of the adoption of international rules in the accounting and auditing fields.

General structure of the International Auditing and Assurance Standards mentioned previously can be summarized as below:

Table 1: Structure of Pronouncements Issued by the IAASB.



Source: 2014-IAASB Handbook of International Quality Control, Auditing, Review, Other Assurance and Related Services Pronouncements, Volume 1, 2014, p.5

General concepts of some of these standards in Table 1 are explained below.

1.2.2.1. International Standards on Auditing (ISA)

These standards are to be applied in the audit of historical financial information. It refers to the audit of financial statements by independent auditors. Standards require auditors to obtain reasonable assurance as the of auditor's opinion relating to fraud in the audit of financial statements. Conditions should be adapted according to the requirements in case of applying standards to other financial information.

Table 2: List of International Standards On Auditing Is Given Below

INTERNATIONAL STANDARD ON QUALITY CONTROL (ISQCs)
International Standard on Quality Control (ISQC) 1, Quality Controls for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements
AUDITS OF HISTORICAL FINANCIAL INFORMATION
200-299 General Principles And Responsibilities
· ISA 200 Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing
· ISA 210 Agreeing the Terms of Audit Engagements
· ISA 220 Quality Control for an Audit of Financial Statements
· ISA 230 Audit Documentation
· ISA 240 The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements
· ISA 250 Consideration of Laws and Regulations in an Audit of Financial Statements
· ISA 260 Communication with Those Charged with Governance
· ISA 265 Communicating Deficiencies in Internal Control to Those Charged with Governance and Management
300-499 Risk Assessment And Response To Assessed Risks
· ISA 300 Planning an Audit of Financial Statements
· ISA 315 (Revised) Identifying and assessing the risks of material misstatement through understanding the entity and its environment
· ISA 320 Materiality in planning and performing an audit
· ISA 330 The auditor's responses to assessed risks
· ISA 402 Audit Considerations Relating to an Entity Using a Service Organization
· ISA 450 Evaluation of Misstatements Identified during the Audit

500-599 Audit Evidence
· ISA 500 Audit Evidence
· ISA 501 Audit Evidence – Specific Considerations for Specific Items
· ISA 505 External Confirmations
· ISA 510 Initial Engagements - Opening Balances
· ISA 520 Analytical Procedures
· ISA 530 Audit Sampling
· ISA 540 Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures
· ISA 550 Related Parties
· ISA 560 Subsequent Events
· ISA 570 Going Concern
· ISA 580 Written Representations
600-699 Using Work Of Others
· ISA 600 Special Considerations - Audits of Group Financial Statements (Including the Work of Component Auditors)
· ISA 610 (Revised 2013) Using the Work of Internal Auditors
· ISA 620 Using the Work of an Auditor's Expert
700-799 Audit Conclusions And Reporting
· ISA 700 Forming an Opinion and Reporting on Financial Statements
· ISA 701 Communicating Key Audit Matters in the Independent Auditor's Report
· ISA 705 Modifications to the Opinion in the Independent Auditor's Report
· ISA 706 Emphasis of Matter Paragraphs and Other Matter Paragraphs in the Independent Auditor's Report

· ISA 710 Comparative Information - Corresponding Figures and Comparative Financial Statements
· ISA 720 The Auditor's Responsibilities Relating to Other Information in Documents Containing Audited Financial Statements
700-799 Specialized Areas
· ISA 800 Special Considerations-Audits of Financial Statements Prepared in Accordance with Special Purpose Frameworks
· ISA 805 Special Considerations-Audits of Single Financial Statements and Specific Elements, Accounts or Items of a Financial Statement
· ISA 810 Engagements to Report on Summary Financial Statements

Source: 2014-IAASB Handbook of International Quality Control, Auditing, Review, Other Assurance and Related Services Pronouncements. Volume 1, 2014

Main paragraphs of ISQC 1 International Standard on Quality Control, ISA 200 Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing and ISA 220 Quality Control for an Audit of Financial Statements are given in next part for understanding audit standards framework in terms of audit quality.

1.2.2.2. ISQC 1 International Standard on Quality Control

This standard deals with a firm's responsibilities for its system of quality for audits and reviews of financial statements, and other assurance and related services engagements. Main paragraphs for ISQC 1 International Standard on Quality Control are directly given below because this standard is highly related with the audit quality.

Main Paragraphs for ISQC 1 International Standard on Quality Control (IAASB Handbook Volume 1, 2014:39-42)**:**

"SCOPE OF ISQC:

Paragraph 1: This International Standard on Quality Control (ISQC) deals with a firm's responsibilities for its system of quality control for audits and reviews of financial statements, and other assurance and related services engagements. This ISQC is to be read in conjunction with relevant ethical requirements.

Paragraph 2: Other pronouncements of the International Auditing and Assurance Standards Board (IAASB) set out additional standards and guidance on the responsibilities of firm personnel regarding quality control procedures for specific types of engagements. ISA 220, for example, deals with quality control procedures for audits of financial statements.

Paragraph 3: A system of quality control consists of policies designed to achieve the objective set out in paragraph 11 and the procedures necessary to implement and monitor compliance with those policies.

AUTHORITY OF ISQC:

Paragraph 4: This ISQC applies to all firms of professional accountants in respect of audits and reviews of financial statements, and other assurance and related services engagements. The nature and extent of the policies and procedures developed by an individual firm to comply with this ISQC will depend on various factors such as the size and operating characteristics of the firm, and whether it is part of a network.

Paragraph 5: This ISQC contains the objective of the firm in following the ISQC, and requirements designed to enable the firm to meet that stated objective. In addition, it contains related guidance in the form of application and other explanatory material, as discussed further in paragraph 8, and introductory material that provides context relevant to a proper understanding of the ISQC, and definitions.

Paragraph 6: The objective provides the context in which the requirements of this ISQC are set, and is intended to assist the firm in:

Understanding what needs to be accomplished; and

Deciding whether more needs to be done to achieve the objective.

Paragraph 7: The requirements of this ISQC are expressed using "shall."

Paragraph 8: Where necessary, the application and other explanatory material provides further explanation of the requirements and guidance for carrying them out. In particular, it may:

Explain more precisely what a requirement means or is intended to cover; and

Include examples of policies and procedures that may be appropriate in the circumstances.

While such guidance does not in itself impose a requirement, it is relevant to the proper application of the requirements. The application and other explanatory material may also provide background information on matters *addressed in this ISQC. Where appropriate, additional considerations specific to public sector audit organizations or smaller firms are included within the application and other explanatory material. These additional considerations assist in the application of the requirements in this ISQC. They do not, however, limit or reduce the responsibility of the firm to apply and comply with the requirements in this ISQC.*

Paragraph 9: This ISQC includes, under the heading "Definitions," a description of the meanings attributed to certain terms for purposes of this ISQC. These are provided to assist in the consistent application and interpretation of this ISQC, and are not intended to override definitions that may be established for other purposes, whether in law, regulation or otherwise. The Glossary of Terms relating to International Standards issued by the IAASB in the Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements published by IFAC includes the terms defined in this ISQC. It also includes descriptions of other terms found in this ISQC to assist in common and consistent interpretation and translation.

OBJECTIVE OF ISQC:

Paragraph 11: The objective of the firm is to establish and maintain a system of quality control to provide it with reasonable assurance that:

(a) The firm and its personnel comply with professional standards and applicable legal and regulatory requirements; and

(b) Reports issued by the firm or engagement partners are appropriate in the circumstances.

The purpose of this International Standard on Quality Control (Quality Control for Firms That Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements) is being a guide to the quality control of audit firms. This standard, which has been effective since 15.12.2009, has a special significance in terms of International Standards on Auditing, International Standards on Review Engagements, International Standards on Assurance Engagements and International Standards on Related Services. This significance is emphasized in various documents published by IFAC. In summary, national standards are not counted compatible with the other standards, as long as the national authorities that determine national standards publish a standard compatible with International Standard on Quality Control.

Quality Control Standard is valid for all services given within the context of other standards.

1.2.2.3. ISA 200 Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing

This standard includes with setting out the overall objectives of the independent auditor and the independent auditor's overall responsibilities to comply with the ISAs. Main paragraphs for ISA 200 Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing are directly given below because this standard is highly related with the audit quality.

Main Paragraphs for ISA 200 Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing (IAASB Handbook Volume 1, 2014:75-77)**:**

SCOPE OF ISA 200:

Paragraph 1: This International Standard on Auditing (ISA) deals with the independent auditor's overall responsibilities when conducting an audit of financial statements in accordance with ISAs. Specifically, it sets out the overall objectives of the independent auditor, and explains the nature and scope of an audit designed to enable the independent auditor to meet those objectives. It also explains the scope, authority and structure of the ISAs, and includes requirements establishing the general responsibilities of the independent auditor applicable in all audits, including the obligation to comply with the ISAs. The independent auditor is referred to as "the auditor" hereafter.

Paragraph 2: ISAs are written in the context of an audit of financial statements by an auditor. They are to be adapted as necessary in the circumstances when applied to audits of other historical financial information. ISAs do not address the responsibilities of the auditor that may exist in legislation, regulation or otherwise in connection with, for example, the offering of securities to the public. Such responsibilities may differ from those established in the ISAs. Accordingly, while the auditor may find aspects of the ISAs helpful in such *circumstances, it is the responsibility of the auditor to ensure compliance with all relevant legal, regulatory or professional obligations.*

An Audit of Financial Statements:

Paragraph 3: The purpose of an audit is to enhance the degree of confidence of intended users in the financial statements. This is achieved by the expression of an opinion by the auditor on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework. In the case of most general purpose frameworks, that opinion is on whether the financial statements are presented fairly, in all material respects, or give a true and fair view in accordance with the framework. An audit conducted in accordance with ISAs and relevant ethical requirements enables the auditor to form that opinion.

Paragraph 4: The financial statements subject to audit are those of the entity, prepared by management of the entity with oversight from those charged with governance. ISAs do not impose responsibilities on management or those charged with governance and do not override laws and regulations that govern their responsibilities. However, an audit in accordance with ISAs is conducted on the premise that management and, where appropriate, those charged with governance have acknowledged certain responsibilities that are fundamental to the conduct of the audit. The audit of the financial statements does not relieve management or those charged with governance of their responsibilities.

Paragraph 5: As the basis for the auditor's opinion, ISAs require the auditor to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error. Reasonable assurance is a high level of assurance. It is obtained when the auditor has obtained sufficient appropriate audit evidence to reduce audit risk (that is, the risk that the auditor expresses an inappropriate opinion when the financial statements are materially misstated) to an acceptably low level. However, reasonable assurance is not an absolute level of assurance, because there are inherent limitations of an audit which result in most of the audit evidence on which the auditor draws conclusions and bases the auditor's opinion being persuasive rather than conclusive.

Paragraph 6: The concept of materiality is applied by the auditor both in planning and performing the audit, and in evaluating the effect of identified misstatements on the audit and of uncorrected misstatements, if any, on the *financial statements. In general, misstatements, including omissions, are considered to be material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements. Judgments about materiality are made in the light of surrounding circumstances, and are affected by the auditor's perception of the financial information needs of users of the financial statements, and by the size or nature of a misstatement, or a combination of both. The auditor's opinion deals with the financial statements as a whole and therefore the auditor is not responsible for the detection of misstatements that are not material to the financial statements as a whole.*

Paragraph 7: The ISAs contain objectives, requirements and application and other explanatory material that are designed to support the auditor in obtaining reasonable assurance. The ISAs require that the auditor exercise professional judgment and maintain professional skepticism throughout the planning and performance of the audit and, among other things:

- *Identify and assess risks of material misstatement, whether due to fraud or error, based on an understanding of the entity and its environment, including the entity's internal control.*
- *Obtain sufficient appropriate audit evidence about whether material misstatements exist, through designing and implementing appropriate responses to the assessed risks.*
- *Form an opinion on the financial statements based on conclusions drawn from the audit evidence obtained.*

Paragraph 8: The form of opinion expressed by the auditor will depend upon the applicable financial reporting framework and any applicable law or regulation.

Paragraph 9: The auditor may also have certain other communication and reporting responsibilities to users, management, those charged with governance, or parties outside the entity, in relation to matters arising from the audit. These may be established by the ISAs or by applicable law or regulation.

OVERALL OBJECTIVES OF THE AUDITOR:

Paragraph 11: In conducting an audit of financial statements, the overall objectives of the auditor are:

(a) To obtain reasonable assurance about whether the financial statements

as a whole are free from material misstatement, whether due to fraud or error, thereby enabling the auditor to express an opinion on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework; and

(b) To report on the financial statements, and communicate as required by the ISAs, in accordance with the auditor's findings.

Paragraph 12: In all cases when reasonable assurance cannot be obtained and a qualified opinion in the auditor's report is insufficient in the circumstances for purposes of reporting to the intended users of the financial statements, the ISAs require that the auditor disclaim an opinion or withdraw (or resign) from the engagement, where withdrawal is possible under applicable law or regulation.

1.2.2.4. ISA 220 Quality Control for an Audit of Financial Statements

ISA 220 deals with the specific responsibilities of the auditor regarding quality control procedures for an audit of financial statements. This standard has these subtitles: system of quality control and role of engagement teams, leadership responsibilities for quality on audits, relevant ethical requirements, acceptance and continuance of client relationships and audit engagements, assignment of engagement teams, engagement performance, monitoring, documentation.

Same subtitles come up with ISQC 1 International Standard on Quality Control which explained above. ISA 220 and ISQC 1 standards are set for similar subject. However ISQC 1 standard deals with audit firm, ISA 220 standard deals with auditor work (Savlı, 2009:17).

Main paragraphs for ISA 220 Quality Control for an Audit of Financial Statements are directly given below because this standard is highly related with the audit quality.

Main Paragraphs for ISA 220 Quality Control for an Audit of Financial Statements (IAASB Handbook Volume 1, 2014:126-129)**:**

SCOPE OF ISA 220:

Paragraph 1: This International Standard on Auditing (ISA) deals with the specific responsibilities of the auditor regarding quality control procedures for an audit of financial statements. It also addresses, where applicable, *the responsibilities of the engagement quality control reviewer. This ISA is to be read in conjunction with relevant ethical requirements.*

SYSTEM OF QUALITY CONTROL AND ROLE OF ENGAGEMENTS TEAMS OF ISA 220:

Paragraph 2: Quality control systems, policies and procedures are the responsibility of the audit firm. Under ISQC 1, the firm has an obligation to establish and maintain a system of quality control to provide it with reasonable assurance that:

(a) The firm and its personnel comply with professional standards and applicable legal and regulatory requirements; and

(b) Reports issued by the firm or engagement partners are appropriate in the circumstances.

This ISA is premised on the basis that the firm is subject to ISQC 1 or to national requirements that are at least as demanding.

Paragraph 3: Within the context of the firm's system of quality control, engagement teams have a responsibility to implement quality control procedures that are applicable to the audit engagement and provide the firm with relevant information to enable the functioning of that part of the firm's system of quality control relating to independence.

Paragraph 4: Engagement teams are entitled to rely on the firm's system of quality control, unless information provided by the firm or other parties suggests otherwise.

OBJECTIVE OF ISA 220:

Paragraph 6: The objective of the auditor is to implement quality control procedures at the engagement level that provide the auditor with reasonable assurance that:

(a) The audit complies with professional standards and applicable legal and regulatory requirements; and

(b) The auditor's report issued is appropriate in the circumstances.

1.2.2.5. International Standards on Review Engagements (ISRE)

These standards are to be applied in the review of historical financial information, including interim financial information. Reviewing engagements provide limited assurance in terms of reliability of historical financial information.

