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AN ANALYSIS ON THE EFFECT OF AUDIT FIRM CHANGE ON STOCK RETURNS FOR BORSA ISTANBUL COMPANIES

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ABSTRACT

AN ANALYSIS ON THE EFFECT OF AUDIT FIRM CHANGE ON STOCK RETURNS FOR BORSA ISTANBUL COMPANIES

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The aim of this study is to analyze the relationship between stock returns of companies and the announcement of switching audit firm in Borsa Istanbul. Some of firms work with local audit companies, while others may work international (Big Four) audit companies. Firms included in BIST TUM index are analyzed using event study methodology. For each firm, the audit companies they work with and their stock returns are included in the analysis. The results of the analysis are interpreted according to the expected return of Borsa Istanbul in the relevant periods.
Companies change their audit firms on a mandatory or optional basis. In the analysis, the audit firms switch of the companies which are listed on the stock exchange are taken as basis between 2008 and 2020. In the study, how audit firm changes and announcements are priced in the market is analyzed.

Keywords: audit, Istanbul Stock Exchange, stock, stakeholders

ÖZ

BORSA İSTANBUL ŞİRKETLERİNDE DENETÇİ FİRMA DEĞİŞMESİNİN HİSSE SENEDİ GETİRİLERİNE ETKİLERİ ÜZERİNE BİR ANALİZ

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Yüksek Lisans, Uluslararası Ticaret ve Finans
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Bu çalışmanın amacı, şirketlerin hisse senedi getirileri ile Borsa İstanbul'da değişen denetim firması duyurusu arasındaki ilişkiyi incelemektir. Firmaların bazıları yerel denetim şirketleri ile çalışırken, diğerleri uluslararası (Dört Büyük) denetim şirketleri ile çalışabilir. BİST TUM endeksinde yer alan firmalar olay çalışması metodolojisi kullanılarak analiz edilmektedir. Her firma için çalıştıkları denetim firmaları ve hisse senedi getirileri analize dahil edilir. Analiz sonuçları, ilgili dönemlerde Borsa İstanbul'un beklenen getirisine göre yorumlanmıştır.
ŞŞirketler denetim firmalarını zorunlu veya isteğe bağlı olarak değiştirirler. Analizde 2008-2020 yılları arasında borsada işlem gören şirketlerin denetim firmalarının değişimi esas alınmıştır. Çalışmada denetim firması değişikliklerinin ve duyurularının piyasada nasıl fiyatlandığı analiz edilmektedir.

Anahtar Kelimeler: Denetin, Borsa İstanbul, hisse senedi, hissedarlar

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Remzi Cihan Celen

İzmir, 2022

TEXT OF OATH

I declare and honestly confirm that my study, titled “AN ANALYSIS ON THE EFFECT OF AUDIT FIRM CHANGE ON STOCK RETURNS FOR BORSA ISTANBUL COMPANIES” and presented as a Master’s Thesis, has been written without applying to any assistance inconsistent with scientific ethics and traditions. I declare, to the best of my knowledge and belief, that all content and ideas drawn directly or indirectly from external sources are indicated in the text and listed in the list of references.

Remzi Cihan Celen
İzmir, 2022

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SYMBOLS AND ABBREVIATIONS

ABBREVIATIONS:

KAP Kamuyu Aydınlatma Platformu

BIST Borsa İstanbul

KGK Kamu Gözetimi Kurumu

NYSE New York Stock Exchange

FED Federal Reserve System

BV Book Value

MV Market Value

CAPM Capital Asset Pricing Model

IFRS International Financial Reporting Standards

ROE Return on Equity

ROA Return on Assets

IASB International Accounting Standards Board

FASB Financial Accounting Standards Board

DDM Dividend Discount Model

AARt Average Abnormal Return at t time

GAAP Generally accepted accounting principles

SOX Sarbanes- Oxley

BDDK Bankacılık Düzenleme ve Denetleme Kurumu

TTK Türk Ticaret Kanunu

KVK Kurumlar Vergisi Kanunu

SPK Sermaye Piyasası Kurulu

SYMBOLS:

P p-value

CHAPTER 1
INTRODUCTION

The world has become more global, and the firms are trying to expand their operations to other countries in order to make more profit. It means more transaction and it brings more complexity for audit companies. Stock value of companies' shows the real value of the companies in the stock market, and it is expected to give a very good performance. It is vital for the sustainability of the companies, and it helps to draw the investors' attention. Some of well-known audit companies come into prominence around the world and they gained most of big companies' trusts. Especially, the firms started to give a special importance to work with a confidential audit company. Four audit companies are generally preferred to work with. They are called Big Four all around the world. Accounting scandals such as Enron, Arthur Andersen & Worldcom in recent years have adversely affected the trust in financial statement regulators. As a result of these events, it is better understood that quality financial reporting is of critical importance for markets and companies. In addition, such events revealed that the quality of financial reporting is also important in terms of audit quality.

Working with a well-known audit company is quite important for big firms. Does it affect to the share price too? Beyond any doubt, changing of a share price depends on the balance of demand and supply. Quality financial reports also give confidence to investors. All external financial statement users such as investors and creditors need reliable financial information. When investors have confidence in the audited financial statements of the business, they provide a flow of funds to the business, and they want to be shareholders.

Well, do the investors also agree on this issue, does it matter to them the quality of the audit or which audit firm they work with, how are these choices priced by shareholders? How is it priced in the market that companies switch their audit firms and make announcement? The relations between them were examined and supported by an application.

CHAPTER 2
STOCK MARKET AND BIST

2.1. Definition of Share and Going Public

A share is a unit of capital that states the property relationship between a company and a shareholder (or stockholder). It can be said that every unit of share represents the financial asset of the firms. There is a mutual advantage for both the companies and the shareholders. Managers decide to go public and sell the companies' shares in order to raise their capital and make investments. Then shareholders deserve to earn dividends in returns with its profit. The percentage of return depends on share price and overall performance. Therefore, it is quite important to choose a company with a good return for investors.

The public offering is a very attractive financing method, as there is no maturity requirement for the repayment of the funds provided as a financing method and the company does not have to make a fixed payment in certain periods, unlike debt financing. Dividends are only paid when the company makes a profit. Public offering enables the company to access to another long-term resource in addition to the cash it creates and the debt it can provide. This resource activities such as new building or land investment, purchases, construction of production facilities, and support of long-term research and development projects can be carried out. In addition, the company can use stocks traded on the stock exchange as collateral and use loans. If the stock price also follows a positive course after the initial public offering, it is also possible to obtain more funds by selling more shares in the future. Considering the inadequacy of capital accumulation especially in developing countries, public offering and demand in the stock market are of great importance in terms of companies' access to the necessary capital to grow, invest and especially be competitive on a global scale (Güngör Akpınar, 2020). The public offering has an improving effect on the debt/equity ratio on the company's balance sheet. Thus, the company can access a more positive level of financial leverage. Also, the strengthening of the capital structure of the company provides convenience in obtaining debt and it can create the opportunity to provide financing with more favorable conditions.

The stock prices of the publicly traded companies can be determined in a transparent way according to the supply and demand formed in the stock market allows this share to be bought and sold at the prices formed whenever it is desired. The transparent determination of the company's value facilitates the determination of asset values in mergers and acquisitions. Also, stock markets are generally liquid markets. This allows investors ability buy and sell these assets easily with little transaction costs.

Thanks to the public offering, the company gains a very high visibility. The company is always closely followed by analysts as well as financial media. At the same time, as a result of the distribution of stocks to many individual and institutional investors, public awareness of the products or services provided by the company may increase. From customers and suppliers' perspectives, the fact that the companies are open to the public can create an environment of trust in terms of financial relations. Thus, the companies can enhance possible cooperation opportunities in the country and abroad.

Most of companies in Turkey are family businesses can make the life of the company limited to the lifetime of the founder of the company or family members who have a right comment on the management. Private companies are hold by the owners of company, so it is not possible to get into the public capital market and find investors. The private companies need to have private funding when it is needed. Public companies have sold their shares (all or an amount of) and stockholders also have a voice for the companies' decisions. Public companies can find investors easily in public capital market. It means more investment options are available (Majaski, 2022). Institutionalization processes of companies are accelerating, and managerial discipline is increasing because of increasing information, reporting and auditing requirements with the public offering.