1.2.2.6. International Standards on Assurance Engagements (ISAE)

These standards are to be applied in assurance engagements other than audits or reviews of historical financial information.

1.2.2.7. International Standards on Related Services (ISRS)

These standards are to be applied to compilation engagements, engagements to apply agreed upon procedures to information and other related services engagements as specified by the IAASB. Accountants collect, classify and summarize financial information. The procedures are not for the accountant to express any assurance on the financial information.

Besides these standards, there are practice statements issued by the International Auditing and Assurance Standards Board. They are the complementaries of the guides for professional accountants. Objectives of these practice statements are providing interpretive guidance and practical assistance in implementing standards and promoting good practice (Preface to The International Standards On Quality Control, Auditing, Review, Other Assurance and Related Services, 2006:6). These practice statements are (https://www.ifac.org/auditing-assurance/projects/status-and-authority-international-auditing-practice-statements-0, (05.12.2015);

1. International Audit Practice Statements (IAPSs): Currently effective IAPSs are:

- IAPS 1000, Inter-bank Confirmation Procedures
- IAPS 1004, The Relationship Between Banking Supervisors and Banks' External Auditors
- IAPS 1006, Audits of the Financial Statements of Banks
- IAPS 1010, The Consideration of Environmental Matters in the Audit of Financial Statements
- IAPS 1012, Auditing Derivative Financial Instruments
- IAPS 1013, Electronic Commerce-Effect on the Audit of Financial Statements

2. International Review Engagements Practice Statements (IREPSs),

3. International Assurance Engagements Practice Statements (IAEPSs),

4. International Related Services Practice Statements (IRSPSs).

1.2.3. Future Of The Auditing

Auditing in the world has started with industrial revolution, improved with global economy, matured with economic and financial crises and transformed from national to international. Auditing implements in the world evolved in parallel with these developments. Auditing implements has started with inspection and accuracy of documents, adopted analytic approach first, then system approach, then risk approach and finally strategic approach. This adaptation is necessary because the companies size are larger, business types are various and transaction varieties are more complicated and comprehensive compared to the past. The number of global companies is gradually increasing. E-commerce volume is gradually increasing and spread to countries around the world. Information technologies are improving in parallel with these developments. Nowadays financial reports and their explanations are very detailed. Importance of the auditing is increasing day by day due to these global economic and financial developments and expansion. Regulations about international accounting, auditing, assurance, audit quality, ethics, education, discipline are being changed frequently for adaptation to the current conditions. Transition from national and regional standards to international standards is becoming widespread. The convergence of standards is being more important in term of public companies. Number of organizations that set standards or related to standards are higher as expected. The consolidation of these organizations has been necessary because of coordination of regulations and implements. It seems that IFAC is undertaking this task.

Also global economic and financial developments encourage accountants and auditors to specialization, force accounting and auditing firms to institutionalization. These developments increase importance of international accounting, auditing and assurance standards. Because of economic and financial crises in the world, very important developments are provided in terms of auditing, last 15 years. Public oversight of auditors and audit firms is gained more importance. Transition from self-audit system to public oversight system has developed concerning audit profession. Accounting and auditing professions now are accepted as a public service. Auditing firms has begun to be identified as accounting firms. The concept of reasonable assurance has begun to settle in the auditor reports. It is inevitable that audit firms in the world use the common network structure in terms of audit assurance. The importance of IT in accounting and auditing is gradually increasing. The recording function has been replaced by the digital media. In the future, accounting and auditing structure will change, develop and reshape in accordance with economic developments, economic and financial crises, volume and types of global companies, transaction variety, developments of public interest and digital developments.

It is very useful understanding IAASB's strategic objectives for 2015-2019 period to see future of auditing (The IAASB’s Strategy for 2015–2019, 2014:4,6):

> *The IAASB has identified its strategic objectives for this period as a means for stakeholders to understand how their needs are being addressed in a changing environment and, importantly, as a means for the PIOB to confirm that the IAASB is fulfilling its public interest mandate appropriately. The strategic objectives for 2015–2019 identified by the IAASB are to:*
>
> *- Ensure that ISAs continue to form the basis for high-quality, valuable and relevant audits conducted worldwide by responding on a timely basis to issues noted in practice and emerging developments,*
>
> *- Ensure the IAASB’s standards evolve as necessary to adequately address the emerging needs of stakeholders for services other than audits of financial statements,*
>
> *-Strengthen outreach and collaboration with key stakeholders in the reporting supply chain on public interest issues relevant to audit, assurance and related services.*

1.3. External Audit In Turkey

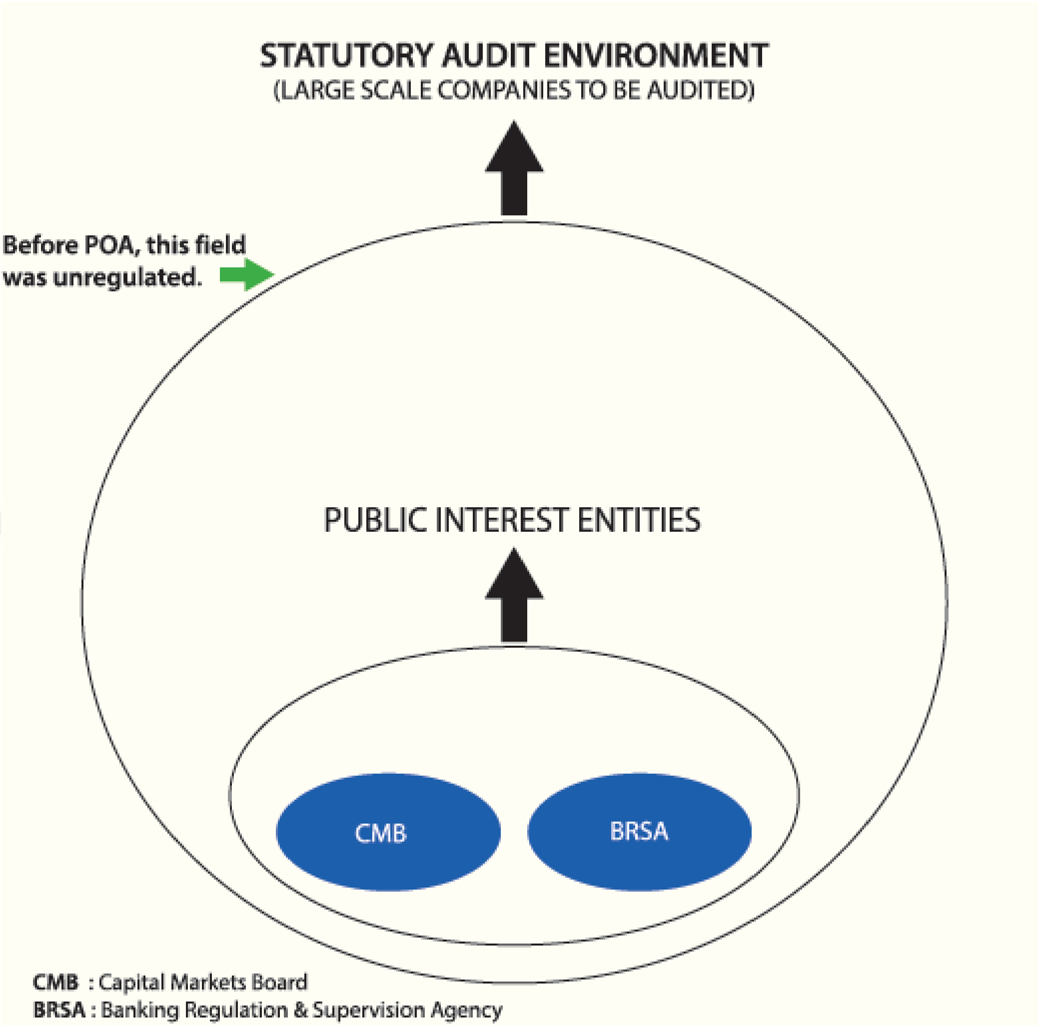
In Turkey, the regulatory and supervisory framework of external audit is currently experiencing important amendments. There were some regulations concerning the auditing activity in Turkey. Capital Markets Board (CMB) made the first comprehensive regulation concerning the auditing in capital in 1987. Banking Regulation and Supervision Agency (BRSA) was established and it became the authority over the inspection of statutory auditors within banking sector. Undersecretariat of Treasury executed auditing of insurance sector. Communiqués of the Energy Market Regulatory Authority regulated auditing of entities operating in energy market. (Republic Of Turkey, POA Introductory Booklet, 2015)

Turkish Commercial Code No. 6102 was published in 2012. This law adopted international accounting standards completely and it was a beginning for the preparation to auditing of financial statements. There weren't any regulations about international auditing standards in previous Turkish Commercial Code No. 6762 which was in effect for 56 years.

On 02.11.2011, Public Oversight, Accounting and Auditing Standards Authority (POA) was established by the Statutory Decree No. 660.

Number of the auditors, audit firms and the companies which are subject to audit have been increased since the New Turkish Commercial Code and establishment of the POA. The figure 3 which summarizes current and previous situation of the audit environment in Turkey is below:

Figure 3: Audit Environment in Turkey



Source: Republic Of Turkey, POA Introductory Booklet, 2015, p. 30

In Turkey, between Big 4, local audit firms and individual audit firms; Big 4 auditor firms have majority of the audit market service. Based on clients market value, top 10 ranking of audit firms in Turkey is similar with the world. Top 10 ranking for audit firms in Turkey is below (Karagüllü, 2008:103):

- PricewaterhouseCoopers
- Deloitte
- Ernst & Young
- KPMG
- BDO International
- Grant Thornton

- Inpact International
- RSM International
- Baker Tilly
- Kavram Bağımsız Denetim

Table 3: The list of audit firms authorized by Capital Markets Board of Turkey and their membership of international audit companies are below:

NUMBER	AUDIT FIRM NAME	INTERNATIONAL AUDIT COMPANY
1	A-1 YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	
2	AAC BAĞIMSIZ DENETİM DANIŞMANLIK VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
3	AC İSTANBUL ULUSLARARASI BAĞIMSIZ DENETİM VE SMMM A.Ş.	ENTERPRİSE NETWORK WORLDWİDE
4	ADALYA ULUSLARARASI BAĞIMSIZ DENETİM VE SMMM A.Ş.	FİNEXPERTİZA
5	ADAY BAĞIMSIZ DENETİM VE SERBEST MUHASEBECİ MALİ MÜŞAVİRLİK A.Ş.	PKF INTERNATİONAL LİMİTED
6	ADM BAĞIMSIZ DENETİM A.Ş.	
7	AG YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	
8	AK BAĞIMSIZ DENETİM VE SMMM A.Ş.	
9	AK DENETİM YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş. YETKİSİ AS	
10	AKADEMİK BAĞIMSIZ DENETİM DANIŞMANLIK VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
11	AKİS BAĞIMSIZ DENETİM VE SERBEST MUHASEBECİ MALİ MÜŞAVİRLİK A.Ş.	KPMG
12	AKSİS BAĞIMSIZ DENETİM ANONİM ŞİRKETİ	
13	AKT BAĞIMSIZ DENETİM A.Ş.	
14	AKTAN BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
15	ALTERNATİF BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	

16	ANALİZ BAĞIMSIZ DENETİM VE DANIŞMANLIK A. Ş.	THE LEADİNG EDGE ALLİANCE
17	ANIL YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	
18	AREN BAĞIMSIZ DENETİM VE SMMM A.Ş.	
19	ARILAR BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	NEXIA INTERNATIONAL
20	ARKAN ERGİN ULUSLARARASI BAĞIMSIZ DENETİM VE SMMM A.Ş.	JPA INTERNATIONAL
21	ARTI DEĞER ULUSLARARASI BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK AŞ	TASK INTERNATIONAL
22	AS BAĞIMSIZ DENETİM VE YMM A.Ş.	NEXİA INTERNATIONAL LTD
23	ATA ULUSLARARASI BAĞIMSIZ DENETİM VE SMMM A.Ş.	KRESTON INTERNATIONAL
24	AVRASYA BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
25	AYK BAĞIMSIZ DENETİM VE DANIŞMANLIK A.Ş.	
26	BAKIŞ YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	IPG INTERNATIONAL PRATICE GROUP
27	BAN-DEN BAĞIMSIZ DENETİM HİZMETLERİ A.Ş.	
28	BAŞARAN NAS BAĞIMSIZ DENETİM VE SERBEST MUHASEBECİ MALİ MÜŞAVİRLİK A.Ş	PRICEWATERHOUSE COOPERS
29	BATI YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	
30	BD BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
31	BDD BAĞIMSIZ DENETİM VE DANIŞMANLIK A.Ş.	
32	BDO DENET BAĞIMSIZ DENETİM YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	BDO INTERNATIONAL
33	BİLGİ BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
34	BİLGİLİ BAĞIMSIZ DENETİM VE YMM A.Ş.	AGN INTERNATIONAL LTD
35	BİRLEŞİK EKOL BAĞIMSIZ DENETİM	

	A.Ş.	
36	BİRLEŞİK UZMANLAR YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	PRİME GLOBAL
37	BİRLEŞİM BAĞIMSIZ DENETİM VE YMM A.Ş.	HAZLEMS FENTON
38	BM BAĞIMSIZ DENETİM A.Ş.	HLB INTERNATİONAL
39	C & Ç BAĞIMSIZ DENETİM VE YÖNETİM DANIŞMANLIĞI A.Ş.	
40	CONSULTA BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	INAA GROUP
41	CPA BAĞIMSIZ DENETİM VE DANIŞMANLIK A.Ş.	
42	CPATURK BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
43	CROWE HORWATH OLGU BAĞIMSIZ DENETİM VE YMM A.Ş.	CROWE HORWATH
44	DEĞER BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	ECOVIS EUROPE AG
45	DENGE ANKARA BAĞIMSIZ DENETİM YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	MAZARS
46	DENGE BAĞIMSIZ DENETİM SERBEST MUHASEBECİ MALİ MÜŞAVİRLİK A.Ş.	MAZARS SOCIÉTÉ COOPÉRATIVE À RESPONSABILITÉ LIMITÉE
47	DETAY BAĞIMSIZ DENETİM VE DANIŞMANLIK A.Ş.	IECNET(INTERNATİONAL EXPERT AND CONSULTANT)
48	DMF SİSTEM ULUSLARARASI BAĞIMSIZ DENETİM DANIŞMANLIK VE YMM A.Ş.	RUSSELL BEDFORD INTERNATIONAL
49	DMR BAĞIMSIZ DENETİM VE DANIŞMANLIK A.Ş.	KUDOS INTERNATİONAL NETWORK
50	DRT BAĞIMSIZ DENETİM VE SERBEST MUHASEBECİ MALİ MÜŞAVİRLİK A.Ş.	DELOITTE TOUCHE TOHMATSU INTERNATIONAL
51	EGE BAĞIMSIZ DENETİM A.Ş.	CH INTERNATIONAL
52	ELİT BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	CPA ASSOCIATES INTERNATIONAL INC.-USA