Finally, public offering and selling stocks are quite important for companies because of finding new opportunities and potential investment decisions. Public companies may prefer to sell share when it is planned to expand their operations, develop new products. It would be the way to borrow money for large companies (Martinez, 2010). Public offerings can return to companies with many important returns and benefits. These benefits come with certain responsibilities, but most of these responsibilities are the rules that our companies must follow in terms of sustainability surely. Being active and remarkable in stock market is vital to attract investors' attentions.

2.2. History of Stock Market and BIST

An exchange or capital market exchange is an organized and regulated market in which tradable securities, commodities, foreign exchange, futures, and options contracts are publicly sold or purchased by investors and third parties safely. The capital market has been created as an investment mechanism that supports productive activities, and the stock market is a market used to achieve this goal (Morales, 2018). The stock market is well-known due to its trading mechanism. It enables to the investors up-to-date prices, and real-time shopping. Those factors are creating a safe environment for investors' activities nowadays. Stock market was institutionalized for the first time in Bruges in 1409. This idea was received wide acceptance rapidly by Western Europe afterwards (Morales, 2018). For instance, Augsburg stock market, Lyon stock market and Amsterdam stock market. It is quite easy to understand that investors who lived those times, wanted to invest their money and their savings at environment of trust.

The stock market also reflects the economic power of the countries. All countries may be affected from positive and negative developments on the most powerful stock exchange market in the world. The London Stock Exchange Market was the most powerful market in the world until 1940s. New York Stock Exchange (NYSE) Market is become very popular in recent years. The current fund size of New York Stock Exchange market is $26.2 trillion, and the number of company listings is 2,400 (NYSE, 2021).

Although other countries have established their own stock markets throughout the years, Turkey established its stock market later than other countries in this regard. Borsa Istanbul or BIST was established in 1985 which provides custody and clearing services to both Turkish and foreign banks. Currently 400 companies are traded at BIST (KAP, 2021). Istanbul Stock Exchange market is divided into many parts. Some of them are getting more attention than the others by investors. The most important of them is BIST 100 which shows the worth of the most valuable companies in Turkey. The amount of fund size of BIST 100 is approximately 34 billion TL. Besides, there are two well-known index which are BIST 50 and BIST 30. Those index shows the most valuable 50 companies and 30 companies in Turkey respectively. So, they are included in BIST 100. BIST 100 is affected by the most valuable 100 companies and it is calculated its value according to 100 companies' value. The price of each stock at BIST 100 depends on 3 important things to determine which are the current price of each stock, the number of available shares and base index value.

2.3. Internal and External Factors that Affect Stock Prices

Many factors and substantial criteria may affect share prices and stock markets in general. Every company desire to sell their shares with high prices in order to get more benefits. However, companies may not set a price when they offer their shares to public. Some of them depend on the companies' processes and performance. On the other hand, a few factors are evaluated according to macroeconomic factors which are also called external factors. The companies should be prepared every kind of situations to give their investors and the market. Especially the internal factors must be strong against from the possible negative issues. Current financial tables and future estimations and management profile and important developments can be example of internal factors. Firstly, current financial tables and future estimations. Most of investors are always care about companies' financial situations like cash position, stock status, possible investment, revenue, liquidity, solvency, profitability etc. Because they want to invest their money to strong firms that give them good signals in the market. Otherwise, they would be facing the risk of loose or fall in their stock price. Future expectations of the firms also may attract the investors' attention. Those investors who tend to invest their money in a long term. Therefore, firms must be active and be adapted to technological changes in the marketplace. Next, management profile and important developments. A strong company structure is vital to be sustainable success and be permanent in the market. So, it would be possible to overcome every kind of difficulties and possible negative external factors. Important developments related to the companies can be happened like errors or scandals, takeover or merger, announcement of dividends, releasing new products, employee layoffs, changing the structure of management etc. Those important developments are absolutely affecting the investors' decision (Sharif et al., 2015). Firms need to pay attention when they make a decision that can bring radical changes.

External factors can also create positive and negative consequences for companies. It cannot be prevented but the firms can make provision for possible events and issues countrywide. Macroeconomic factors such as interest rates, inflation, unemployment, and economic growth can be given example as external factors (Marks, 2021). Higher interest rate means more debt for companies when they decide to borrow money. The companies' financial tables may be affected negatively (profits, dividends) and it causes to reduce stock prices. Inflation means higher prices and decreasing sales reduces profit margin. Also, higher prices bring higher interest rate. Furthermore, political issues, speculation and manipulation, exchange rate, industry performance, terrorist incidents, natural disasters, market sentiment and global problems are included in external factors. Economic climate should be favorable, and stability must be provided by government because investors avoid making investment at atmosphere of uncertainty.

2.4. Asset Pricing

2.4.1. Stock Pricing Model

Stock market is an instantaneously changeable market. There are many factors that may influence the prices. Investors generally follow the status of companies which they invest in stock market. Therefore, the company's price movements in the stock market are one of the important factors for investing decision. The main factor of moving the price of shares is balance of power.

Figure 2.1. Stock Market Pricing

Balance of power which is comparing the strengths of buyers (demanders) against sellers (suppliers) at any time. It can be said there is a strong dynamic between buyers and sellers. If the total demand is greater than the supply for a share, the price of share will increase. On the other hand, if the number of supplies is higher than the number of demands, the price of share falls. Stock market creates an environment for both buyers and sellers who are able to make transaction safely and easily. An auction process is created when the prices are identified in stock market. A bid which is somebody is willing to buy and the other bid which is somebody is willing to sell for a share. When those bids are matched, trading takes place between buyer and seller. There are lots of transactions are executed during in a trading day. So, big fluctuations can be observed minute to minute (Hayes, 2022).

There are 2 elements which represent the condition of the market. Investors can gain insight about a country's economic condition, unemployment rate and make important financial inferences from the bull and bear markets. First, bull market represents prices are in an optimistic environment in the future when the market is in an uptrend. A bull market is less risky than a bear market, as prices tend to move up. The prices will follow an optimistic environment in the future and investors will tend to start buying. On the other hand, in a bear market, the situation is the opposite of that in a bull market. In other words, the market is in a downward trend and a pessimistic atmosphere dominates in the market. It makes investors discourage to invest at uncertain environment (Kramer, 2022).

2.4.2. Efficient Market Hypothesis

The efficient market hypothesis basically argues that financial assets affect all available information at any time and that in case of new information entry, this will immediately reflect on the prices of financial assets. In other words, changes in prices in an efficient market will occur only when new information comes to the market.

In the formation of the concept of an efficient market, the behavior of the prices and returns of financial assets in the markets is the main indicator. According to this hypothesis, the buyer or the seller cannot determine the prices individually, and it is assumed that both parties can reach the information symmetrically at the same time and at similar costs.

Nowadays, the interaction of capital and money markets is increasing day by day due to globalization. The increase in these interactions not only causes the markets to move together also contributes to the increase in the informational efficiency in the markets. The intertwining of financial markets by way of globalization, any large-scale development can cause fluctuations in the capital markets of countries. For example, the interest rate decisions taken by the US Federal Reserve (FED) have a clear impact on the money and capital markets in all countries of the world.

In addition, according to the efficient market hypothesis, there are 3 assumptions in terms of investor behavior. Firstly, investors are rational and evaluate financial assets within this framework. Secondly, even if some investors are not rational, the behavior of non-rational investors is mutually exclusive so that prices are not affected. Thirdly, even if investors generally do not act rationally, rational arbitrageurs in the market prevent prices from being affected (Shleifer, 2000).

The prices of financial assets change according to new information and assets can be bought and sold at new prices. Today, this effect has become much larger, and even external events have begun to have an impact on financial assets. From this perspective, the increasing mutual interaction in the markets as a result of globalization has also increased the information interaction. As a result, this is the reflection of the changes that affect the decision-making processes of international investors on the international markets.