53	ENGİN BAĞIMSIZ DENETİM VE SERBEST MUHASEBECİLİK MALİ MÜŞAVİRLİK A.Ş.	GRANT THORNTON
54	ERCİYES YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	
55	EREN BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK ANONİM ŞİRKETİ	GRANT THORNTON
56	FİNANSAL EKSEN BAĞIMSIZ DENETİM VE DANIŞMANLIK A.Ş.	
57	GÜÇBİR BAĞIMSIZ DENETİM A.Ş.	IAPA INTERNATİONAL
58	GÜNCEL BAĞIMSIZ DENETİM DANIŞMANLIK VE YMM A.Ş.	GROUPE LAVIALE SOHACA
59	GÜNEY BAĞIMSIZ DENETİM VE SERBEST MUHASEBECİ MALİ MÜŞAVİRLİK A.Ş.	ERNST&YOUNG GLOBAL LIMITED
60	GÜRELİ YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM HİZMETLERİ A.Ş.	BAKER TILLY INTERNATIONAL
61	HLB SAYGIN BAĞIMSIZ DENETİM A.Ş.	HLB INTERNATIONAL
62	HSY DANIŞMANLIK VE BAĞIMSIZ DENETİM ANONİM ŞİRKETİ	CROWE HORWATH INTERNATİONAL
63	IHY BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	KİNGSTON SOREL INTERNATİONAL
64	IŞIK YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	BKR INTERNATIONAL
65	İRFAN BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
66	İTİMAT BAĞIMSIZ DENETİM A.Ş.	PRIME GLOBAL
67	KARAR BAĞIMSIZ DENETİM DANIŞMANLIK SMMM A.Ş.	JHI ASSOCİATİON
68	KARMA BAĞIMSIZ DENETİM A.Ş.	PARKER RANDALL INTERNATIONAL
69	KAVRAM BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	CROWE HORWATH INTERNATIONAL
70	KÖKER YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	AGN INTERNATIONAL
71	LİDYA BAĞIMSIZ DENETİM VE SERBEST MUHASEBECİ MALİ MÜŞAVİRLİK A.Ş.	
72	MBK BAĞIMSIZ DENETİM VE SERBEST MUHASEBECİ MALİ	MOORE STEPHENS INTERNATİONAL LTD

	MÜŞAVİRLİK A.Ş.	
73	MED YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	RG TREUHAND MÜTH AND PARTNER GMBH
74	MEGA GLOBAL ULUSLARARASI BAĞIMSIZ DENETİM A.Ş.	JHI JEFFREYS HENRY INTERNATIONAL
75	MERCEK BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
76	MERİDYEN KURUMSAL ÇÖZÜM VE BAĞIMSIZ DENETİM A.Ş.	INPACT INTERNATİONAL
77	MGI BAĞIMSIZ DENETİM A.Ş.	
78	MOD BAĞIMSIZ DENETİM SERBEST MUHASEBECİ MALİ MÜŞAVİRLİK A.Ş.	
79	OLUŞUM BAĞIMSIZ DENETİM VE DANIŞMANLIK A.Ş.	NEXIA INTERNATIONAL
80	ÖNDER BAĞIMSIZ DENETİM VE DANIŞMANLIK A.Ş.	
81	PÜR BAĞIMSIZ DENETİM YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
82	RANDIMAN DENETİM YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	
83	RASYONEL BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	EURAUDIT INT
84	REFERANS BAĞIMSIZ DENETİM VE DANIŞMANLIK A.Ş.	
85	REHBER BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	ANTEA
86	REPORT BAĞIMSIZ DENETİM VE SERBEST MUHASEBECİ MALİ MÜŞAVİRLİK A.Ş.	
87	RSM TURKEY BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	RSM INTERNATIONAL
88	SAMDEN SAMSON BAĞIMSIZ DENETİM A.Ş.	
89	SER-BERKER BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	DFK INTERNATIONAL
90	SUN BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	PKF WORLDWIDE
91	TÜRKERLER BAĞIMSIZ DENETİM YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	PREMİER INTERNATİONAL ASSOCİATES

92	TÜRKMEN BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
93	ULUSAL BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	RUSSELL BEDFORD İNTERNATİONAL
94	ULUSLARARASI BAĞIMSIZ DENETİM VE SMMM A.Ş.	
95	VEZİN BAĞIMSIZ DENETİM A.Ş.	HLB INERNATİONAL
96	YEDİTEPE BAĞIMSIZ DENETİM A.Ş.	PRAXİTY GLOBAL ALLİANCE LTD.
97	YILDIZLAR BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK ANONİM ŞİRKETİ	
98	YKY BAĞIMSIZ DENETİM VE YEMİNLİ MALİ MÜŞAVİRLİK A.Ş.	
99	YORUM YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	
100	YÖNTEM YEMİNLİ MALİ MÜŞAVİRLİK VE BAĞIMSIZ DENETİM A.Ş.	NEXIA INTERNATIONAL

Source: http://www.spk.gov.tr

In this part, general framework of audit standards in Turkey, CMB and POA functions in terms of audit and companies subject to audit in Turkey are explained.

1.3.1. Audit Standards in Turkey

Because accounting and auditing standards are crucial for the world's economy, Turkey set Turkish Standards on Auditing in compliance with international standards as a part of world's economy.

Oversight, Accounting and Auditing Standards Authority (POA) is authorized to set and issue Turkish Audit Standards by the Statutory Decree No.660. POA has signed a copyright agreement with IFAC to take international standards published by IFAC as reference. Also, this choice is fundamentally a requirement of EU negotiation process and literally accepted in Turkish Commercial Code No. 6102. Besides, in Turkish Commercial Code and Statutory Decree No. 660 dated 26.12.2012, Turkish Audit Standards are defined as education, ethic, quality control and auditing standards and other auditing standards related to auditing field, including information system auditing. International auditing standards were published as education, ethic, quality control and assurance auditing and related services standards by three auditing standards setting boards that conducted under the IFAC leadership. Standards on auditing, review engagements, other assurance engagements and related services are published by International Auditing and Assurance Standards Board (IAASB) that is one of the three boards.

The auditing standard setting process has been conducted on the basis of IFAC's Policy for Translating Reproducing Standards and consultation commissions and a review committee has been composed for the adaption of the standards. Auditing standard setting process of the POA includes the following steps (Republic Of Turkey, POA Introductory Booklet, 2015:25,26):

- Determination of the key terms,
- Translation of the original auditing standards into Turkish,
- Initial edit by an expert,
- Crosswise edit by a senior expert,
- Sending the text to the related consultation commission,
- Edit by expert team,
- Edit by Head of Auditing Standards Department,
- Presenting the text to Review Committee and POA's Board Members,
- Announce the text to the public opinion,
- Receiving and assessing the opinions about the text,
- Final edits, Board decision and publication of the text in the Official Gazette

In this framework, the list of auditing standards that were published by POA in compliance with international auditing standards are below:

Table 4: List of Turkish Standards on Auditing:

Standards Published in the Official Gazette
Quality Control
QCS 1 Quality Control Standard 1
General Principles and Responsibilities
TSA 200 Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with Turkish Standards on Auditing
TSA 210 Agreeing the Terms of Audit Engagements
TSA 220 Quality Control for an Audit of Financial Statements
TSA 230 Audit Documentation
TSA 240 The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements
TSA 250 Consideration of Laws and Regulations in an Audit of Financial Statements
TSA 260 Communication with Those Charged with Governance
TSA 265 Communicating Deficiencies in Internal Control to Those Charged with Governance and Management
Risk Assesment and Response to Assessed Risks
TSA 300 Planning an Audit of Financial Statements
TSA 315 Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and İts Environment
TSA 320 Materiality in Planning and Performing an Audit
TSA 330 The Auditor's Responses To Assessed Risks
TSA 402 Audit Considerations Relating to an Entity Using a Service Organization
TSA 450 Evaluation of Misstatements Identified during the Audit
Audit Evidence
TSA 500 Audit Evidence
TSA 501 Audit Evidence – Additional Considerations for Specific Items
TSA 505 External Confirmations

TSA 510 Initial Engagements - Opening Balances
TSA 520 Analytical Procedures
TSA 530 Audit Sampling
TSA 540 Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures
TSA 550 Related Parties
TSA 560 Subsequent Events
TSA 570 Going Concern
TSA 580 Written Representations
Using Work of Others
TSA 600 Special Considerations - Audits of Group Financial Statements (Including the Work of Component Auditors)
TSA 610 Using the Work of Internal Auditors
TSA 620 Using the Work of an Auditor's Expert
Audit Conclusions and Reporting
TSA 700 Forming an Opinion and Reporting on Financial Statements
TSA 705 Modifications to the Opinion in the Independent Auditor's Report
TSA 706 Emphasis of Matter Paragraphs and Other Matter Paragraphs in the Independent Auditor's Report
TSA 710 Comparative Information - Corresponding Figures and Comparative Financial Statements
TSA 720 The Auditor's Responsibilities Relating to Other Information in Documents Containing Audited Financial Statements
Specialized Areas
TSA 800 Special Considerations-Audits of Financial Statements Prepared in Accordance with Special Purpose Frameworks
TSA 805 Special Considerations-Audits of Single Financial Statements and Specific Elements, Accounts or Items of a Financial Statement
TSA 810 Engagements to Report on Summary Financial Statements

Other Standards Published in the Official Gazette
TSA Policy Decision for Basis Regarding Audit Report Concerning System And Committee of Early Identification of Risk
TSRE 2410 Review of Interim Financial Information Performed by the Independent Auditor of the Entity
TSRS 4400 Engagements to Perform Agreed-Upon Procedures Regarding Financial Information
TSAE 3400 The Examination of Prospective Financial Information
TSAE 3420 Assurance Engagements to Report on the Compilation of Pro Forma Financial Information Included in a Prospectus
TSAE 3402 Assurance Reports on Controls at a Service Organization
TSAE 3000 Assurance Engagements Other Than Audits or Reviews of Historical Financial Information

Other Standards Sent for Publishing in the Official Gazette
TSRE 2400 Engagements to Review Historical Financial Statements

Standards Opened to Public Opinion
TSA 701 Communicating Key Audit Matters in the Independent Auditor's Report

On 31 January 2014, the POA has become an International Forum of independent Audit Regulators (IFIAR) Member. Turkey has one more regulator that is an IFIAR Member: the Capital Markets Board of Turkey (CMB). The CMB and POA share one vote within IFIAR. The following are brief summaries and highlights of Turkey IFIAR Members’ activities and developments in audit regulation in their jurisdictions during 2014 (2014 IFIAR Annual Report, 2015:51-53):

Capital Markets Board of Turkey (CMB)

UVAP System

The project called the Remote Data Transfer System (UVAP), which was created to improve the efficiency of oversight on auditing activities, was completed in 2010. Further improvements have been made on the system in 2013. Audit firms submit to the UVAP system a variety of information that enables CMB to monitor firms on a timely basis. Information submitted by the audit firms includes audit engagements signed with their clients, services provided to clients by the audit firms other than audit & assurance services, information regarding individuals (auditors at all levels) at the firm, auditor promotions, audit firm financial information etc. UVAP system also enables CMB to generate reports electronically.

Routine Full Inspections and Thematic Inspections

In 2014, the CMB continued to oversee the audits of public companies as well as other companies under the scope of capital markets law in order to protect investors and the public interest by promoting informative, accurate, and independent audit reports. Overall, the CMB conducted 13 inspections (11 full inspections and 2 thematic inspections) of audit firms, including 3 "Big Four" audit firms. During these inspections CMB reviewed 45 audit files.

As of December 31, 2014, a total of 92 firms were registered with the CMB. However, in 2013 and 2014, 70 of them were actively involved in independent audits in public companies (22 firms had no engagements). Thus CMB conducted inspections on 30% of the audit firms which have at least one or more engagements under the scope of the capital markets law.

Of 11 firms inspected, CMB concluded there were some shortcomings in statutory audits conducted by all 11 firms. In the majority of audits, the auditor's opinion on the financial statements was not supported by sufficient and appropriate audit evidence mainly in inventory, revenue, PP&E, cash, receivables. Other main deficiencies include lack of documentation, audit planning and risk assessment procedures, internal control testing, revenue recognition, accounting estimates, fair value measurements, use of experts, engagement quality control reviews and external confirmation procedures.

CMB also performed 2 thematic inspections on EQCR and business combinations.

CMB Inspection Findings Report

"CMB quality control inspection findings annual report" will be published in the beginning of 2015. The annual report will provide the results of the inspection findings, as well as recommendations for expected improvements by the audit firms.

Public Oversight, Accounting and Auditing Standards Authority (POA)

Setting Accounting and Auditing Standards

POA strategically has an objective of setting accounting standards in full compliance with the International Financial Reporting Standards (IFRSs). All of the Standards established by IASB have been promulgated in the Official Gazette under the title of Turkish Accounting/Financial Reporting Standards (TAS/TFRS) and TAS/TFRS Interpretations. Those standards are continuously *updated in accordance with the amendments made by the IASB with the effective dates as originally pronounced by IASB.*

POA has also promulgated Turkish Auditing Standards in the Official Gazette including Standards on Auditing, Standards on Review Engagements, Standards on Assurance Engagements and Standards on Related Services. Additionally, the Code of Ethics and Standards on Review Engagements are in the process of being published in the Official Gazette. All of these standards are in full compliance with the standards published by IFAC.

Approval and Registration of Auditors and Audit Firms

POA has continued to approve auditors and audit firms and to administer auditor registration in Turkey. In 2014, over 5,000 members of the profession (CPAs and Sworn-in CPAs) were licensed and 111 audit firms were approved. As of 31 December 2014, there have been over 10,000 licensed auditors and 146 approved audit firms in Turkey. A total of 110 of those firms have been approved to conduct the audits of public interest entities (PIEs). Registration information about auditors and audit firms is stored in electronic form and is electronically accessible to the public.

Oversight, Inspections and Related Activities

Inspections are carried out at least in every 3 years for audit firms which audit PIEs and in every 6 years for the others. In 2014, POA's inspection schedule covered 63 PIE audit firms. Quality Control Inspections of PIE audit firms under the current 3 year inspection plan, covering the 2012-2014 period, were completed. While the main focus was on the efficiency of the audit firm's quality control systems during the first three year inspection cycle, the focus will be transferred to the file reviews during the second three year inspection cycle.

During 2014, POA has replied to the questions addressed by audit firms and auditors related to independent audit. On the other hand, POA has carried out simultaneous oversight activities by examining information submitted to POA in order to make them perform the audits effectively and efficiently and also with integrity and objectivity for complying with the laws and regulations and also professional values, ethics, and attitudes. Moreover, in furtherance of simultaneous audit, "Oversight-Audit Project" called "GÖZ–DE" is in the process of development by POA. In addition, POA holds conferences and *seminars about financial reporting and auditing throughout the country for raising awareness all the year round.*

Additionally, in 2014, POA became a nominee to host to a Permanent Secretariat of IFIAR in order to take more responsibility in IFIAR activities and to share practices regarding the audit market and its experiences in the field of oversight, inspection and investigation. POA has organized meeting activities with the Members of IFIAR, especially with PCAOB, for improving mutual relations and collaboration and sharing experiences.

1.3.2. Companies Subject to Audit in Turkey

Turkish Commercial Code No. 6102 brought a lot of innovation to the Turkish economy. External audit is one of these innovations. External audit is carried out according to the Turkey Audit Standards in Turkey. Turkey Audit Standards were created in accordance with international standards by Public Oversight, Accounting and Auditing Standards Authority (POA) was enacted and published in the Official Gazette. External audit is carried out by the auditors that are authorized by POA.

Council of Ministers has been authorized to determine which companies are subject to external audit, by Turkish Commercial Code No. 6102. Each year, The Council of Ministers determines the Turkish Companies that are subject to external audit. Preparation operations of Council of Ministers Decision are executed by POA in this field and then results served to the Council of Ministers. In order to harmonize European Council acquis, scope of external audit are being expanded gradually overtime. Published in the Official Gazette on 19 March 2016 with Council of Ministers Decision, the criterion of subjecting to external audit was revised and the scope of external audit has been expanded for the year 2016 compared to 2015 and 2014 years. The Criterion is determined as;

- Balance sheet total ≥ 75 million TL,
- Annual net turnover ≥ 150 million TL,
- Employee headcount ≥ 250

for the year 2014.

The Criterion is determined as;

- Balance sheet total ≥ 50 million TL,
- Annual net turnover ≥ 100 million TL,
- Employee headcount ≥ 200

for the year 2015.

The Criterion, published in the Official Gazette on 19 March 2016, is determined as;

- Balance sheet total ≥ 40 million TL,
- Annual net turnover ≥ 80 million TL,
- Employee headcount ≥ 200

for the year 2016.

Companies providing at least two of these criterion at the two consecutive accounting periods are subject to audit. Therefore, in the years 2014 and 2015 companies that provide any two of these 3 criterion are subject to external audit in 2016. In addition, regardless of these criterion, companies such as (Republic Of Turkey, POA Introductory Booklet, 2015:53-54):

- Listed companies and other capital market institutions,
- Financial institutions and their associates, joint ventures and subsidiaries,
- Insurance firms and their associates, joint ventures and subsidiaries,
- Companies that broadcast nationwide and provide media service,
- Intermediary companies of precious metals which are allowed to operate as a member of the Istanbul Gold Exchange,
- Joint-stock companies that are engaged in the production or trade of precious metal and that are allowed to operate as a member of the Istanbul Gold Exchange metals,
- Agricultural products warehouse companies that are established as joint-stock companies

are subject to audit in accordance with the Cabinet Decree.

Until 21 March 2016, 196 audit firms and 13.280 auditors were registered to Statutory Audit Public Register. List of registered audit firms and auditors is open to public in at www.kgk.gov.tr official website.

CHAPTER TWO

LITERATURE REVIEW ON AUDIT QUALITY AND AUDITOR SELECTION

Explanatory factors and consequences of auditor qualification are remarkable subjects in the accounting research beginning from 1960, especially over the last years (Pedro et. al., 2005:725-738).

High audit quality perception varies based on assessing party of audit (Knechel et. al., 2013:385):

- Users of financial reports check the absence of material misstatements.

- The aim of auditor is to complete all audit tasks in a satisfactory way that required by the firm's audit methodology.

- The audit firm evaluates that the work can be defended against challenge in an inspection or court of law.

- Regulators view whether audit is in compliance with professional standards.

- Society care audit in terms of avoiding economic problems for a company or the market.

In 2006, U.K.'s Financial Reporting Council (FRC) tried to design a formal audit quality framework. Aim of this framework is to support effective communication between auditors, audit committees, preparers, investors and other stakeholders. FRC determined following key drivers for audit quality in 2008 (FRC, The Audit Quality Framework, 2008:1).

- The culture within an audit firm;

- *The skills and personal qualities of audit partners and staff;*

- *The effectiveness of the audit process;*

- *The reliability and usefulness of audit reporting; and*

- *Factors outside the control of auditors affecting audit quality.*

The FRC hopes that the publication of this Framework will assist:

- *Companies; in evaluating audit proposals;*

- *Audit Committees; in undertaking annual assessments of the effectiveness of external audits;*

- All stakeholders; in evaluating the policies and actions taken by audit firms to ensure that high quality audits are performed, whether in the UK or overseas; and

- Regulators; when undertaking and reporting on their monitoring of the audit profession.

By FRC, several potential indicators of audit quality were identified for each driver. It can be seen at Figure 4.

Table 5: Key Drivers and Indicators of Audit Quality

Driver	**Indicators**
The culture within an audit firm	The culture of an audit firm is likely to provide a positive contribution to audit quality where the leadership of an audit firm: • Creates an environment where achieving high quality is valued, invested in and rewarded. • Emphasises the importance of 'doing the right thing' in the public interest and the effect of doing so on the reputation of both the firm and individual auditors. • Ensures partners and staff have sufficient time and resources to deal with difficult issues as they arise. • Ensures financial considerations do not drive actions and decisions having a negative effect on audit quality. Promotes the merits of consultation on difficult issues and supporting partners in the exercise of their personal judgement. • Ensures robust systems for client acceptance and continuation. • Fosters appraisal and reward systems for partners and staff that promote the personal characteristics essential to quality auditing. • Ensures audit quality is monitored within firms and across international networks and appropriate consequential action is taken.

The skills and personal qualities of audit partners and staff	The skills and personal qualities of audit partners and staff are likely to make a positive contribution to audit quality where: • Partners and staff understand their clients' business and adhere to the principles underlying auditing and ethical standards. • Partners and staff exhibit professional scepticism in their work and are robust in dealing with issues identified during the audit. • Staff performing detailed 'on-site' audit work have sufficient experience and are appropriately supervised by partners and managers. • Partners and managers provide junior staff with appropriate 'mentoring' and 'on the job' training. • Sufficient training is given to audit personnel in audit, accounting and industry specialist issues.
The effectiveness of the audit process	An audit process is likely to provide a positive contribution to audit quality where: • The audit methodology and tools applied to the audit are well structured and: - Encourage partners and managers to be actively involved in audit planning. - Provide a framework and procedures to obtain sufficient appropriate audit evidence effectively and efficiently. - Require appropriate audit documentation. Provide for compliance with auditing standards without inhibiting the exercise of judgement. - Ensure there is effective review of audit work. - Audit quality control procedures are effective, understood and applied. • High quality technical support is available when the audit team requires it or encounters a situation it is not familiar with. • The objectives of ethical standards are achieved, providing confidence in the integrity, objectivity and independence of the auditor. • The collection of sufficient audit evidence is not inappropriately constrained by financial pressures.

The reliability and usefulness of audit reporting	Audit reporting is likely to provide a positive contribution to audit quality where: • Audit reports are written in a manner that conveys clearly and unambiguously the auditor's opinion on the financial statements and that addresses the needs of users of financial statements in the context of applicable law and regulations. • Auditors properly conclude as to the truth and fairness of the financial statements. • Communications with the audit committee include discussions about: - The scope of the audit. - The threats to auditor objectivity. - The key risks identified and judgements made in reaching the audit opinion. - The qualitative aspects of the entity's accounting and reporting and potential ways of improving financial reporting.
Factors outside the control of auditors	Factors outside the control of auditors which are likely to make a positive contribution to audit quality include: • An approach to corporate governance within the reporting entity that attaches importance to corporate and financial reporting and to the audit process. • Audit committees that are active, professional and robust in dealing with issues identified during the audit. Shareholders that support auditors, where appropriate, thereby increasing the likelihood that directors and management will comply with their obligations in relation to the preparation of reliable financial statements. • Reporting deadlines that allow the opportunity to carry out an audit without undue reliance on work performed before the end of the reporting period. Appropriate agreed arrangements for any limitation of liability. • An audit regulatory environment that focuses on the drivers of audit quality.

Source: FRC, The Audit Quality Framework, 2008, p. 3-7

According to FRC, as audit quality is a dynamic concept, these drivers and indicators may change over time.

Furthermore, audit committee members asked for guidance to support their assessment of the external audit. In 2015, FRC developed "The Practice Aid" and issued a guidance called "Audit Quality Practice Aid for Audit Committees". This guidance (FRC, 2015:5);

- Presents an overview of audit quality, highlighting factors that audit committees could consider when making their assessment and steps they could take in doing so.

- Describes the possible inputs (sources of evidence) for the assessment.

- Discusses the key professional judgments the auditor makes during the audit and how audit committees might assess them.

- Describes three further elements that audit committees can consider when evaluating the quality of their auditor: Skills, Character and Knowledge; Mindset and Culture; and Quality Control.

Academic research examines explanatory factors of auditor qualification in various ways. This research emphasizes that Big-4 provides higher quality. Distinguishing from the previous researches, the determinants of auditor selection are discussed more extensively in this study.

2.1. Audit Quality

In the literature, the discussions about the audit quality are structured around the four main topics (Defond & Zhang, 2014):

1. The definition of audit quality
2. The drivers of the client demand for audit quality
3. The drivers of the auditor supply of audit quality
4. The concerns of the regulators about audit quality.

Audit quality directly affects the various decisions of the users of audited financial statements in terms of the degree of determining GAAP violations and nearly all definitions of audit quality are set around this belief. (DeAngelo, 1981; Watts & Zimmermann, 1981; Fuerman, 2003). In contrast to this belief, DeFond and Zhang (2014) argues that besides GAAP violations, auditors are responsible from providing assurance of financial reporting quality as a result of professional auditing standards. In February 2014 IAASB issued a framework for audit quality. In this framework IAASB also stated that auditors are required to comply with relevant auditing standards and at the same time standards of quality control through ethics and regulatory requirements. In addition, IAASB claimed that an open and constructive relationship between auditors and management also helps to create an environment in which management can benefit from auditors' observations on matters such as:

- Possible improvements to the entity's financial reporting practices.
- Possible improvements in internal control over financial reporting.
- New financial reporting requirements.
- Perspectives on industry issues.
- Observations on legal and regulatory matters.

Measuring audit quality is difficult because of unobservable amount of assurance provided by auditors (Defond & Zhang, 2014). Audit quality proxies commonly used are output-based or input-based:

Output-based audit quality measures are; material misstatements, auditor communication, financial reporting quality characteristics, perception-based measures.

Input-based audit quality measures are; auditor characteristics, auditor–client contracting features.

Audit quality is a significant subject for firms, investors and auditors. Audit research investigates audit quality measures. Each measure has its own strengths and weaknesses. According to my point of view in audit literature, Defond and Zhang (2014) made the best explanation about relationship between financial reporting quality, audit quality, firms' characteristics and financial reporting systems in their research. They stated that (Defond and Zhang, 2014:290-291):

"Because it is inextricably intertwined with financial reporting quality, audit quality also depends on firms' innate characteristics and financial reporting systems. Therefore, it is critically important for models that empirically test audit quality to disentangle these constructs."

According to Defond and Zhang (2014), four models commonly used in testing of the audit quality proxies. These are; going-concern, discretionary accruals, audit fees and Big N. The control variables that are typically used in the models and some of the studies that use these models need to be explained.

Going-concern: Model-specific variables of going-concern audit quality models are; size, leverage, loss, ROA, probability of bankruptcy, change in leverage, stock returns, subsequent security, issuance, report lag, operating cash flow, investments, age, lagged going-concern, industry dummy.

Some of the studies that use these models are; Mutchler et al. (1997), Louwers (1998), Carcello and Neal (2000), Reynolds and Francis (2001), Craswell et al (2002), DeFond et al. (2002), Lennox (2005b), Carey and Simnett (2006), Francis and Yu (2009), Hope and Langli (2010), Lennox and Li (2012).

Discretionary accruals: Model-specific variables of discretionary accruals audit quality models are; size, leverage, loss, sales growth, operating cash flow, big n, market-to-book, total accruals, equity/debt issuance, industry/year dummy.

Some of the studies that use these models are; Becker et al. (1998), Klein (2002), Ashbaugh et al. (2003), Myers et al. (2003), Butler et al. (2004), Menon and Williams (2004), Gul et al. (2009), Prawitt et al. (2009), Krishnan et al. (2011), Michas (2011), Lennox and Li (2012).

Audit Fee: Model-specific variables of audit fee audit quality models are; size, leverage, loss, roa, current assets/total assets, quick ratio, foreign sales, number of segments, december year end, going-concern opinion, industry/year dummy.

Some of the studies that use these models are; Gul and Tsui (1998), Seetharaman et al. (2002), Chaney et al. (2004), Francis et al. (2005), Choi et al. (2009), Doogar et al. (2010), Gul and Goodwin (2010), Numan and Wilekens (2012), Dao et al. (2012), Fung et al. (2012).

Big N: Model-specific variables of Big N audit quality models are; Size, leverage, loss, ROA, current ratio, asset turnover, growth, capital intensity, equity/debt issuance, industry/year dummy.

Because Big N audit quality model is used in this study, some of the previous studies that have used Big N audit quality models are explained in detail.

Firth and Smith (1992) used client size (or growth) measure as a control variable same as Defond (1992). Francis et al. (1999) examined relation between endogenous tendency of generating accruals and demand for Big 6 auditor. NASDAQ firms were used as sample in this study over the periods between 1975–1994. They found evidence that the firms which have higher accruals are willing to hire Big 6 auditors in providing assurance services. Because high-accruals can provide more opportunity to manipulate earnings management. Also they stated that, high-accruals firms and audited by Big 6 have lower amounts of estimated discretionary accruals.

This study contributed to auditor choice literature by testing firm size, leverage, growth opportunities, new equity issues, financial distress and regulated industries. According to Kim et al. (2003) auditor choice is becoming important if the client's managers have incentives to prefer income-increasing accrual choices. Big 6 auditors are less effective than non-Big 6 auditors in this regard.

By using private firms in U.K. as the sample, Chaney et al. (2004) investigated that firms self-select the auditor by taking costs and benefits into account related to auditor choice. Khurana and Raman (2004) found that the audit quality differentiation between Big N and non-Big N auditors in terms of perceived audit quality is positively affected by country-level litigation exposure. Mansi et al. (2004) investigated effects of audit firm size on audit quality. Authors found that there is a relationship between auditor quality, audit tenure and the cost of debt financing by examining effects of audit firm size and tenure on audit quality. 8,529 firm-year observations from 1974 to 1998 were used as the sample. Lennox (2005b) examined relationship between audit firm size and management ownership for unlisted companies in U.K. The results indicated that when management ownership increases, the likelihood of hiring a large audit firm is lower. By using a set of firm-level data across 39 countries, Choi and Wong (2007) found that Big 5 auditors have a stronger governance function in weaker legal environments. Also likelihood of choosing qualified auditors is more reasonable for risky firms because of lower litigation costs. Defond et al. (2015) found that larger firms, with higher ROA, higher leverage, lower current ratios and lower asset turnover ratios engage Big N auditor. This result support that Big N clients are different from non-Big N clients.

Fortin and Pittman (2007) investigated the role of auditor choice in debt pricing in private firms. They stated that larger, more complex firms prefer a Big 4 auditor. Other proxies such as the number of private loan contracts, the number of subsidiaries, the firm's year-end is within a week of December 31, the fraction of accounts receivable and inventory in total assets, the length of the firm's operating cycle, asset turnover, negative equity, liquidity, leverage, loss, profitability are determined not effective on auditor selection process. This study concluded that a firm's yield spreads or credit ratings are not affected even firms retain working with Big 4 auditor. Besides, Big 4 public accounting firms give additional financial services (including tax-planning opportunities) other than audit service. Auditor choice of the firms can be affected by these kinds of financial services. Also big 4 auditor benefits (minimizing taxes and lover corporate tax burdens) should be taken into account in this manner. Guedhami et al. (2009) used 176 privatized firms from 32 countries as the sample. This study indicated that if state ownership proportion increases, the likelihood of choosing Big 4 auditors decreases. Chang et al. (2009) examined the impact of audit quality on firms' financial decisions and capital structure. This study reported empirical evidence that firms audited by higher quality auditor (Big-6 auditor) prefer to issue equity instead of debt financing. Gul et al. (2010) investigated the impact of auditor selection on stock price synchronicity for Chinese-listed firms over the 1996–2003 periods. They found that auditor quality is inversely associated with stock price synchronicity. Chen et al. (2011) provided evidence that firms which working with Big 4 auditor more likely to have less earnings management.