In an efficient market, no one can sell equity shares for more than their fair value or buy for less than their fair value. In this case, since there are no such thing as real values exceeding the costs, there will be no alternative for financial managers to increase the wealth of their shareholders. (Emery, 1998)

The market clearing price is in equilibrium in markets where the efficient market is implemented completely. In a stock market with maximum information exchange, the seller cannot sell the asset for more or less than it actually is, and the buyer cannot buy these assets cheaper or more expensive. The market clearing price is determined as the price at which the number of buyers equals the number of sellers in any asset. Keeping the market balanced in this direction is vital for the welfare of the investors. In the stock market, a good application of the efficient market hypothesis can prevent manipulative rumors and unfair prices in share prices. Thus, the market in the shares is traded at the clearing price and the stock market balance is preserved.

In today's world where information is important for investment, it is one of the most important details for investors to reach accurate and transparent information. For this reason, it is essential for companies to work with independent audit firms in order to ensure an efficient market in the stock market. Thus, investors can take their decisions with financial reports that are verified by the independent audit firms. Accessing to information has become easier and more reliable by the help of independent audit firms.

2.4.3. Modern Portfolio Theory

According to the theory, assuming that capital markets are efficient, and investors are rational, investors should only make investment decisions based on expected return and risk, and the standard deviation of past returns is the only mathematical indicator of risk.

After Markowitz laid out the foundations of the modern portfolio theory in 1952, this theory was developed by many researchers and presented as asset pricing models. The main purpose of portfolio management is to get the maximum benefit from the investments made. According to the traditional portfolio approach, this benefit can be achieved by obtaining the highest rate of return from the securities portfolio at the highest acceptable risk level.

According to Markowitz, Risk is the realization of the actual return (deviation) from the expected return at a different level. The investor may receive a return lower than the expected return, or a return above the expected return. If risk had defined only the probability of bad things to happen, no investor would be willing to take on risk. Realization of the actual return at a different level from the return (deviation) expected by the investor may be due to a systematic reason that will affect all the securities in the market at the same time, or to a non-systematic reason that will affect only a certain firm or a certain industry line. Therefore, the total risk undertaken in securities investments consists of two elements, systematic risk and unsystematic risk. So, Markowitz formularizes that the sum of symmetrical risk and asymmetrical risk equals total risk.

Systematic risk which is a risk group that systematically simultaneously affects the returns (prices) of all securities traded in the market, resulting from changes in the general economic, political, and social environment. Due to this feature, it is not possible to eliminate or minimize systematic risk by diversifying among securities. For this reason, this risk group can also be called risk that cannot be eliminated by diversification or market risk.

Unsystematic risk arises from the firms. A positive or negative development about the company only leads to a change in the return of the company's stock. Since the unsystematic risk of each firm and therefore each stock is unique to itself, it is possible to reduce or eliminate this risk by diversifying among the stocks. For this reason, the group of unsystematic risk is also called risk that can be eliminated through diversification or firm risk. Theoretically, in order to completely eliminate the unsystematic risk, the investor should buy from all the stocks in the market (Rubinstein, 2002).

2.4.4. Capital Asset Pricing Model

The capital asset pricing model proposes that there is a linear relationship between risk and return on financial assets. The beta coefficient measures the level of systematic risk that assets are exposed to in this relationship. Therefore, a high risk requires a high return on the asset. The principal of the capital asset pricing model is higher risk brings higher expected return on investment (Blitz et al., 2014).

Individuals and companies tend to prefer financial assets that have the lowest risk level and provide the highest return against this low risk in order to address their investments. This theory is called "Capital Asset Pricing Model (CAPM)" in the finance literature. Under favor of these financial models, the market risks of financial assets can be calculated, so that investors can act and take a decision in the market according to the risk levels which they have determined in their financial investments. From this point of view, it is of great importance that the risk coefficients are calculated correctly in financial investments in order to determine the behavior of investors in the market. Shortly, Systematic sources of risk include purchasing power (inflation) risk, interest rate risk, market risk, political risk, and currency risk. Unsystematic sources of risk are financial risk, management risk, business, and industry risk.

2.4.5. The Fama and French Model

The French Fama Model, which is an important study in asset pricing and portfolio management, refers about the factors of these pricing. The Fama and French model remarks 3 factors which are the size of firms, book-to-market values, and excess return on the market. It is found that firm size and BV/MV (book value/market value) ratio influenced stock returns in 1993 study. It has been determined that stocks with high BV/MV (book value/ market value) ratios or those small-scale companies provide more returns.

According to Fama and French, the reason why stocks with a high BV/MV ratio or small-scale companies provide more returns is because those stocks are riskier. Thereupon, Fama and French, in his study in 1995, investigated what the economic reason is that makes those stocks risky and therefore enables to the investors to earn more returns. At the end of the research, it was revealed that there is a relationship between the BV/MV Ratio and the firm's profitability, and it is determined that the profits (earnings) of the firms with a high BV/MV ratio are lower compared to the firms with a low BV/MV ratio (Şakar, 2009).

CHAPTER 3
AUDIT AND ITS IMPORTANCE

3.1. Definition of Auditing

An independent audit is a systematic and independent examination of an organization's records, legal records, documents to determine how accurately and clearly a financial statement disclosure, as well as non-financial disclosures. Auditing is a process which reporting important findings about companies for the interested parties. Financial statement auditing is the most common type of auditing around the world. Because economic transactions are taken into consideration that companies have carried out. The reports are prepared by independent auditors according to international reporting standards and generally accepted international accounting principles (Bonner, 1999).

Audit firms provide reasonable assurance to the third parties by periodically checking the financial and non-financial records of companies. Auditors must gather adequate quantity and appropriate quality of evidence in order to obtain a particular opinion on whether the financial statements have been prepared in accordance with predetermined criteria. Audit evidence which can be defined as all kinds of information, documents and data obtained during the audit work in order to achieve the audit objectives. Audit firms express an opinion for a company according to those criterias and the audit reports are published publicly.

According to resource, auditing can be identified as setting standards on the purpose of ensuring the results of an activity comply with the plans, comparing the results obtained with these standards, and determining corrective measures at the points where the implementations digress from the plan (Sanal, 2002). Auditing is a prominent part of management process of whole companies. It makes the operations more sustainable and enables to control each process. It gives an opportunity to solve the possible issues and mistakes as immediate as possible if something goes wrong. Whether the work has been completed clearly or not only can be known at the end of the audit.

Besides, internal auditing is an activity that evaluates the sufficiency and effectiveness of the internal control system of a company. It is conducted by professionals who have enough knowledge about the culture, systems and processes of the firms. Internal auditing is just as important as external auditing. It even increases the effectiveness of external audit. Establishing an effective internal audit system leads to better results in external auditing. Thus, the company gives quite powerful signs to investors and provides confidence towards the market. Firms generally are willing to control themselves to identify the possible risks. Because internal auditing is an indispensable function for achieving organization's objectives.

3.2. Purpose of Auditing

Audit firms are an independent firm that is subject to audit to express an opinion on whether there is any misstatement or fraud in the financial statements of companies. The primary purpose of audit firms is providing reasonable assurance to the third parties about the accuracy of financial statements and other financial information of the firms (Hay et al., 2014). A fair audit report is vital for the third parties for their investment decision and the market always needs an objective and reliable resources. The state imposes an audit obligation on companies in some areas. This makes it possible to protect the interests of investors and ensures that they can be able to invest in a safe environment. Besides, auditors may also be required to provide an idea of the effectiveness of internal controls over financial reporting for publicly traded companies. Audit companies are also responsible for providing this safe environment according to the regulations are set by the state. It is provided sufficient and reasonable assurance with certain periodic or annual audits.

Auditing is an indispensable process for companies as well. It is a great opportunity to measure the effectiveness of their own activities and solve possible and existing problems. It provides the right information flow to the management and helps to make forecasts and analyzes regarding the financial statements to take effective decisions for the future. In addition, accounts with deficit or surplus in the financial statements and which are at risk of material misstatement provide the opportunity to be checked and corrected if it is needed. It can be counted among the audit purposes of companies to attract the attention of investors by presenting the reliability of their activities and financial statements to the market. So, it becomes easier for the companies to find low-cost financing.

Investors examine the reports published by independent audit firms when making investment decisions, and these reports are the most reliable sources for them. In the subject of audit quality, Big 4 audit firms come to the fore. The market considers that the reports issued by these audit firms are more thoroughly audited and more acceptable than local firms. According to Miettinen, working with a well-known audit company is quite important for big firms. Does it affect to the share price too? Beyond any doubt, changing of a share price depends on the balance of demand and supply. Quality financial reports also give confidence to investors. All external financial statement users such as investors and creditors need reliable financial information. When investors have confidence in the audited financial statements of the business, they provide a flow of funds to the business, and they want to be shareholders. So, it has a positive effect on share prices (Miettinen J. , 2007).

3.3. Enron Scandal

The example of the Enron scandal is the most obvious example that demonstrates the importance of audit quality. The scandal is felt impact by the whole world, and it gave hundreds of countries a deep shock. It also had a huge negative impact on the stock market, with many shareholders falling victim to bad quality auditing.

The Enron crisis, which is also known as the Enron Scandal and resulted in the bankruptcy of Enron Company, can be summarized as the cheating made in the accounting records to be presented the company more profitable than it was and these cheats were dissimulated by Arthur Andersen. Thus, both the public and the shareholders were misinformed, and the company was shown to be much more valuable and profitable than it should have been.

Arthur Andersen audit firm was accomplice in this case. Because it provided both external auditing, internal auditing and management consultancy services to Enron in that times. In 2000, Arthur Andersen earned approximately $54 million from its auditing services and consulting services (Healy and Palepu, 2003). Arthur Andersen made irregular and unfair changes in the financial statements in order not to lose Enron as a client. Although problematic records were noticed in the reports prepared by Arthur Andersen for Enron, it was seen that they were not reflected in the reports and gave positive opinions. Another factor that causes Arthur Andersen to perform fraudulent audit activities is the system in the USA. Advertising and fierce competition were allowed in order to prevent large audit firms from seizing the market in the USA, and the non-audit revenues (consulting) of audit firms reached a level that could compete with their main job, audit revenues. This situation can be said that was created pressure factor on audit firms.

Although the Enron scandal took place in the United States, its social and economic effects shook the whole world deeply. As a result of this scandal, 4,500 people in the USA and 85,000 people in the world lost their jobs, and the effect on the US economy is estimated to be 64 billion dollars. Many of firms went bankrupt and shareholders lost billions of dollars in stock market. The fact that fraudulent records could not be detected in this case had the potential to undermine confidence in the market (Healy and Palepu, 2003). The scandals that have arisen due to frauds in the financial statements and auditing problems have led to a problem of trust in the capital markets, senior management, financial reports, the independent audit system and auditors. For this reason, the Enron case was approached as a result of the potential problems in the accounting and auditing system rather than being a simple fraud (Yusuf and Cengiz, 2014).

3.4. Sarbanes Oxley Act

After major corporate scandals such as Enron and Worldcom in the USA created distrust in the accounting and company disclosures among the shareholders, the "Public Companies Accounting Reform and Investor Protection Act", also known as the Sarbanes & Oxley Act (SOX), was enacted on July 30, 2002, especially to improve these issues. The law, which aims to improve controls over their reporting and supports effective corporate governance, covers all companies listed in the USA.

The Enron scandal and its results indicate that it was due to a system issue. For this reason, accounting and independent auditing systems was changed and regulated in USA. In order to prevent a market crisis similar to the Enron case, the US Congress, started Sarbane's Oxley Movement in 2002, demanded extensive improvements and additional resources (Arnold and De Lange, 2004). Sarbane's Oxley Act aims to eliminate the loss of public confidence in the capital markets due to the Enron scandal and to ensure that listed companies meet their responsibilities in terms of transparency, honesty and disclosure of their financial statements. Furthermore, new applications make the independent audit mechanism more effective against mistakes and fraud on financial reports (Yusuf and Cengiz, 2014).

Wide-ranging financial scandals involving reputable public companies such as WorldCom and Enron adversely affected the users and benefits of financial information. Enacted by George W. Bush in 2002, the SOX 2002 Act aims to protect and improve the integrity and quality of financial reporting and auditors, as well as rebuild the security of investors and stakeholders (Marianne, 2005).

The SOX 2002 Act was adopted in the American Congress in 2002 in order to correct the distortions encountered in the audited companies, to ensure that the auditor companies act with the awareness of their social responsibilities, and in response to the public reaction to corruption and distortions in the auditing system. In addition to these reasons, due to the fact that the current generally accepted accounting principles lead to different interpretations and are insufficient, it was necessary to reorganize the accounting standards with this law.

By law, CEOs and CFOs are responsible for verifying internal control and financial reports throughout the financial reporting process. This means that both CEOs and CFOs can be held corporately liable if financial information is found to be inaccurate. In addition, another responsibility brought to the managers is to examine and audit the internal control system. 90 days before the publication of the company's financial statements to be disclosed to the public, it is obligatory to evaluate the effectiveness of the company's internal control system and to disclose their conclusions to the public in the report to be published (Billing, Evans, 2005).

In Turkey, after the SOX 2002 Law, the Capital Markets Board (SPK) also made regulations. In this context, Serial: X No: 19 communiqués were announced and audit companies operating in the audit sector were asked to comply with the laws. Corporate governance practices are tried to be implemented in Turkey with the help of SPK, Banking Regulation and Regulatory Authority (BDDK), Turkish Commercial Code (TTK), Corporate Tax Law (KVK) and other related regulations. From this point of view, the Turkish independent audit industry has to comply with these legislative changes in the world.

3.5. Accounting and Auditing Reporting Standards

The developments that led to the globalization of the economy brought new problems, especially multinational enterprises, multinational accounting and auditing firms, investors, and investment analysts, who use accounting information closely related to the economy. Almost all the researchers working in the field of international accounting agree that the differences in the accounting systems of the countries are behind the emerging problems.

International Accounting Standards are published by the IASC-International Accounting Standards Committee. IASC was established in 1973 by the accounting professional organizations of the countries and its first meeting was held in London on 29 June 1973. Professional accountancy organizations in Australia, Canada, France, Germany, Japan, Mexico, the Netherlands, the UK, Ireland and the USA took part in the establishment of the IASC in June 1973. The International Accounting Standards Committee served in this status from 1973 to 2001 and published the International Accounting Standards. This committee has been named IASB-International Accounting Standards Board (International Accounting Standards Board) since the beginning of 2001 (De George, et al. 2016).

Nowadays, the World is become more global, and the market is more accessible by every kind of investor. Many new problems and events are occurring and those are varied country to country. So, it has become inevitable to have a standardized accounting and reporting standard. According to this point, IFRS and GAAP give a great opportunity to have a standard perspective for both investors and business managers. IFRS is widely used by about 100 countries, especially most of the European countries adopt this Financial Reporting Standard. On the other hand, The United States adopts its national financial reporting standards which is called US GAAP. Furthermore, Canadian GAAP is used by Canada and UK GAAP is applied by the United Kingdom which is national financial reporting standards of the UK.

In Turkey, SPK and BDDK have put into effect the Turkish Accounting Standards, which are compatible with IFRS, to be implemented in their affiliated institutions. The standards which call Turkish Accounting Standards (TMS) are published by the UK-based International Accounting Standards Board (IASB) and are implemented by many countries around the world, including Turkey. Some of the standards are called TMS and the other part is called TFRS.

The Turkish Accounting Standard (TMS) and Turkish Financial Reporting Standard (TFRS) are published on the website of the Kamu Gözetimi Kurumu. The Institution revises these standards when and to the extent necessary and updates its website. It can be said that the purpose of the standards is to develop an international common language in financial reporting, which is also the founding purpose of the IASB, the board that publishes the relevant standards. Thus, financial literacy of investors, creditors, stakeholders and other information users will become global (Dalğar, H. 2011).

As a result, International Financial Reporting Standards, which are of vital importance for businesses in particular and for national economies in general, seem to have achieved their purpose sufficiently due to their application in more than 100 countries today. Considering that this practice is the pioneer and the most important step of a single financial reporting system implemented all over the world very soon, the importance of these standards is better understood.

3.6. Mandatory Auditor Rotation

Independent auditors who carry out the audit of the financial statements play an important role in reducing the information risk in the capital markets by increasing the reliability of the financial statements of the enterprises. All financial statement users, especially investors and creditors, can make more effective and efficient decisions thanks to audited financial statements. This situation also provides a more rational use of resources in the economy. In order to achieve all these desired results, the audit must be carried out in a quality manner.