Yaşar (2013) tested whether audit firm size have an impact on discretionary accruals by using the sample of manufacturing industry firms listed on Istanbul Stock Exchange (BIST) over the periods between 2003-2007. Audit firm size was used as a proxy for audit quality. The study indicates that there is no difference between the firms audited by Big 4 or non-Big 4 in terms of restriction of earnings management in Turkey.

The choice of audit firm quality metric is a fundamental topic in the auditor selection literature (Citron and Manalis, 2001:443). DeAngelo (1981) investigated the relationship between audit quality and auditor size and found that auditor size affects auditor quality positively and larger audit firms provide a higher level of audit quality. According to DeAngelo, the larger audit firms have more clients than the other smaller audit firms. The larger audit firm can behave more independently because they have less fear of losing a particular client. Thereby audit firm quality depends on independence degree of auditor. Francis and Wilson (1988) contributed audit quality literature by developing brand name model of audit quality. Authors found that brand name reputation is very significant for larger audit firms in terms of higher quality fee level. If larger audit firms do not provide higher quality audit service, their brand name reputation lessens and they cannot get expected level of future revenue.

Positive relationship between audit firm size and performance is founded by previous studies (Chen and Cheng, 2008; Chen et al., 2008; Collins-Dodd et al., 2004; Rescho, 1987). Also Chen et al. (2013) found that the association between audit firm size and audit quality is significantly positive in national, regional, and local audit firms.

Parallel to the previous research, in this study auditor size also found as the main determinant for audit quality. Thus qualified auditors will refer to the larger audit firms as Big4.

2.2. Auditor Selection

The requirement of a strong relationship between the auditor and the management emphasizes the importance of auditor selection process. As the companies grow in size and developed in organizational structure, they need more finance and may want to be a part of capital markets. This complexity increases the need for high quality financial reporting and corporate governance processes began to evolve. The effects of these factors on the nature and quality of the financial reporting directly will have an impact on audit quality directly. In their paper, Newton and Ashton (1989) stated that clients want to work with audit firms which have similar organizational structure and management style as their own form.

The demand for high quality audit stimulates the selection of the auditors through different factors but especially size, tenure, reputation, concentration and price. Various studies mainly uses the size as a proxy (DeAngelo, L.E. 1981; Teoh et al., 1993; Francis et al., 1999; Lee et al., 2003; Lennox, 2005a; Lin & Liu, 2009) but selection is a two-sided process between the audit firm and the client. Most of the studies skip the importance of the client characteristics in the selection process and most of them use only one or two proxies. Some of these studies found that audit firm size is positively associated with audit quality (Palmrose 1988; Krishnan and Schauer 2000; Khurana and Raman 2004).

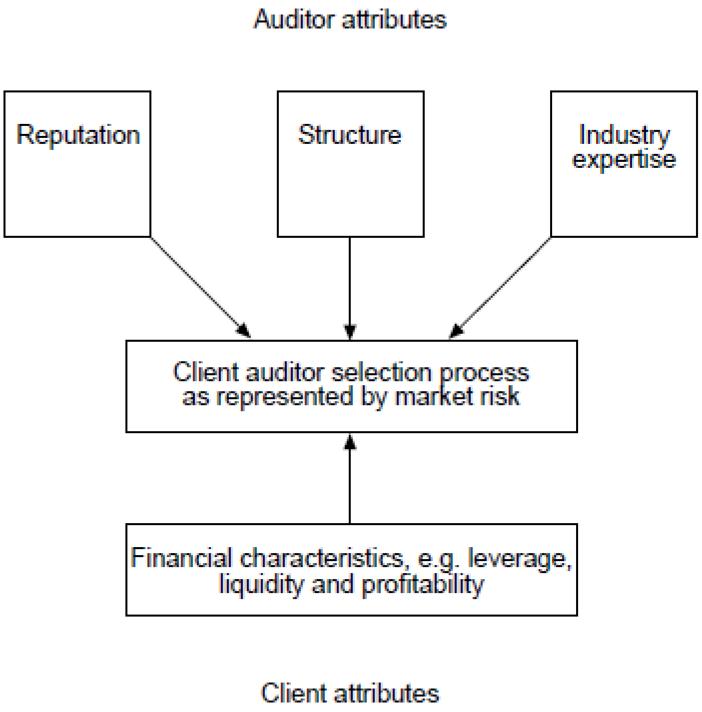
Pratt and Stice (1994) investigated the relation between client characteristics in terms of financial condition and auditor judgments of litigation risk. Their results indicate that the clients' financial condition is the primary consideration in the auditors' assessment of litigation risk. There are many different firm financial characteristics used in the literature as independent variables such as age, assets, leverage, return on assets, loss, market to book and also firm characteristics such as international diversification, foreign ownership, being a watchlist company and being in corporate governance index. This study is the first study that combined both financial and other general characteristics of the firm in one analysis. Firm characteristics variables are taken from prior studies (Wallace et al. 1994; Zarzeski 1996; Alsaeed K. 2006; Bagherpour M. A. 2006; McDougal 2011, DeFond et al. 2015). In general, most of the previous studies achieved the result that companies with better financial conditions prefer Big 4 companies and non-big 4 companies have client characteristics significantly different than Big 4 companies' clients.

Önder, Aksu and Balcı (2004) determined several financial characteristics and firm characteristics in order to test the characteristics for auditor selection in Istanbul Stock Exchange for the years 1999, 2000, and 2001. In their study foreign shareholdings, percentage of shares held by public, membership in the finance sector, leverage, size, ROA and market-to-book ratio were used as independent variables. They determined that firm size, level of shareholdings by foreign shareholders, and membership in the finance sector are positively associated; level of public shareholdings is negatively associated with auditor selection (in that time Big 5 and Non-Big 5). They found that leverage and ROA are not significant variables in terms of auditor choice.

Another variable that was taken into account in this study is IPO underpricing decisions. In the literature, there is a consensus that audit quality may affect IPO underpricing through more accurate information and also may serve as one of the indicators of company value (Chang et al., 2009). By examining a large sample companies Beatty (1989) found that companies audited by big audit firms (Big Eight at that time) suffer less IPO underpricing. Ljungqvist (1997) using a sample of 189 firms over the periods between 1970-1993 found an initial underpricing of about 10.9%. Zouari et.al, (2011) stated that in France, Jacquillat and MacDonald (1974) and Dubois (1989) reported an initial underpricing respectively about 4.2% and 19.0 percent.

Cravens et al. (1994) combined reputation, concentration and structure in one analysis. They also emphasized that clients may provide a positive signal for investors through the auditor selection process so investors may assume that companies audited by big audit firms receive higher quality audits and report more reliable financial information. Their analysis regarding auditor attributes and client attributes to auditor selection process can be seen at Figure 5.

Figure 4: Factors Which Influence the Auditor Selection Process



Source: Karven et. al., 1994, p. 28

There is also a relation between audit quality and financial reporting quality. Audit quality is a component of financial reporting quality, because high audit quality increases the credibility of the financial reports. This increased credibility arises through greater assurance that the financial statements faithfully reflect the firm's underlying economics. Audit quality, however, is not the only component of financial reporting quality. Financial reporting quality is also affected by the quality of the pre-audited financial statements, which are an input for the audit process. The quality of the pre-audited statements is further determined by the firm's financial reporting system, which maps its underlying economics into the financial reports; and the firm's internal characteristics, which determine its underlying economics (Dechow et al., 2010). Thus it can be easily stated that, financial reporting quality is a function of audit quality, the quality of the firm's financial reporting system and its internal characteristics (Defond and Zhang, 2014:276). The future research may also review the financial reporting quality literature to find determinants of audit quality because of relationship between audit quality and financial reporting quality.

Market reaction to auditor changes is an important issue in audit literature. Arioglu and Tuan (2015) have an empirical study about audit firm rotation by public firms quoted at BIST. "They investigate whether the market reaction changes based various audit firm characteristics that could potentially affect audit quality, such as whether or not the audit firm is an international firm, whether or not it is one of the Big 4 audit firms, and the ranking of the audit firm among all audit firms. Authors expect that if firms switch to audit firms that are expected to increase the quality of financial reporting, markets would react positively to these audit firm changes as a result of improved audit quality. Their findings suggest that investors in Turkish capital markets do not value the reputation of audit firms when public firms switch auditors." (Arıoğlu and Tuan 2015:397-398)

Lawrance et al. (2011) examined the firm characteristics' effects on audit quality proxies through differences between Big4 auditor and Non-Big4 auditor. Authors used three audit-quality proxies; discretionary accruals, the ex-ante cost-of-equity capital, and analyst forecast accuracy. This research provided suggestive evidence that there are no significant differences in these audit quality proxies between Big4 auditor and Non-Big4 auditor when Propensity Score Matching procedure[1] is used. They stated that audit quality proxies which used by previous research are driven by firm characteristics. Defond & Zhang (2014) used Coarsened Exact Matching procedure[2] instead of Propensity Score Matching, for eliminating

[1] Propensity Score Matching model developed by Rosenbaum and Rubin (1983) to match on a broad range of client characteristics and use attribute-based matching to examine whether the Big 4 distinction can be attributed to specific client characteristics (Lawrence et. al., 2011:262).
[2] Coarsened Exact Matching, a relatively recent development in the statistics literature, is not subject to random matching problem of Propensity Score Matching, and thus could improve the match quality and provide less sensitive results (Defond et. al., 2015).

Propensity Score Matching's inherent limitations. They found that there is no Big N quality differentiation which is driven by client characteristics. Donovan et al. (2014) reviewed Defond & Zhang (2014) empirical audit literature study and suggested that audit quality research should focus on externalities and inefficiencies for understanding audit-quality choice and these research should add competitive advantages of auditors and the institutional features of the audit process for defining audit quality.

Auditor choice research focus to examine determinants of the existing auditor selection (e.g. Francis et al., 1999; Abbott and Parker, 2000, Beasley and Petroni, 2001, Citron and Manalis, 2001) or determinants of auditor switching (e.g. Chow and Rice 1982; Francis and Wilson, 1988; Johnson and Lys, 1990; DeFond, 1992; Abbott and Parker, 2000, Woo and Koh, 2001). (Beattie et. al., 2006:3)

The association between auditor opinion and auditor change has been a particular focus of auditor switching literature. Yaşar (2015) tested the relationship between qualified opinions and auditor switches for industry firms listed on Istanbul Stock Exchange for years between 2003-2009 years. Author found that managers change their auditors after qualified opinions. However, these firms are not more likely to get an unqualified opinion for the following year.

Brown and Knechel (2013) investigated the degree of compatibility between firms and their auditors. They used two proxies to develop measures of auditor-firm compatibility as financial statement similarity and narrative textual disclosures similarity. They used five financial variables to measure financial similarity as firm size, combination of inventory and receivables, total accruals, liquidity and ROA. By using Vector Space Model (VSM),[3] Authors found that if auditor-firm compatibility is lower, firms are more likely to switch other auditors with relatively high auditor-firm fit.

There are lots of studies that explore auditor choice in terms of objective financial variables like size, growth, debt ratio, profitability but some studies use behavioral perspective. These studies (Addams and Allred, 1994, 2002; Rummel et al., 1999; Stanny et al., 2000; Sands and McPail, 2003) focus on designating

[3] Vector Space Model (VSM) is one of the common methods for analyzing similarities of text documents to measure narrative textual disclosures similarity.

perceptual choice criteria that explains auditor choice from client perspective. (Reheul et. al., 2011:8)

For example Sands and McPhail (2003) provided evidence that Technical Competence and Client Orientation are most important auditor choice criteria. Audit firm's industry experience and auditor's response capacity to the client needs play an important role in the decision process of auditor selection.

By using ordered probit regression, Michaely and Shaw (1995a) found that the firms whose debt-to-assets ratio is higher are more likely to engage Big Eight audit firms, in IPO process. Authors stated that auditor quality influences IPO's long-term performance. Also higher quality auditors choose less risky firms to protect their reputation. Similar results can be seen at Titman and Trueman's (1986). In their study, authors suggested that riskier firms don't prefer to hire higher quality auditor. Knechel et al, (2008); Sundgren, (1998); Broye and Weill, (2008) examine the impact of leverage on auditor selection process. They found that there is a positive relationship between leverage and selection of large audit firms. However influence of leverage can vary among the countries (Piot, 2001; Sundgren, 1998).

Johnson and Lys (1990) and Berger and Hann (2007) findings indicated that there is a positive relationship between return on assets (ROA) and auditor selection.

Abidin (2006) found that growing, larger companies are more likely to engage large audit firms. Also leveraged companies are less likely to engage Big5/4 auditor. Cytrin and Monalyze (2000) and Burton (1995) provided evidence that firm size has a positive relationship with selection of large audit firm. (Banimahd and Vafaei, 2012:4102)

By using logistic regression, Banimahd and Vafaei (2012) examined determinants of auditor selection in the listed companies of Tehran stock exchange (TSE) over the 2001- 2007 period. They found that main determinants of auditor selection are firm size, profitability, audit report opinion in the prior year and the state ownership.

Zureigat (2011) used listed companies on the Amman Stock Exchange (ASE) as the sample and explored the relation between ownership structure and audit quality. This research indicated that firms which have high level of foreign ownership and institutional ownership are more likely to hire Big4. Considering foreign and institutional investors need high quality financial statements, author interpreted that Big4 provide high quality financial statements.

Some of the previous research (Balvers et al. 1988; Beatty, 1989; Hogan 1997) findings indicated that the firms which made initial public offerings and also are audited by one of Big 6 auditors are more likely to reduce underpricing.

Menon and Williams (1991) stated that more prestigious underwriters encourage their clients to choose a higher quality auditor because of upholding their (underwriters) reputation, in IPO process. It can be claimed that underwriter prestige is one of the main determinants that affects auditor choice decision for companies that are making IPO. Previous research (Menon and Williams, 1991; Firth and Smith, 1992; Michaely and Shaw, 1995b; Copley and Douthett Jr., 2002; Wang and Iqbal, 2006; Doolan, 2009) suggested that IPO companies which select prestigious underwriters are more likely to select higher quality auditors.

In their study, Karim and Zijl (2013) concluded that firm size is evidently an important control variable in auditor selection process. Debt-to-total assets ratio and ROA don't affect firm's auditor selection. Revier and Schroé (2010) found evidence that larger firms and the firms that have more transactional complexity are more likely to hire Big 4. Chaney et al. (2004) found that multinational and large firm is more likely to opt one of Big N auditors.

Agency cost is another determinant that has been used in previous auditor selection literature. Conflict of interest among the stakeholders and managers of a company and information asymmetry cause agency cost. Chow (1982) found that conflict of interests incites the firms to work with external auditors. Piot (2001) provided evidence that the firms which have higher agency cost demand higher audit quality. Francis and Wilson (1988) suggested that there is a positive relationship between agency cost level and selection of higher quality (Big 8 auditors). Defond (1992) similarly supported that level of agency costs affect the level of audit quality. Mastorakis et al. (2012) used German and French listed companies to investigate effects of firm financial characteristics on Big4 audit firm selection related to agency costs of free cash flows. They found that dividends and total debt might be significant determinants for the selection of Big4 audit firm in terms of agency cost of free cash flows. Firms that have high debt or high dividend policy are less likely to choose Big4 audit firm. By this choice firms don't pay premium and they reduce agency cost of free cash flows.

Eshleman and Guo (2014) tested whether Big 4 auditors deliver higher audit quality than other auditors, after controlling for the endogenous choice of auditor. Authors used the incidence of accounting restatements as a different proxy for audit quality. By using a propensity-score matching procedure authors found that clients of Big 4 audit firms are less likely to subsequently issue an accounting restatement than are other auditors' clients. In contrast with recent research, authors provided evidence that Big 4 audit firms do perform higher quality audits.