Especially at the beginning of the 2000s, accounting scandals experienced in large enterprises such as Enron and Worldcom in the United States of America led to bankruptcy both these enterprises and Arthur Andersen, which was one of the five largest auditing firms in the world at that time, which carried out the audit of these enterprises. These cases revealed the damage to the principle of auditor independence and reduced the confidence in auditing. The damage to the independence of the auditor has led to questioning the audit quality and making new regulations.

Following the accounting scandals, the Sarbanes-Oxley Act, which was prepared in the United States in 2002, implemented measures to protect investors. The regulation introduced new rules in the supervision of publicly traded enterprises. Some new rules on auditing have been revised by the European Union. With the regulations made in our country, efforts have been made to adapt to these developments. One of the issues covered by the said regulations is mandatory auditor rotation.

Mandatory auditor rotation is generally handled in two ways. These are rotations that can be made at the firm level and the partner lead auditor level. The purpose of rotation is to prevent the auditor-client business relationship, which may damage the auditor's independence and professional skepticism, since the audit is conducted in the public interest. However, rotation has its benefits as well as its costs. For example, those who advocate rotation of auditors argue that this will increase independence, while those who oppose rotation argue that reduced time spent working with the same entity may limit the auditor's specialization in that entity, and this may prevent the detection of material misstatements in the audit.

Auditor's independence is a fundamental building block in the conduct of independent audit work. Independence in auditing means that the auditor acts with an impartial point of view in collecting audit evidence, evaluating the evidence and results, and preparing the audit report. The principle of auditor independence is emphasized in the International Auditing Standards published by the IAASB operating under IFAC.

According to Mautz and Sharaf, the fact that the independent auditor has a long working time with the client company may cause closeness between the auditor and the client company and damage the independence of the auditor. Rotation of auditors is an application that can prevent this threat. The application of compulsory auditor rotation has come to the fore as a solution proposal, especially after the big business scandals (Mautz& Sharaf, 1961).

With the application of rotation in the audit, it is aimed to prevent the relations between the auditor and the client company from turning into a quality that may lead to the establishment of a union of interests. Mandatory auditor rotation can be at the level of the audit firm or at the level of the partner lead auditor. In the "Code of Ethics for Professional Accountants" published by the International Ethical Standards Board (IESBA) operating under IFAC, it is recommended that the use of the same senior audit personnel in an audit contract for a long time may create familiarity and self-interest threats, and it is recommended to rotate the partner lead auditor every 7 years.

With the mandatory auditor rotation policy, it is targeted to increase the quality of the audit and thus to increase the quality of financial reporting (Carey & Simnett, 2006). According to the research, the main purpose of compulsory rotation of auditors is to carry out the audit with a new perspective and thus to increase the independence of the auditor who will start working with the rotation (Daugherty et al. 2012). The practice of rotation is believed to help auditors maintain professional skepticism. (Nagy, 2005). According to Hoyle's research, he argued that the companies' search for new auditors will increase the competition among audit firms and thus audit firms can provide higher quality independent audit services (Hoyle, 1978).

In Turkey, the Public Oversight, Accounting and Auditing Standards Authority (KGK) was established in 2011 to regulate the field of independent audit envisaged in accordance with the Turkish Commercial Code (TKK). In the Independent Audit Regulation published by the KGK, there is a provision regarding rotation at both the audit firm level and the auditor’s level. According to regulation, unless 3 years have passed; It has been stated that audit firms will not be able to conduct audits on client companies for which they have conducted audits for 7 years in the last 10 years, and auditors, including those working in audit firms, for 5 years in the last 7 years. According to the Turkish Commercial Code (TKK), an auditor who has been selected as an auditor for the same company for a total of 7 years within 10 years cannot be re-elected as auditor until 3 years have passed. KGK has the authority to shorten these periods (Şenyiğit& Zeytinoğlu, 2014). In addition, there are regulations made by the Capital Markets Board (SPK) and the Banking Regulation and Supervision Agency (BDDK) that guide the practice of auditor rotation.

3.7. Audit Sector in Turkey

According to KAP (Kamuyu Aydınlatma Platformu), 85 audit firms are active in Turkey. KGK (Kamu Gözetimi Kurumu) is a regulatory and supervisory government agency established to oversee the audits of companies which are liable to be audited. KGK, which was established in 2011, has many duties in terms of increasing the quality of auditing. Financial statements: To establish national auditing standards in line with international standards, including information systems auditing, in order to ensure that the financial status, performance and cash flows of the enterprises are presented in accordance with the Turkish Accounting Standards, conformity to the needs of the users, reliability, transparency, comparability and understandability, taking into account the public interest. The KGK is also responsible for monitoring and supervising the activities of independent auditors and independent audit firms and the compliance of their audit work with standards and regulations (KGK, 2011).

According to the research, it is seen that the independent auditing conducted in Turkey is a developing sector. The big companies are generally audited by four big independent audit firms and these four big companies audit 42% of the total audited Public Interest Institutions in Turkey. The Big Four companies provide higher returns in audit market compared to the local audit firms in Turkey. Coping skill of complexity, experience and quality of work can be shown as the reasons. Other local Turkish audit firms receive a share of approximately 20% from the total independent audit revenues. The biggest share of the total independent audit revenues goes to the big four companies (Erdoğan and Solak, 2016).

3.8. Principal Agent Problem

The principal agent problem occurs when an institution or organization has a right to make decisions and take actions instead of the other entities. The main reason why this theory is called a problem is that it sets out from problems that may arise after the transfer of authority to a third party. The principal agent problem, from the perspective of finance theory, is that managers put their own interests before the interests of shareholders. The interests of the executives are generally secured and defined through the perception that the company's performance is somehow good. In short, principal agent problem is the situation of creating a manipulative perception on firm performance (Eisenhardt, 1989).

If the problem is approached from shareholders' perspective, they always want to find transparent and confidential information while they decide to make an investment. So, the companies especially which are publicly traded, must be audited by independent auditing firms. The fact that the business world has become more complex over the years has also been a major factor to show up this problem. Thus, the auditing of companies has become a necessity in order to make minimize the problem. Investors have a great opportunity to obtain precise and clear information about companies' financial statements by examining the report prepared by the independent audit company before making an investment decision. It is also crucial from the legal point of view that companies are audited according to the legislation which is determined by the state. For this reason, many companies in the world are audited by the independent auditing firms at certain periods, although they are not required to give full assurance to their investors. It makes them more trustworthy, and they can be able to reach more investors.

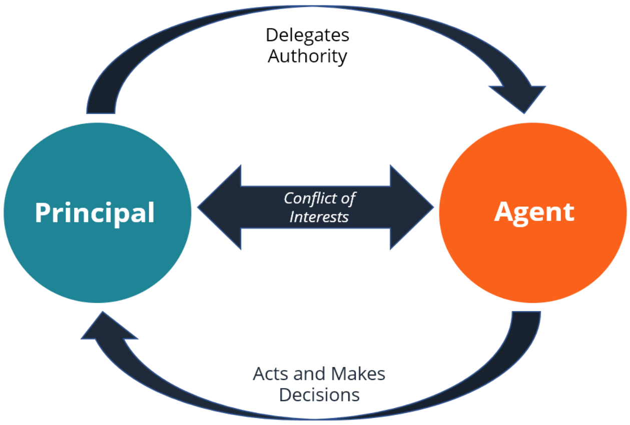

Figure 3.1. The cycle of Principal Agent Problem

Agency cost is the general name of all costs arising from wrong and poor decisions and actions are taken by the agency on behalf of the company. It generally occurs when the management and shareholders conflict of their interests. There can be many other kinds of costs if there is principal agency problem. Companies are audited by independent auditing firms may solve the conflicts and prevent possible extra costs (Jensen and Meckling, 2019).

3.9. Separation of Ownership and Control

Harold Demsetz examined the role of the concept of property right in economic and social life. In the study, it is stated that there are behavioral differences according to property types. In the study, considering the numerical importance of the property type, it is stated that it would be more economically meaningful to have a single owner instead of more than one owner. H. Demsetz, on the other hand, states that the result of the change of ownership is effective in the problem of changing hands. In other words, private ownership can be easily changed, but this is not the case with public ownership. Demsetz focuses on the types of behavior arising from property differences, and these different types of behavior determine the economy in terms of the use of property itself. Also, he argues that it is not possible to act economically in property types that are not owned by a single person, and externality problems will arise in such property types (Demsetz, 1967).

Alchian and Coase also attributed that public and private property (or organization) operate differently from each other, as well as aims of public and private property are different. The system of cost-reward, which is faced by elements such as employees and shareholders who bring public or private organizations into being, is an important determinant. Another issue Alchian mentions is the degree of transferability of properties. In other words, it is a matter of whether the shares on the property are sellable or not. The author considers the property owners' inability to sell their shares in public properties as an important element of difference. If there is a failure in the private sector, owners and shareholders can show their reaction to this trend by transferring (selling) their shares. In the literature, this situation is called shareholder revolt. This creates various limitations and constraints in the decision-making processes of business managers. However, it is not possible for the owners of public property, that is, the individuals who make up the society, to waive these rights. Therefore, public organization managers always feel the shareholder pressure in their behavior and decision-making (Alchian and Coase, 1977).

Shareholder revolt is not a threat for a public company. Nowadays, in publicly traded companies, the control of shareholders over operating profits is restricted. The shareholders, who own the property of the public enterprise, may hard to prevent a possible fraudulent process. So, it is possible for the managers of the public enterprises to make profits beyond the legal limits and the high profits obtained in this context are likely to be spent on luxury consumption within the scope of the enterprise.

The risk of fraud is always a big threat to any investor. They desire to make maximum profit by using their assets. For this reason, accessing to information, transparency and reliability are vital when they are making investment decisions. The balance sheets and income statements which are announced by companies in certain periods create the investors' investment decisions. Recently, it is getting impossible for investors to question the reliability of the announced reports, and due to the complexity of accounting and financial accounts, it has become inevitable for these reports to be approved by an authority. Independent audit firms examine companies' financial accounts for this need and audit by applying the necessary procedures. Procedures are determined according to accounting standards and Independent Audit firms give an opinion by giving reasonable assurance in the light of audit workpapers. The primary function of auditing is to prevent errors and corruption on financial statements. Thus, investors can access the audited companies' reports from public sites. As a result, it minimizes the risk of control for the investors and removes restrictions which are created from managers.

3.10. Dividend Discount Model

Investors make their investments for maximum return. Therefore, dividend distribution is one of the most important factors that will affect their investment decision. It is not easy to predict the dividend due to the uncertainty of market conditions. So, using DDM while investing can provide an opportunity to evaluate current market conditions. Dividend discount model is a stock valuation method which enables to calculate the actual stock price in the future. This model provides the ability to predict the value of the stock at its future settings so that the investors can rely on the distribution of these shares in the expected return. So, Gordon's model serves to solve the market uncertainty and misinformation as it assumes a constant growth rate for dividends. Since it is practically impossible to know what the value of dividends will be in future years, the Gordon model assumes that the value of each year is equal to the previous one, with a small increase. This small increase is considered constant, so it is also known as the fixed dividend growth model.

According to Gordon’s model the profit sharing influences the value of the stock and the present value of the stock will be equal to the present value of the expected dividends. In this method, the value of the firm is stated by associating with the dividend payments are made for the stock. The equity value of the firm is determined by discounting the future dividends and dividend payments to the present. If the company does not pay dividends, the company will be worthless (Gordon, 1959).

It is very difficult for a company to experience the same growth year after year as the Gordon model assumes. Therefore, multistage models assume different growth for each period. The most common is to use two- or three-stage growths. In these models, the growths are higher initially, but then they tend to stabilize at a steady smaller growth. Consequently, investing with only the Gordon model as a reference may lead to wrong decision making. The Gordon model provides a predictive idea of investment and return for a company.

3.11. Rational Expectations Theory

According to the theory, since all data are disclosed, decision makers in the market are as informed about events and developments as those who manage the economy. In this case, the decision makers in the market anticipate the effects of the measures to be taken by the economy management and act accordingly. Rational expectations are one of the most appropriate models of macroeconomics to evaluate economic expectations. The expectations of workers, consumers and companies about future economic situations are an important part of this model.

He stated that the expectations are the future predictions created with the information at hand, and he claimed that the expectations and the predictions of the model that accurately represents the economy are equal. The basis of the rational expectations hypothesis is the formation of economic variables through systematic processes. In the process of time, economic agents learn what the process is that determines a variable and use this information to adjust expectations for that variable. Individuals gain knowledge of the variable that creates the process, using all available knowledge of the expectations associated with the variable. In this case, firms' expectations will be the same as the theory's prediction for the same information set (Muth, 1961).

3.12. Changing the Audit Firm Can be Signal

In a challenging competitive environment created by globalization, developing technology and changing economic systems, it becomes vital to increase the financial information security that affects the decisions of financial information users, to ensure the independence of the auditor and to change the independent audit firm in the context of the quality of the audit.

In terms of economic and technological developments, financial information users can access the most accurate information, it is very important that the financial statements of companies have been independently audited. Innovations are introduced by national and international regulatory organizations to ensure that independent audit does not lose its independence. In Turkey, the choice of independent auditor is left to the preference of the company, except for mandatory cases according to the regulations made by the regulatory institutions.

Companies in the market work either local audit firms or with Big 4 audit firms. A change in companies' audit firm can be a signal to the market and affect investors' decisions. Working with Big 4 audit firms in line with the targets of the companies can put the companies in a more advantageous position in the stock market rather than working with the local audit firms. Many authorities choose audit firms according to audit quality for their companies. Because they want to comprehensively address any error or risk in their financial statements. For this reason, Big 4 audit firms come to the fore in the market with their audit quality. In addition, some investors attach importance to audit quality and take this criterion into account when making investment decisions. For this reason, companies can stop their cooperating with local audit firms and prefer Big 4 audit firms in order to gain significant advantages.

CHAPTER 4
LITERATURE REVIEW

Miettinen examined the relationship between audit quality and financial performance. Audit quality was measured using the size of the audit firm and the frequency of audit committee meetings. As a result of the study, it was determined that the quality of the audit (the size of the audit firm) has a significant impact on financial performance. In addition, the results of the study showed that the measures of audit quality are not only symbolic but also contribute to financial performance (Miettinen, 2011).

Eshitemi and Omwenga examined the effect of independent audit quality on financial performance. In the study, the size of the audit firm, the independence of the auditor, the qualifications of the audit team and the experience of the auditor; Return on assets (ROA) and return on equity (ROE) are used as financial performance indicators. As a result, it has been determined that the effect of independent audit quality on financial performance is statistically significant and positive (Eshitemi and Omwenga, 2016).

According to Cheng et al.'s research, it is examined the relationship between independent auditor quality, auditor size and financial performance by using a total of 10,339 data from the reports of publicly traded (1039) and privately held audit firms (9300) operating in the Taiwan Stock Market between 1989 and 2006. In the study, financial performance as the dependent variable, "the natural logarithm of each firm's net profit", audit quality as the independent variable, "four important factors related to human capital: talents, personal quality of audit partners and staff, and education level of auditors". taken. According to their Path Analysis (relationship analysis), the authors determined that there is a statistically positive and positive relationship between independent auditor quality, auditor size and financial performance (Cheng et al., 2013).

Moutinho et al. found a relationship between audit fees and company performance using the data of 2881 (non-financial) publicly traded companies operating in the United States during the 2000-2008 period. Financial performance, which is the dependent variable of the study, was measured with Earnings Power (Earnings Before

Interest and Taxes on Assets (Profits)), return on assets (ROA- Net Profit on Assets), return on equity (ROE) and Tobin Q ratios. "Audit Fees" was used as the dependent variable of the study. According to the results of the analysis made by the panel data (fixed effects model) analysis method, the authors determined that the relationship between audit fees and company performance is statistically significant and negative, in other words, an increase (decrease) in audit fees decreases (increases) company performance (Moutinho et al., 2012).

Lack of information and poor financial reporting quality were cited as the main problems that hinder the entry of foreign capital into the market and economic growth. It can be said that foreign investors in Turkey need a high-quality financial reporting and corporate governance approach more than local investors. Besides, while a high-quality independent audit service reduces information asymmetry, capital cost and principal-agent conflict, it may also have possible negative effects due to the increase in audit costs and the quality of financial information disclosed to company competitors (Knechel et al., 2008). Therefore, the benefit of the independent audit service received can be versatile for companies, and the value of this benefit may differ from company to company. In this context, the selection of an independent auditor is a very important strategic decision for the company. It can also be a strong signal about financial reporting quality for companies' stakeholders.