The best explanation of relation between previous and future auditing research, audit quality, auditing regulators and auditing standards framework is stated in David Hay’s study published in 2015 (Hay, 2015:159):

> *Auditing is always a controversial and changing area, due to successive crises, the expectation gap, and the incentives of regulators to demonstrate that they are active and responding to current needs. Although there is always change, there are bigger changes taking effect now. Research about auditing in the current environment is different from what it has been in the past because of the change from self-regulation to independent regulation in most countries, and much greater use of global auditing standards. Regulators are now focusing on audit quality, what it is and how it can be measured; and they are working on developing more informative audit reports. Research can help with these projects, and is doing so. I also argue that there are a number of areas in which there seems to be a strong need for auditing research, but surprisingly little research is being done. These topics include the impact of higher-quality auditing in developing economies, and assurance for other entities such as charities and small companies. There is also demand for assurance on other issues, such as reports on sustainability or on privacy. While there is research on some of these new areas, such as sustainability reporting, there is not very much of it. Having reviewed these opportunities where there is not enough research being done, the article also points out that, now that auditing research is being taking more notice of by standard setters, there are opportunities in the established areas of auditing research, informed by prior research. Research in these areas is driven by fundamental issues from disciplines such as economics and management, such as the supply of auditing and the demand for auditing,*

> *or corporate governance. There are many new opportunities for further work at the frontiers of auditing research.*

Previous research provides evidence that Big N auditors provide higher audit quality than Non-Big N auditors. However, recent research examines whether Big N effect is driven by Big N auditors having higher quality clients. This research aims to extend the previous audit quality literature by focusing on the characteristics of Turkish companies that prefer a specified level of audit quality, specifically investigating their initial public offering characteristics.

CHAPTER THREE
RESEARCH DESIGN

3.1. AIM OF THE STUDY

The insufficiency of transparency and reliability of presented financial reports are perhaps the two of the most important factors that cause corporate failures. Audit quality effects positively transparency and reliability of financial reports. To improve the integrity of financial reporting and audit quality, the factors that affect audit quality should be examined. DeAngelo (1981) investigated the relationship between audit quality and auditor size and found that auditor size affects auditor quality positively. DeAngelo (1981) stated that "Larger audit firms provide a higher quality audit". Besides auditor size, there can be other factors that affect audit selection process and these factors can be derived from firm's own characteristics. This study empirically investigated the relationship between firm and IPO characteristics and selection of Big 4 auditor. Therefore, this study extends and contributes to audit quality literature by using Turkish data. This study;

- Investigates firm characteristics of selected Turkish public companies,
- Investigates IPO characteristics of selected Turkish public companies,
- Examines the relationship between firm and IPO characteristics and choice of Big 4 auditor.

This study initially examines whether there is a relationship between each of independent variables (Firm age, IPO age, firm size, liquidity, leverage, ROA, loss, corporate governance, foreign ownership, growth, international diversification, watchlist, market to book, total asset turnover, proceeds, standard return, prestige) and the choice of a Big-4 auditor. This study also investigates whether firm age and IPO age have correlation in terms of the choice of a Big-4 auditor.

This study aims to have a significant role in auditor choice literature. Getting high quality audit service is directly related to the fact that firm characteristics and IPO characteristics. Therefore, this study may provide positive insight into audit quality literature. This research contributes to the audit quality literature by illustrating that audit quality is affected not only by audit firm size, but also firm' own characteristics. This study is also useful for the stakeholders of firms in the

Istanbul Stock Exchange (BIST) as it provides evidence for relationship between firm characteristics and audit quality.

This research examines whether firms' internal characteristics affect audit selection in Turkey. Therefore, data are collected from the BIST to provide answers to the questions raised in this study.

3.2. LIMITATIONS

For the sample, firms which are listed in BIST from 2009–2013 are selected. There are certain limitations of this research. First, there is a limited data about which audit firms provided service when selected BIST companies made IPO. Therefore, IPO characteristics in IPO period and auditor choice of between 2009-2013 periods are matched, in this study. Besides, audit reports of listed firms are not available before the year 2009.

Another important limitation of this study is lack of audit fees data. The audit fees determinant is not used due to lack of data. However, there are a lot of researches that use auditor fees as another proxy for audit quality or examine the relationship between auditor quality and the characteristics of the initial public offerings (IPOs).

3.3. METHODOLOGY

In this section, sample selection, descriptive analysis, definition of variables, hypothesis and research model are described.

3.3.1 Sample Selection

The sample for the study consists of all firms listed on the Istanbul Stock Exchange BIST, excluding firms in financial industry. The sample period is from 2009–2013. The data for the variables are available for each year in the sample period. Financial institutions (such as banks, insurance companies, real estate, investment trusts (reits), brokerage houses, holding and investment companies) are excluded because of their own financial characteristics. Firms who made IPO before 1990 are also excluded because there is no data availability for these firms. Finally the firms that don't have required information for the sample period are excluded.

The selected sample is summarized in Table 2. After excluding the firms mentioned above, the final sample consists of 149 firms and 745 observations.

Table 6: Summary of the Sample Selection

Total number of firms listed in the BIST 2009-2013	445
Financial institutions (-)	151
Date of Listing before 1990 (-)	62
No information for 5 years (-)	83
Total sample firms (=)	149
Total observations for 5 years (=149*5)	**745**

3.3.2. Descriptive Analysis

The distribution of companies across the industries that are classified by using BIST is given below.

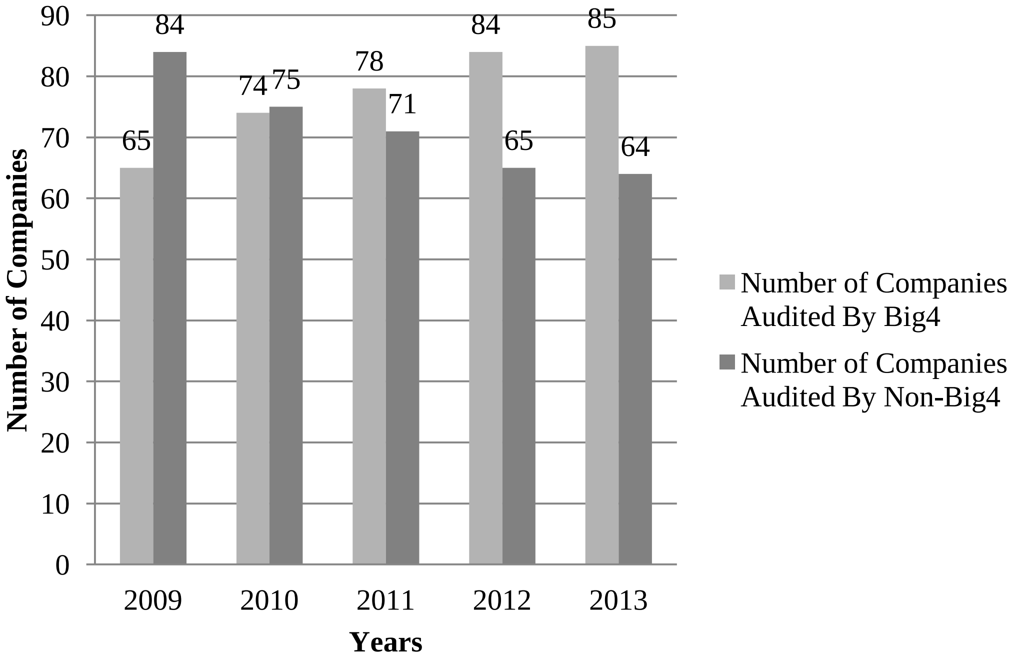
The number of companies in the research sample is 149 for each year; 745 observations in total. Number of observations audited by Big4 is 386; number of observations audited by Non-Big4 is 359. (see Table 3)

Table 7: Number (Percentage) of Observations Audited by Big4 or Non-Big4 in terms of Industry

Industry	Full Sample	Number (Percentage) of Observations Audited by Big4	Number (Percentage) of Observations Audited by Non-Big4
MANUFACTURING INDUSTRY	515	271 (%52.6)	244 (%47.4)
ELECTRICITY GAS AND WATER	20	9 (%45)	11 (%55)
EDUCATION, HEALTH, SPORTS AND OTHER SOCIAL SERVICES	20	12 (%60)	8 (%40)
CONSTRUCTION AND PUBLIC WORKS	10	0 (%0)	10 (%100)
MINING	15	8 (%53.3)	7 (%46.7)
TECHNOLOGY	60	31 (%51.7)	29 (%48.3)
TRANSPORTATION, TELECOMMUNICATION AND STORAGE	25	20 (%80)	5 (%20)
WHOLESALE AND RETAIL TRADE, HOTELS AND RESTAURANTS	75	35 (%46.7)	40 (%53.3)
REAL ESTATE ACTİVİTİES	5	0 (%0)	5 (%100)
Total	745	**386 (%52.1)**	**359 (%47.9)**

Figure 6 presents number (percentage) of companies audited by big4 or non-big4 on yearly basis.

Figure 5: Number (Percentage) of Companies Audited By Big4 or Non-Big4



In Table 4, number of observations audited by big4 or non-big4 are reported for dummy variables for the full sample.

Table 8: Number of Observations Audited By Big4 or Non-Big4 for Dummy Variables

Description Of Variables	**Variable Name**	**Full Sample**	**Number (Percentage) of Observations Audited By Big 4 Auditors**	**Number (Percentage) of Observations Audited By Non-Big 4 Auditors**
Loss	LOSS	254	104 (%40.9)	150 (%59.1)
Underwriter Prestige	PRESTIGE	370	223 (%60.3)	147 (%39.7)
Watchlist Company	WATCHLIST	26	1 (%3.8)	25 (%96.2)
Corporate Governance İndex	CORGOV	69	60 (%87)	9 (%13)
Foreign Ownership	FOROWNERSHIP	193	137 (%71)	56 (%29)
Observations		**745**	**386 (%51.8)**	**359 (%48.2)**

In Table 5, Mean and standard deviations are reported for key variables for the full sample and the two sub-samples (firms audited by Big 4 and Non-Big 4 auditors).

3.3.3. Definition of Variables

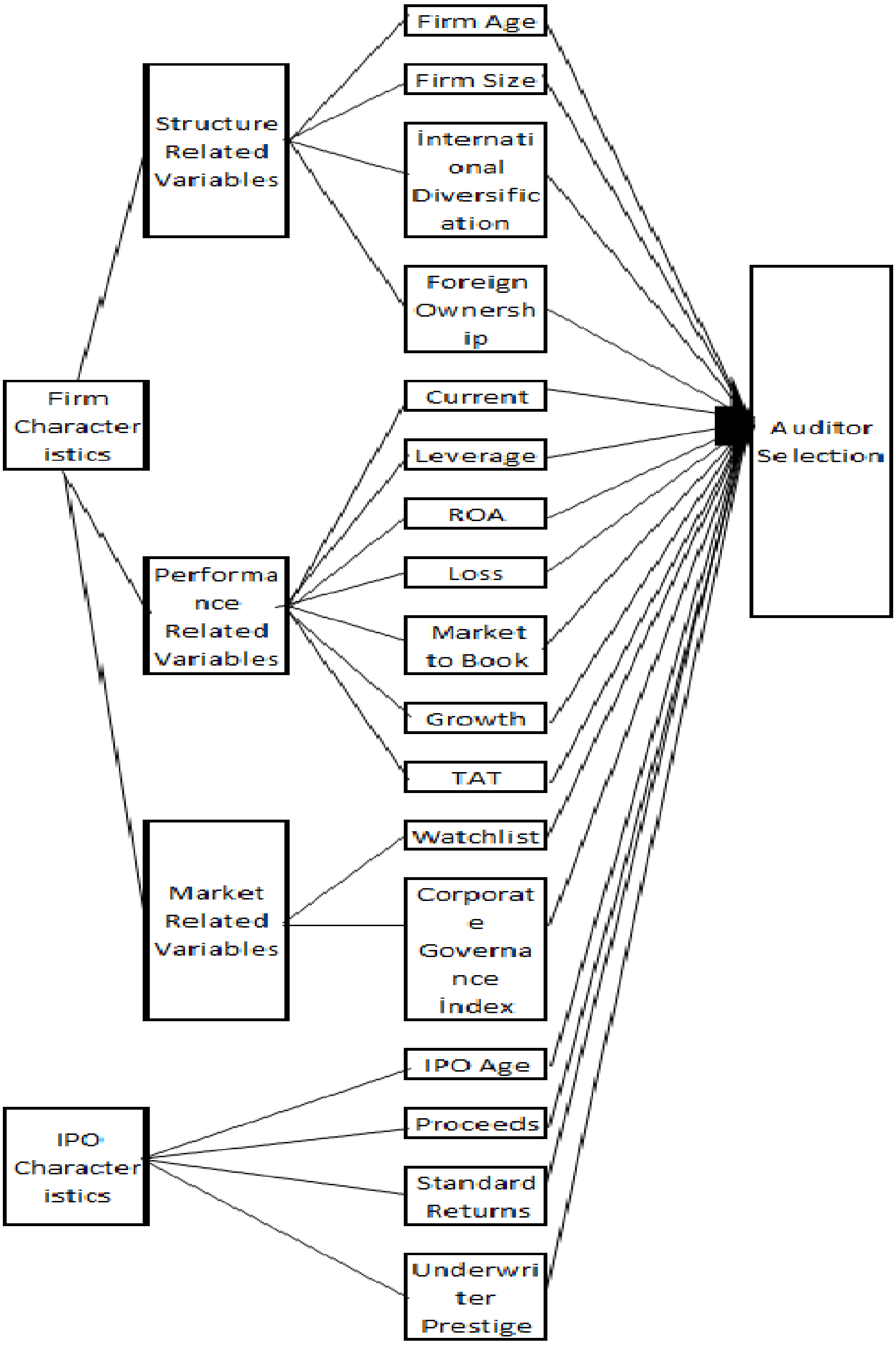
Determinants of auditor choice can be seen at Figure 7. These determinants consist of IPO characteristic variables and firm characteristic variables; structure-related, performance-related and market-related variables.

The variables used in this research can be classified into three main groups. The first group variables are the variables for audit quality, the second group is for firm characteristics and the third group is for IPO characteristics.

Table 9: Mean and Standard Deviations for Variables

Description of Variables	Variable Name	Full Sample		Companies Audited By Big 4 Auditors		Companies Audited By Non-Big 4 Auditors		The Mean Difference Between Companies Audited By Big 4 And Non-Big 4 Auditors	
		Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean difference	t statistics
Company age	AGE	3.540	0.409	3.591	0.421	3.485	0.389	0.106**	3.577
Company IPO age	IPOAGE	2.813	0.323	2.850	0.320	2.773	0.322	0.078**	3.298
Issue Size	PROCEEDS	16.036	1.368	16.378	1.415	15.669	1.213	0.710	7.364
Current Ratio	CURRENT	2.569	4.426	2.202	2.217	2.964	5.926	-0.762*	-2.291
Leverage Ratio	LEVERAGE	56.127	59.532	52.601	35.786	59.918	77.204	-7.316	-1.639
First 12 Month Post-IPO Stock Returns.	STDRET	0.278	0.143	0.276	0.137	0.282	0.149	-0.006	-0.581
Return on Assets	ROA	2.016	28.709	3.034	13.078	0.921	39.072	2.113	0.976
Markettobook ratio	MARKETTOBOOK	2.299	4.848	2.626	4.553	1.946	5.130	0.680*	1.907
Sales Growth	GROWTH	18.567	78.653	15.092	35.131	22.302	107.248	-7.210	-1.215
Total Assets Turnover	TAT	96.556	76.291	108.810	83.473	83.380	65.319	25.430	4.648
Foreign Sales	INTDIVERSIFICATION	0.193	0.234	13.903	7.700	11.454	7.772	2.450	4.317
Observations		745		386		359			

Figure 6: Three Main Group variables



3.3.3.1 Audit Quality

Audit quality proxies that were provided by the literature are size, price and tenure. Generally accepted measure of audit quality is auditor size. Regarding this, also in this research the auditor size is used as a proxy to determine the quality of auditors. According to this, Big4 audit firms are assumed to provide higher quality audit services compared to Non-Big4. The probability of Big4 versus Non-Big4 auditor selection can be affected by various firm characteristics and IPO characteristics.