When companies decide to be liable to independent audit or not, some criteria can also be effective. Companies may not need an audit if they can create an effective control system on important issues. According to a resource, while independent audit plays a very important assurance role for the company's owners and partners about the reliability of the accounting information provided by the management, it can also directly affect the corporate governance understanding and activities. The relationship between independent audit quality and corporate governance is explained by two effects in theory. If the company has a strong corporate governance mechanism, it may not need a quality independent assurance service. This situation is accepted in the literature as the substitution effect. On the other hand, the company may request a quality independent audit service to complement and support its corporate governance mechanism (Cohen et al., 2002).

Audit committees, which play a vital role in the supervision of companies' accounting and reporting processes, are required to follow prudent accounting policies in the preparation of financial statements and in presenting financial information to the public. Due to the concept of prudence, which is one of the basic principles of accounting, companies transfer possible bad situations to financial statements faster, while transferring possible good situations to financial statements after passing many verification stages (Watts, 2003). As a result, more transparent, more reliable and higher quality financial reports are emerged. A strong relationship is expected between the relationship between the audit committee and prudence.

Precaution, which is one of the basic principles of accounting, is an important principle that restricts the opportunistic behavior of managers and increases the quality of financial reporting by rapidly preventing violations in accounting records (Zhong and Li, 2017). Although it was removed from the common conceptual framework proposed by the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) in 2010, it is still an important principle adopted by many companies today. Auditing firms, on the other hand, audit the financial statements and express their opinions in this direction and by contingent upon to the principles.

CHAPTER 5
AN ANALYSIS ON THE EFFECT OF AUDIT FIRM CHANGE ON STOCK RETURNS FOR BORSA ISTANBUL COMPANIES

5.1. The Purpose of Study

In this study, the effects of the audit firm elections and announcements of 328 companies traded in Borsa Istanbul (BIST) between the years 2008-2020 on the stock returns of the companies and the shareholders were examined.

5.2. Data Collection

In study, the selected BIST companies which are traded between 2008 and 2020, which auditor firm they choose with each quarter and the auditor's opinions stated in their reports were obtained from Kamuyu Aydınlatma Platformu (KAP) website (www.kap.org.tr). These companies' stock price data is taken from the Investing.com database. The share price data were taken monthly for each company, and the audit firm selection announcement was assumed to be two months after the end of quarter when a change in auditing company occurs. In order to compare the stock returns of the companies, monthly return data of BIST100 were used and the formulation was made separately for each year. In data analysis, observations with insufficient data for analysis and whose data could not be reached were not included in the study.

5.3. The Research Method

The Event Study Method developed by Dolley (1933) was used as a method in the research. In the Event Study, the date of an event, the event window and the forecast window must be determined. The date of the event (t) is the date of the event that is the subject of the research. The event window was determined as 5 months before (t-5) and 5 months after the event (t+5). The reason for keeping the event window short is to minimize the effect of other developments after the event date and to examine only the effect of audit firm selection on stock prices. The time intervals between t-5 and t+5 days were used in this study as the estimation window.

In this analysis, the day of the event is determined as the month when companies change their audit firm. Thus, according to the event model, it is possible to compare 5 months before and 5 months after. The month-end stock market value of each company was taken from the Investing.com database and compared with the BIST100 average return monthly. SAS University Edition and Microsoft Excel package programs were used in the research.

In the research, the return of stock "i" at time "t" is calculated as follows:

$$R_{it} = (Pit - P_{it-1}) / P_{it} - 1 \qquad (1)$$

In the formula;

Pit, : closing price of stock “i” at time “t”,

Pit-1 : The closing price of the stock “i” at time “t-1”,

Rit : Return of stock “i” at time “t”

The market model was used to calculate the expected rate of return from the stock. The model accepts the linear relationship between stock returns and market returns. According to the market model, the relationship between the expected return of the stock and the market return is modelled as follows.

$$E(R_{it}) = \alpha + \beta_i R_{mt} \qquad (2)$$

In the formula;

α: Constant term

βi: systematic risk of stock “i”

Rmt: Return of market portfolio on day t

eit: Represents the error term of the stock “i” on day “t”.

BIST100 index was used as the market portfolio. For each stock, the α and β coefficients in the model were estimated by the ordinary least square’s regression method using the forecast data of that stock.

The expected returns (E(Rit)) are obtained by using the market returns within the relevant event windows. After the expected returns are found, the abnormal returns of the stock are calculated as follows:

$$ARit = Rit - E(Rit) \qquad (3)$$

In the formula;

ARit : abnormal return rate of stock “i” on day “t”,

Rit: The realized rate of return of the stock “i” on day “t”,

E(Rit) = α + βiRmt ; According to the market model, “i” represents the expected rate of return from the stock on the “t” day.

Average abnormal returns were calculated as follows:

$$AAR_t = \frac{1}{N}\sum_{i=1}^{N} AR_{it} \qquad (4)$$

In the formula;

N: Number of switching audit firm announcements included in the analysis,

t: Indicates the relevant day in the event window.

In the result of the analysis, the average abnormal return (AAR) and p value values are measured with statistical significance levels and interpreted. Statistical significance was questioned in the following analyzes. First of all, the audit firm changes of 328 companies on the stock exchange between 2008 and 2020 were analyzed. Then, to perform a deeper analysis, Big Four and local audit firms are separated, and the analysis is customized according to the audit firm preferred by the listed stock exchange companies. 4 different analyzes which are Big four to Big four, Big four to local, local to big four and local to local, made and interpreted according to the statistical significance level.

5.4. The Research Hypothesis

As discussed in the previous sections, it was emphasized that auditing is essential for companies and the importance of which audit firms’ companies work with on the basis of shareholders. Transparent information is very important in the empirical literature, and it has been observed whether the announcements of the auditor companies affect the share prices in the companies. In this context, the following hypotheses will be tested in this study.

H0: The average abnormal returns of stocks are equal to 0 in the months around the date when companies change the auditor firm they will work with.

$$AR_t = 0$$

H1: The average abnormal returns of stocks are different from 0 in the months around the date when companies change the auditor firm they will work with.

$$AR_t \neq 0$$

5.5. Findings

As a result of the analysis made with the data collected in the research, the findings regarding the average abnormal returns, standard deviations, t statistical values and p values are given in the following tables.

Announcements for the selection of the auditor companies that 328 companies in Borsa Istanbul work for between 2008-2020 were analyzed. When Table 4.1 is examined, while the negative average abnormal return was obtained 3 days before the "t" day when the audit firm was announced, the number of days with negative average abnormal return after the "t" day when the event occurred decreased to 1.

However, it was observed that this difference was not statistically significant. On the other hand, it was observed that the positive average abnormal return obtained on the "t" day when the auditor firm selection announcement was made was statistically significant at the 0.05 significance level.

Furthermore, when the degree of significance of the p-value is examined, it is observed that -2nd and -3rd periods have a moderate evidence against the hypothesis. Those periods are between 5% and 1% significance level. In the periods after the audit firm selection, it was understood that 1st and 5th periods have a moderate evidence against the hypothesis. In general, after the companies announced their audit firm selection to the public, a positive average abnormal return was obtained. 2nd period has a weak evidence and 4th period has strong evidence against the hypothesis.

Table 5.1. Average Abnormal Returns within the All-Event Windows

Time	AARt	Standard Deviation	Number of Observations	Tstatistic	P value
-5	-0.0078	0.1489	796	-1.4771	0.1401
-4	0.0077	0.1456	796	1.4907	0.1364
-3	-0.0114**	0.1436	797	-2.2353	0.0257
-2	-0.0109**	0.1296	797	-2.3634	0.0183
-1	0.0146	0.2703	799	1.5288	0.1267
0	-0.0103*	0.1506	800	-1.9356	0.0533
1	0.0133**	0.1713	800	2.1966	0.0283
2	-0.0081*	0.1345	800	-1.7019	0.0892
3	0.0047	0.1960	800	0.6767	0.4988
4	0.0191***	0.1837	800	2.9480	0.0033
5	0.0153**	0.1689	730	2.4424	0.0148

*: 0.05 < P < 0.10 Significant level

**: 0.01 < P < 0.05 Significant level

***: P < 0.01 Significant level

According to the above results provide evidence that auditor announcements were priced negatively by the market on the day of the event. However, the effect of this was short lived and it was observed that the pricing continued positively. Although there are many levels of significance in the analysis of the data, abnormal returns are unevenly decomposed into negative and positive. The line chart below also shows that the average abnormal return values zigzag from -5 to 5 time interval.