Our audit quality measure is derived from prior studies (DeAngelo, L.E. 1981; Teoh et al., 1993; Francis et al., 1999; Lee et al., 2003; Lennox, 2005b; Lin & Liu, 2009).

3.3.3.2. Firm Characteristics

Firm age, IPO age, firm size, liquidity, leverage, ROA, loss, corporate governance, foreign ownership, growth, international diversification, watchlist, market to book, total asset turnover were used as firm characteristics in this study.

There are lots of empirical studies that research relationship between firm characteristics and other financial variables. Despite a wide variety of measures of firm's characteristics, there is a consensus in the literature for the measurement criteria for each characteristic.

In this study, variables of firm characteristics are taken from prior studies (Wallace et al. 1994; Zarzeski 1996; Alseed K. 2006; Bagherpour M. A. 2006; McDougal 2011; DeFond et al. 2015).

3.3.3.3 IPO Characteristics

IPO age, proceeds, standard return, prestige were used as IPO characteristics in this study. As an IPO characteristic, underwriter prestige is measured by number of issuing firms each underwriter brings to the IPO market. The most preferred underwriters by firms are accepted prestigious underwriter. For empirically testing the effects of IPO standard return on audit selection, 12 month post-IPO stock return measures was used in this study.

In this study, measures of IPO characteristics are derived from (Beatty 1989; Willenborg 1999; Chang et al. 2008; Firth M. 2012).

3.3.4. Hypothesis

The first set of hypotheses (H1a to H1p) tests whether there is a relationship between firm characteristics, IPO characteristics and the likelihood of selecting a Big 4 auditor. Subsequent sets of hypotheses (H2a to H2p) tests whether there is a relationship between firm characteristics, IPO characteristics and the likelihood of selecting a Big 4 auditor by taking IPO age variable instead of firm age variable. Finally hypothesis (H3) tests whether there is a correlation between firm age and IPO age in terms of auditor selection.

H1a: There is a relationship between company age and the likelihood of selecting a Big 4 auditor.

H1b: There is a relationship between company size and the likelihood of selecting a Big 4 auditor.

H1c: There is a relationship between company liquidity and the likelihood of selecting a Big 4 auditor.

H1d: There is a relationship between company leverage and selection of a Big 4 auditor.

H1e: There is a relationship between company profitability (ROA) and the likelihood of selecting a Big 4 auditor.

H1f: There is a relationship between company negative income and the likelihood of selecting a Big 4 auditor.

H1g: There is a relationship between being a member of Corporate Governance Index and the likelihood of selecting a Big 4 auditor.

H1h: There is a relationship between the percentage of foreign ownership in a company and the likelihood of selecting a Big 4 auditor.

H1i: There is an association between company sales growth and selection of a Big 4 auditor.

H1j: There is a relationship between the percentage of company export sales and the likelihood of selecting a Big 4 auditor.

H1k: There is a relationship between being a watchlist company and the likelihood of selecting a Big 4 auditor

H1l: There is a relationship between market to book ratio and the likelihood of selecting a Big 4 auditor.

H1m: There is a relationship between Total asset turnover ratio and the likelihood of selecting a Big 4 auditor.

H1n: There is a relationship between proceeds and the likelihood of selecting a Big 4 auditor.

H1o: There is a relationship between the first 12 month post-IPO stock returns and the likelihood of selecting a Big 4 auditor.

H1p: There is a relationship between being the firm underwritten by prestigious underwriters and the likelihood of selecting a Big 4 auditor.

To investigate whether there is a relationship between selected Turkish Public Companies' firm characteristics, IPO characteristics and the likelihood of selecting a Big 4 auditor, it is tested one further set of hypotheses parallel to H1a to H1p. The second set of hypotheses (H2a to H2p) tests whether there is a relationship between firm characteristics, IPO characteristics and the likelihood of selecting a Big 4 auditor by taking IPO age variable instead of firm age variable. In this test, it is expected that the independent variables to be associated with selection of a Big 4 auditor in the same way as in H1a to H1p.

H2a to H2p: There is a relationship between the independent variables described above (IPO age, firm size, liquidity, leverage, ROA, loss, corporate governance, foreign ownership, growth, international diversification, watchlist, market to book, total asset turnover, proceeds, standard return, prestige) and selection of a Big 4 auditor.

This study also investigates whether firm age and IPO age have correlation in terms of the choice of a Big-4 auditor. In this test, it is expected that there is a high correlation between firm age and IPO age in terms of auditor selection.

H3: There is a correlation between firm age and IPO age in terms of auditor selection.

3.3.5 Research Model

In this research, auditor selection is chosen as dependent variable, while the firm characteristics and IPO characteristics are independent variables. First, we used firm age as one of the independent variables. Then we used IPO age instead of firm age in the same model to see whether any different results can be achieved or not.

Data is obtained from BIST database, BIST database on the Internet, Public Disclosure Platform (PDP) database on the internet, Corporate Governance Association of Turkey (TKYD) for the years 1990 to 2013.

We employed probit regression analysis in this study. Probit model is used for providing evidence related to relationship between a dependent variable (Auditor size) and one or more independent variables (Firm characteristics and IPO characteristics). The modeling of the probability of Big- 4 auditor selection with selected firm characteristics and IPO characteristics is possible with the use of the probit model.

We provided the predicted probability of the selection of Big 4 in terms of firm age by estimating the Probit model below:

$$Big4_i = \beta_1 + \beta_2 Age + \beta_3 Assets + \beta_4 \,\mathrm{Pr}oceeds + \beta_5 Current + \beta_6 Leverage + \\ \beta_7 Stdret + \beta_8 ROA + \beta_9 Loss + \beta_{10} \,\mathrm{Pr}estige + \beta_{11} Corgov + \beta_{12} Forownership + \\ \beta_{13} Growth + \beta_{14} Intdiversification + \beta_{15} Watchlist + \beta_{16} Markettobook + \\ \beta_{17} TAT + \sum_t Year + \varepsilon_i$$

Table 10: Description of Variables for Auditor Choice with Firm Age

Variables	Description
BIG4 (Dependent variable)	Equals one if the auditor is in the high quality group (Big4) and zero otherwise.
AGE	The log of company age at the time of registration.
ASSETS	The log of total assets.
PROCEEDS	The log of the issue size.
CURRENT	Current assets divided by current liabilities.
LEVERAGE	The ratio of total liability to total assets.
STDRET	The standard deviation of the first 12 month post-IPO stock returns.
ROA	Earnings before interest and taxes divided by total assets.
LOSS	Equals one when a firm’s net income is negative, and zero otherwise.
PRESTIGE	Equals one if the prestigious underwriter participated IPO process and zero otherwise.
MARKETTOBOOK	Market value of equity scaled by book value of equity.
GROWTH	Year percentage growth in sales.
TAT	Ratio of sales to total assets.
WATCHLIST	Equals one when a firm BIST watchlist company, and zero otherwise.
CORGOV	Equals one when a firm in Corporate Governance Index, and zero otherwise.
INTDIVERSIFICATION	Ratio of export sales to total sales.
FOROWNERSHIP	One when a firm has foreign ownership, and zero otherwise.

The year dummies are included but not reported. The estimations correct the error structure for heteroscedasticity.

We provided the predicted probability of the selection of Big 4 by estimating the Probit model below. In this model, IPO age was used instead of firm age:

$$\begin{aligned} Big4_i = {} & \beta_1 + \beta_2 Ipoage + \beta_3 Assets + \beta_4 \mathrm{Pr}oceeds + \beta_5 Current + \beta_6 Leverage + \\ & \beta_7 Stdret + \beta_8 ROA + \beta_9 Loss + \beta_{10} \mathrm{Pr}estige + \beta_{11} Corgov + \beta_{12} Forownership + \\ & \beta_{13} Growth + \beta_{14} Intdiversification + \beta_{15} Watchlist + \beta_{16} Markettobook + \\ & \beta_{17} TAT + \sum_t Year + \varepsilon_i \end{aligned}$$

Table 11: Description of Variables for Auditor Choice with IPO Age

Variables	Description
BIG4 (Dependent variable)	Equals one if the auditor is in the high quality group (Big4) and zero otherwise.
IPOAGE	The log of company IPO age at the time of listing.
ASSETS	The log of total assets.
PROCEEDS	The log of the issue size.
CURRENT	Current assets divided by current liabilities.
LEVERAGE	The ratio of total liability to total assets.
STDRET	The standard deviation of the first 12 month post-IPO stock returns.
ROA	Earnings before interest and taxes divided by total assets.
LOSS	Equals one when a firm’s net income is negative, and zero otherwise.
PRESTIGE	Equals one if the prestigious underwriter participated IPO process and zero otherwise.
MARKETTOBOOK	Market value of equity scaled by book value of equity.
GROWTH	Year percentage growth in sales.
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CORGOV	Equals one when a firm in Corporate Governance Index, and zero otherwise.
INTDIVERSIFICATION	Ratio of export sales to total sales.
FOROWNERSHIP	One when a firm has foreign ownership, and zero otherwise.

The year dummies are included but not reported. The estimations correct the error structure for heteroscedasticity.

In this research, in the data set the value “1” is given for the Big4 and “0” for the Non-Big4. Due to this binary classification of the dependent variable, the Probit model is used.

3.4. CONCLUSION AND FINDINGS

In this section, the results for the interactions between audit quality, firm characteristics and IPO characteristics were given.

3.4.1. Auditor Choice with Firm Age

Table 6 presents the probit results estimated for the sample period from 2009 to 2013 in terms of firm age.

Table 12: Results of the Probit Analysis for Auditor Choice with Firm Age

Dependent Variable: BIG4				
Method: ML - Binary Probit (Quadratic hill climbing)				
Date: 10/09/14 Time: 13:51				
Sample: 2009 2013				
Included observations: 745				
Convergence achieved after 10 iterations				
Covariance matrix computed using second derivatives				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
AGE	0.557763	0.146087	3.818022	0.0001
ASSETS	0.214306	0.049851	4.298936	0.0000
PROCEEDS	0.111637	0.056953	1.960163	0.0500
CURRENT	-0.015480	0.016162	-0.957813	0.3382
LEVERAGE	-0.001508	0.001346	-1.120014	0.2627
STDRET	0.382140	0.394383	0.968957	0.3326
ROA	-0.000339	0.003395	-0.099868	0.9204
LOSS	-0.007575	0.129192	-0.058631	0.9532
PRESTIGE	0.294051	0.107964	2.723601	0.0065
YEAR	0.089678	0.036713	2.442654	0.0146
CORGOV	0.642492	0.225971	2.843248	0.0045
FOROWNERSHIP	0.327788	0.123681	2.650270	0.0080
GROWTH	-0.000964	0.000767	-1.257313	0.2086
INTDIVERSIFICATION	-0.540291	0.225621	-2.394680	0.0166
WATCHLIST	-1.383504	0.485193	-2.851451	0.0044
MARKETTOBOOK	0.024214	0.010739	2.254847	0.0241
TAT	0.002994	0.000780	3.838373	0.0001
C	-188.6282	73.82799	-2.554969	0.0106
McFadden R-squared	0.214391	Mean dependent var		0.518121
S.D. dependent var	0.500007	S.E. of regression		0.433161
Akaike info criterion	1.136375	Sum squared resid		136.4061
Schwarz criterion	1.247840	Log likelihood		-405.2998
Hannan-Quinn criter.	1.179338	Deviance		810.5997
Restr. Deviance	1031.811	Restr. log likelihood		-515.9053
LR statistic	221.2109	Avg. log likelihood		-0.544027
Prob(LR statistic)	0.000000			
Obs with Dep=0	359	Total obs		745
Obs with Dep=1	386			

In Table 7, the findings for the predicted probability of the selection of Big 4 in terms of firm age are given. Probabilities are shown in parentheses. Year dummies are included but not reported. Probabilities that are significant at, 5% and 1% levels are marked with *, ** respectively.

Table 13: Auditor Choice Probit Model with Firm Age

Control Variables	Expected Sign	Coefficient (Prob.)
AGE	+	0.558 (0.000)**
ASSETS	+	0.214 (0.000)**
PROCEEDS	+	0.112 (0.050)
CURRENT	+	-0.015 (0.338)
LEVERAGE	-	-0.002 (0.263)
STDRET	+	0.382 (0.333)
ROA	+	0.000 (0.920)
LOSS	-	-0.008 (0.953)
PRESTIGE	+	0.294 (0.007)**
CORGOV	+	0.642 (0.005)**
FOROWNERSHIP	+	0.328 (0.008)**
GROWTH	+	-0.001 (0.209)
INTDIVERSIFICATION	+	-0.540 (0.017)*
WATCHLIST	-	-1.384 (0.004)**
MARKETTOBOOK	+	0.024 (0.024)*
TAT	+	0.003 (0.000)**
McFadden R-squared	0.21	

Table 7 shows the key characteristics in the auditor selection. This Probit regression indicates that older and larger firms are more likely to engage one of Big 4 auditors. Also, the firms underwritten by prestigious underwriters are more likely to choose Big 4 auditors. In addition, possibility of being audited by Big 4 auditors is higher for the companies in corporate governance index than the others. In contrast, the possibility of watchlist companies being audited by Big 4 auditors is lower than the others. It was also found that firms which have foreign ownership are more likely to be audited by Big 4 auditors, supporting our prediction that foreign ownership affects auditor selection. Regarding the international diversification variable, it was investigated that firms experiencing greater foreign sales are more likely to engage Big 4 auditors. Firms with higher market-to-book and higher total asset turnover are more likely to be audited by Big 4 auditors.

These findings are consistent with the findings of Önder, Aksu and Balcı (2004) study. Firm size and level of shareholdings by foreign shareholders are positively associated with Big-N auditor selection and leverage and ROA are not significant variables in terms of auditor choice.

3.4.2. Auditor Choice with IPO Age

Table 8 presents the probit results estimated for the sample period from 2009 to 2013 in terms of IPO age.

Table 14: Results of the Probit Analysis for Auditor Choice with IPO Age

Dependent Variable: BIG4				
Method: ML - Binary Probit (Quadratic hill climbing)				
Date: 05/20/16 Time: 16:48				
Sample: 2009 2013				
Included observations: 745				
Convergence achieved after 9 iterations				
Covariance matrix computed using second derivatives				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
IPOAGE	1.140803	0.211351	5.397670	0.0000
ASSETS	0.203338	0.049782	4.084555	0.0000
PROCEEDS	0.199605	0.061687	3.235776	0.0012
CURRENT	-0.025444	0.017925	-1.419474	0.1558
LEVERAGE	-0.001918	0.001337	-1.434774	0.1514
STDRET	0.197198	0.408680	0.482524	0.6294
ROA	-0.000880	0.003496	-0.251662	0.8013
LOSS	-0.070093	0.131156	-0.534427	0.5930
PRESTIGE	0.177877	0.111798	1.591063	0.1116
YEAR	0.091801	0.036996	2.481372	0.0131
CORGOV	0.573038	0.216228	2.650154	0.0080
FOROWNERSHIP	0.214466	0.126341	1.697512	0.0896
GROWTH	-0.001087	0.000777	-1.398263	0.1620
INTDIVERSIFICATION	-0.666392	0.231962	-2.872844	0.0041
WATCHLIST	-1.328719	0.486826	-2.729352	0.0063
MARKETTOBOOK	0.021180	0.010873	1.947904	0.0514
TAT	0.003640	0.000818	4.450272	0.0000
C	-195.1519	74.40724	-2.622753	0.0087
McFadden R-squared	0.229326	Mean dependent var		0.518121
S.D. dependent var	0.500007	S.E. of regression		0.425894
Akaike info criterion	1.115691	Sum squared resid		131.8675
Schwarz criterion	1.227155	Log likelihood		-397.5947
Hannan-Quinn criter.	1.158654	Deviance		795.1894
Restr. deviance	1031.811	Restr. log likelihood		-515.9053
LR statistic	236.6211	Avg. log likelihood		-0.533684
Prob(LR statistic)	0.000000			
Obs with Dep=0	359	Total obs		745
Obs with Dep=1	386			

In Table 9, the findings for the predicted probability of the selection of Big 4 in terms of IPO age are given. Probabilities are shown in parentheses. Year dummies are included but not reported. Probabilities that are significant at, 5% and 1% levels are marked with *, ** respectively.

Table 15: Auditor Choice Probit Model with IPO Age

Control Variables	Expected Sign	Coefficient (Prob.)
IPOAGE	+	1.141 (0.000)**
ASSETS	+	0.203 (0.000)**
PROCEEDS	+	0.200 (0.001)**
CURRENT	+	-0.025 (0.156)
LEVERAGE	-	-0.002 (0.151)
STDRET	+	0.197 (0.629)
ROA	+	-0.001 (0.801)
LOSS	-	-0.070 (0.593)
PRESTIGE	+	0.178 (0.112)
CORGOV	+	0.573 (0.008)**
FOROWNERSHIP	+	0.214 (0.090)
GROWTH	+	-0.001 (0.162)
INTDIVERSIFICATION	+	-0.666 (0.004)**
WATCHLIST	-	-1.329 (0.006)**
MARKETTOBOOK	+	0.021 (0.514)
TAT	+	0.004 (0.000)**
McFadden R-squared	0.22	

Table 9 indicates the key characteristics of firms in auditor selection. In this model firm age variable is changed to IPO age. Results of the table 7 and table 9 are very similar. Older and larger firms and the firms in corporate governance index are more likely to be audited by Big 4 auditors. Again similarly, non-watchlist companies and firms that have higher foreign sales are more likely to opt for a Big 4 auditor. Firms with higher total asset turnover are more likely to be audited by Big 4 auditors.

Unlike Table 7, underwriting by prestigious underwriters, having foreign ownership and market-to-book ratio are not determined as the key characteristics of firms while selecting auditors. In addition, firms with larger issue size are more likely to be audited Big 4 auditors.

Comparing Table 7 and Table 9; proceeds, market to book, foreign ownership and prestige variables gave different results for auditor choice. Besides analysis shows that liquidity, leverage, the first 12 month post IPO stock returns, ROA, loss and sales growth are not effective characteristics in case of using both firm age and IPO age.

3.4.3. Firm Age and IPO Age

Table 10 presents the Panel Least Squares results estimated for the sample period from 2009 to 2013.

Table 16: Results of the Panel Least Squares Analysis for Firm Age and IPO

Dependent Variable: AGE
Method: Panel Least Squares
Date: 10/23/14 Time: 20:45
Sample: 2009 2013
Periods included: 5
Cross-sections included: 149
Total panel (balanced) observations: 745

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IPOAGE	0.812175	0.035704	22.74714	0.0000
C	1.255635	0.101089	12.42109	0.0000

R-squared	0.410520	Mean dependent var	3.540133
Adjusted R-squared	0.409726	S.D. dependent var	0.409346
S.E. of regression	0.314497	Akaike info criterion	0.526999
Sum squared resid	73.48907	Schwarz criterion	0.539384
Log likelihood	-194.3070	Hannan-Quinn criter.	0.531772
F-statistic	517.4322	Durbin-Watson stat	0.443928
Prob(F-statistic)	0.000000		

In Table 11, the findings for correlation coefficient between firm age and IPO age are given. Probabilities are shown in parentheses. Year dummies are included but not reported. Probabilities that are significant at, 5% and 1% levels are marked with *, ** respectively.

Table 17: Correlation Coefficient Between Firm Age and IPO Age

Control Variables	Expected Sign	Coefficient (Prob.)
IPOAGE		0.812 (0.000)**
R-squared	0.41	

At first, we run a probit model by adding firm age and IPO age together. Findings of this model were insignificant. Therefore we examine whether there is a relationship between firm characteristics, IPO characteristics and the likelihood of selecting a Big 4 auditor without IPO age variable. Then we examine whether there is a relationship between firm characteristics, IPO characteristics and the likelihood of selecting a Big 4 auditor by taking IPO age variable instead of firm age variable. As expected, finally it was observed that firm age is significantly correlated with IPO age. (see Table 11)

CONCLUSION

The growing need for more transparent and fairly presented financial reports enhances the importance of external auditing and audit quality. Financial information accuracy is the crucial point for users such as shareholders, potential investors, banks, creditors etc. Financial information accuracy can be obtained from auditing process and level of audit quality increases financial information accuracy. Audit quality is a concept that is structured by various factors such as audit firm leadership, knowledge/experience/tenure of the auditor, variety of services offered by the audit company, size in terms of being a big 4 or non-big 4 and reporting quality (both financial reports and auditor reports). Previous research concluded that auditor size affects auditor quality positively and larger audit firms provide a higher level of audit quality. Thus, strong relationship between audit quality and auditor selection came into prominence in the auditing field. Firm's auditor selection process is complex and affected by a number of factors. Some of these factors might significantly include firm characteristics and IPO characteristics.

The aim of this research was to examine the factors related to auditor selection in BIST. In auditor selection literature, a lot of study has attempted to determine the factors affecting auditor selection and there are different researchers that focus client characteristics or IPO characteristics. Client characteristics and IPO characteristics play important role because they may have possible effects on auditor selection. This research concentrates on determining the level of association between the client characteristics, IPO characteristics and auditor selection. It is the first study that examines the interaction between audit quality, client characteristics, IPO characteristics and auditor selection in one model for Turkey.

The first chapter of the study gives an overview about external audit. In the second chapter; audit, client characteristics and IPO characteristics are described within a detailed literature review. Also, the study seeks to analyze both the client characteristics and IPO characteristics in one analysis, at the same time by comparing the big 4 / non-big 4 selection process. In the third chapter, the sample, research design and the methodology of the analysis are described and the findings are discussed. Finally, comments about the results and their effects were discussed.

The study contributes to the audit quality literature about auditor selection by extending it to BIST, an emerging market. This research has also contributed to the auditor selection literature by providing new evidence about the factors, which affect and do not affect auditor selection in an emerging market. This research contributes to the auditor selection literature by: first, examining interaction between audit quality, client characteristics, IPO characteristics and auditor selection in one model in terms of firm age; second, examining interaction between audit quality, client characteristics, IPO characteristics and auditor selection in one model in terms of IPO age; third, examining the correlation between firm age and IPO age for the same audit quality model. These various factors were not considered in a one model by the prior studies. Generally, this research provides empirical evidence on the role of firm age, IPO age, firm size, international diversification, being corporate governance index, being watchlist company, issue size, underwriter prestige, having foreign ownership and market to book ratio in auditor selection decisions.

This study is also useful for the stakeholders of firms in the Istanbul Stock Exchange (BIST) as it provides evidence for relationship between firm characteristics and audit quality. Getting high quality audit service is directly related to the fact that firm characteristics and IPO characteristics.

The results of this study indicate that firm age, IPO age and firm size are positively associated with audit quality. This is evidence that larger and older firms in terms of both firm age and IPO age are more likely to be audited by Big 4 auditors.

The companies that sell goods or serve abroad are more likely to be audited by Big 4 auditors. Also, results indicate that firms in the corporate governance index and non-watchlist companies are more likely to opt for a Big 4 auditor. In addition, issue size, prestigious underwriter, foreign ownership and market-to-book ratio are significant firm characteristics that impacts auditor choice. Liquidity, leverage, the first 12 month post IPO stock returns, ROA, loss and sales growth are not effective characteristics for auditor choice. Also this study indicates that there is a strong correlation between firm age and IPO age for the same audit quality model.

This research extends audit literature by taking firm characteristics and IPO characteristics into account together in terms of auditor selection. One of the IPO characteristics in audit literature is audit firm provided service when companies made IPO. There is a limited data about which audit firms provided service when selected BIST companies made IPO. Therefore, IPO characteristics in IPO term and auditor choice of between 2009-2013 periods are matched, in this study.

Another important limitation of this study is lack of audit fees data. The audit fees determinant is not used due to lack of data. However, there are a lot of researches that use auditor fees as another proxy for audit quality or examine the relationship between auditor quality and the characteristics of the IPOs.

Audit quality proxies that were provided by the literature are size, price and tenure. Generally accepted measure of audit quality is auditor size. In this research the auditor size is used as a proxy to determine the quality of auditor. For future, this study could be extended by examining other audit quality determinants such as audit fees and auditor tenure. Besides, audit firms' effects to IPO process can be examined for BIST, by providing available data in recent years.

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APPENDICES

APPENDIX 1: Correlations in terms of Firm Age.

	BIG4	AGE	ASSETS	PROCEEDS	CURRENT	LEVERAGE	STDRET	ROA	LOSS	PRESTIGE	YEAR	CORGOV	FOROWNERSHIP	GROWTH	INTDIVERSIFICATION	WATCHLIST	MARKETTOBOOK	TAT
BIG4	1.0000																	
AGE	0.1297	1.0000																
ASSETS	0.3863	0.1404	1.0000															
PROCEEDS	0.2595	-0.2720	0.5350	1.0000														
CURRENT	-0.0861	0.0075	-0.1526	0.0002	1.0000													
LEVERAGE	-0.0615	-0.1150	-0.0245	0.0385	-0.2672	1.0000												
STDRET	-0.0214	0.1164	-0.1014	-0.3345	0.1029	-0.0836	1.0000											
ROA	0.0368	0.0677	0.0518	0.0980	0.0825	0.0101	0.0105	1.000										
LOSS	-0.1564	-0.0993	-0.2679	-0.2140	-0.1157	0.2229	0.0301	-0.3187	1.000									
PRESTIGE	0.1681	0.0460	0.2065	0.2337	-0.086	0.1002	-0.05	0.0414	-0.0	1.0000								

					3		37		971									
YEAR	0.0950	0.0000	0.0997	0.0000	-0.0320	0.0467	0.0000	0.0236	0.0080	0.0000	1.0000							
CORGOV	0.2247	-0.0490	0.4036	0.2579	-0.0252	-0.0191	-0.0329	0.0536	-0.1223	0.1457	0.0491	1.0000						
FOROWNERSHIP	0.2269	0.0657	0.1943	0.1683	-0.0187	-0.0627	0.0868	0.0398	-0.1151	0.0438	0.0108	0.0542	1.0000					
GROWTH	-0.0458	-0.0249	-0.0302	-0.0481	-0.0262	-0.0048	0.0157	0.0487	-0.0368	-0.0517	0.0404	0.0036	-0.0499	1.0000				
INTDIVERSIFICATION	-0.0089	0.1984	0.1164	-0.0180	-0.0634	-0.0743	-0.0254	0.0466	-0.1047	0.1173	-0.0371	0.1320	0.0131	-0.0521	1.0000			
WATCHLIST	-0.1825	0.0260	-0.1872	-0.1030	0.0092	0.2666	0.0953	0.1229	0.0947	0.0890	0.1034	-0.0608	-0.0957	-0.0411	0.0110	1.0000		
MARKETTOBOOK	0.0701	-0.0223	-0.0984	0.0312	0.0292	0.0150	-0.0575	0.0173	0.0271	-0.1046	-0.0448	0.0057	0.1513	-0.0017	-0.0596	-0.0240	1.0000	
TAT	0.1667	-0.1089	0.0008	0.0903	-0.1698	0.1211	-0.0568	0.1212	-0.1535	0.0681	0.0088	0.0224	0.1627	0.0781	-0.0542	-0.0886	0.0894	1.0000

APPENDIX 2: Correlations in terms of IPO Age.

	BIG4	IPOAGE	ASSETS	PROCEEDS	CURRENT	LEVERAGE	STDRET	ROA	LOSS	PRESTIGE	YEAR	CORGOV	FOROWNERSHIP	GROWTH	INTDIVERSIFICATION	WATCHLIST	MARKETTOBOOK	TAT
BIG4	1.0000																	
IPOAGE	0.1201	1.0000																
ASSETS	0.3863	0.0205	1.0000															
PROCEEDS	0.2595	-0.4341	0.5350	1.0000														
CURRENT	-0.0861	0.0730	-0.1526	0.0002	1.0000													
LEVERAGE	-0.0615	-0.0500	-0.0245	0.0385	-0.2672	1.0000												
STDRET	-0.0214	0.2478	-0.1014	-0.3345	0.1029	-0.0836	1.0000											
ROA	0.0368	0.0347	0.0518	0.0980	0.0825	0.0101	0.0105	1.0000										
LOSS	-0.1564	0.0164	-0.2679	-0.2140	-0.1157	0.2229	0.0301	-0.3187	1.0000									
PRESTIGE	0.1681	0.1139	0.2065	0.2337	-0.086	0.1002	-0.05	0.0414	-0.0	1.0000								

					3		37		971									
YEAR	0.0950	0.0000	0.0997	0.0000	-0.0320	0.0467	0.0000	0.0236	0.0080	0.0000	1.0000							
CORGOV	0.2247	-0.0696	0.4036	0.2579	-0.0252	-0.0191	-0.0329	0.0536	-0.1223	0.1457	0.0491	1.0000						
FOROWNERSHIP	0.2269	0.1095	0.1943	0.1683	-0.0187	-0.0627	0.0868	0.0398	-0.1151	0.0438	0.0108	0.0542	1.0000					
GROWTH	-0.0458	-0.0119	-0.0302	-0.0481	-0.0262	-0.0048	0.0157	0.0487	-0.0368	-0.0517	0.0404	0.0036	-0.0499	1.0000				
INTDIVERSIFICATION	-0.0089	0.1970	0.1164	-0.0180	-0.0634	-0.0743	-0.0254	0.0466	-0.1047	0.1173	-0.0371	0.1320	0.0131	-0.0521	1.0000			
WATCHLIST	-0.1825	0.0553	-0.1872	-0.1030	0.0092	0.2666	0.0953	0.1229	0.0947	0.0890	0.1034	-0.0608	-0.0957	-0.0411	0.0110	1.0000		
MARKETTOBOOK	0.0701	0.0008	-0.0984	0.0312	0.0292	0.0150	-0.0575	0.0173	0.0271	-0.1046	-0.0448	0.0057	0.1513	-0.0017	-0.0596	-0.0240	1.0000	
TAT	0.1667	-0.1795	0.0008	0.0903	-0.1698	0.1211	-0.0568	0.1212	-0.1535	0.0681	0.0088	0.0224	0.1627	0.0781	-0.0542	-0.0886	0.0894	1.0000