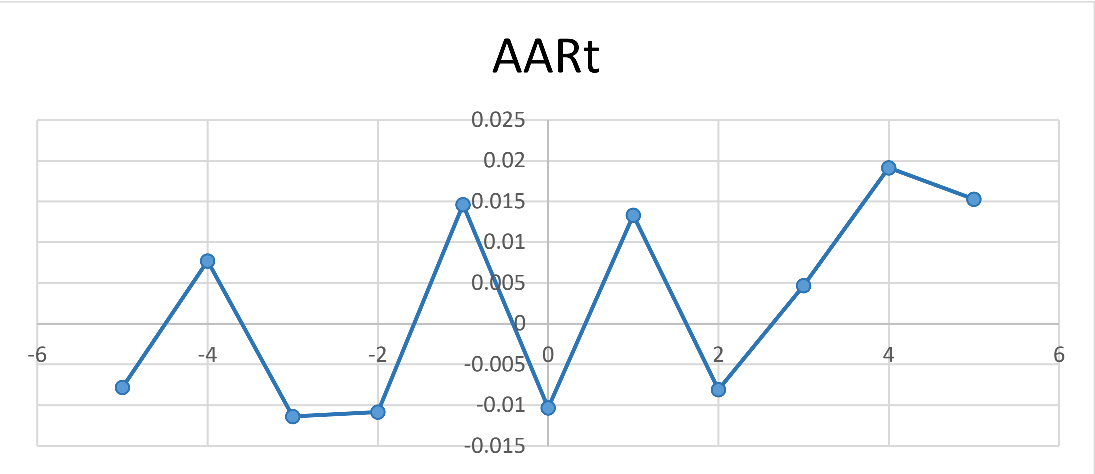

Figure 5.1. Average Abnormal Returns Within the Event Windows

In addition to the analysis for the whole data, the audit firms are divided into two groups. These are the Big Four and local audit firms. Events are separated in to four categories depending on whether the company changed its auditor company within the groups or between the groups. The results of four analyzes regarding the audit firm selection of 328 companies between 2008-2020 were obtained. The purpose of the analyzes is to examine more closely the effect of audit firm selection on the share prices of companies.

Table 5.2. Average Abnormal Returns, switches from Big Four Companies to Big Four Companies

Time	AARt	Standard Deviation	Number of Observations	Tstatistic	P value
-5	-0.0036	0.1094	310	-0.5774	0.5641
-4	0.0133**	0.1182	310	1.9870	0.0478
-3	-0.0052	0.1176	310	-0.7721	0.4406
-2	-0.0021	0.1079	310	-0.3506	0.7262
-1	0.0074	0.1787	310	0.7315	0.4650
0	-0.0083	0.1520	310	-0.9602	0.3377
1	0.0148**	0.1260	310	2.0632	0.0399
2	-0.0085	0.0947	310	-1.5832	0.1144
3	-0.0078	0.1087	310	-1.2613	0.2082
4	0.0274***	0.1526	310	3.1647	0.0017
5	0.0182**	0.1338	276	2.2599	0.0246

*: 0.05 < P < 0.10 Significant level

**: 0.01 < P < 0.05 Significant level

***: P < 0.01 Significant level

In this analysis, the relevant companies switch to work with another big four while working with the big four. The degree of significance of the p-value is examined, it is observed that -4th period has a moderate evidence against the hypothesis before the switching day. Besides, its average abnormal return is positive. On the other hand, after the announcement, 1st and 5th period which have positive average abnormal returns and 5% level of significance is provided. Moreover, 4th period has a strong evidence against the hypothesis because this period provides the 1% significance level.

Table 5.3. Average Abnormal Returns, switches from Big Four Companies to Local Companies

Time	AARt	Standard Deviation	Number of Observations	Tstatistic	P value
-5	0.0428***	0.0875	56	-3.6613	0.0006
-4	0.0565*	0.2161	56	1.9570	0.0554
-3	-0.0239	0.1693	56	-1.0578	0.2948
-2	-0.0102	0.1172	56	-0.6545	0.5155
-1	-0.0019	0.1345	57	-0.1061	0.9159
0	-0.0015	0.1428	57	-0.0811	0.9357
1	0.0382*	0.1634	57	1.7629	0.0834
2	0.0075	0.1275	57	0.4431	0.6594
3	0.0218	0.1820	57	0.9063	0.3687
4	-0.0222	0.1410	57	-1.1915	0.2385
5	0.0208	0.1375	61	1.1800	0.2426

*: 0.05 < P < 0.10 Significant level

**: 0.01 < P < 0.05 Significant level

***: P < 0.01 Significant level

In this analysis, the companies which switched Big four audit firms to local audit firms. According to analysis' output, before the announcement -5th period is statistically significant very strong but average abnormal returns is negative in the period. Also, the -4th period has a weak evidence against the hypothesis. The number of significance level and average abnormal returns are remaining incapable. After the announcement, the 1st period which is only provided on the 5% significance level.

Table 5.4. Average Abnormal Returns, switches from Local Companies to Big Four Companies

Time	AARt	Standard Deviation	Number of Observations	Tstatistic	P value
-5	0.0046	0.2568	75	0.1568	0.8758
-4	0.0084	0.1021	79	0.73162	0.4666
-3	0.0455***	0.0925	79	-4.3785	0.0000
-2	-0.0096	0.1163	79	-0.7312	0.4669
-1	-0.0142	0.0957	79	-1.3205	0.1905
0	-0.0221	0.1562	79	-1.2547	0.2133
1	0.0032	0.0994	79	0.2897	0.7728
2	-0.0054	0.0913	79	-0.5215	0.6035
3	-0.0224**	0.0959	79	-2.075	0.0413
4	0.0408**	0.1802	79	2.01222	0.0476
5	-0.0121	0.1087	77	-0.9748	0.3328

*: 0.05 < P < 0.10 Significant level

**: 0.01 < P < 0.05 Significant level

***: P < 0.01 Significant level

In the above analysis, the companies decided to switch local audit firms to Big Four audit firms. The 3rd and 4th periods have a moderate evidence against the hypothesis with the provided 5% significance level but only 4th period has a positive average abnormal return. Before the announcement, -3rd period has a good evidence, but it may not be a sufficient result statistically because the previous and following time intervals' significance levels are unstable and unsensible.

Table 5.5. Average Abnormal Returns, switches from Local Companies to Local Companies

Time	AARt	Standard Deviation	Number of Observations	Tstatistic	P value
-5	-0.0086	0.1554	355	-1.04004	0.2990
-4	-0.0052	0.1598	351	-0.61511	0.5389
-3	-0.0072	0.1669	352	-0.80656	0.4205
-2	0.0189**	0.1502	352	-2.36086	0.0188
-1	0.0301	0.3636	353	1.55324	0.1213
0	-0.0109	0.1498	354	-1.36461	0.1732
1	0.0103	0.2145	354	0.90143	0.3680
2	-0.0108	0.1691	354	-1.20562	0.2288
3	0.0189	0.2623	354	1.3553	0.1762
4	0.0137	0.2125	354	1.21479	0.2253
5	0.0183	0.2090	316	1.55596	0.1207

*: 0.05 < P < 0.10 Significant level

**: 0.01 < P < 0.05 Significant level

***: P < 0.01 Significant level

In the above analysis, companies which announced the switch local audit firm to another local audit firm. Only -2nd period has a moderate evidence against the hypothesis. This period is provided 5% significance level according to p-value and its average abnormal return is positive. However, this evidence remains incapable because after the announcement, there is not any evidence is provided to significance level.

CONCLUSION

Auditing is an indispensable process for companies. The fact that companies are audited by the third party according to the standards and regulations determined by the state in financial and non-financial matters undoubtedly increases the confidence in the market. Auditing ensures that the risk of error and fraud in financial and non-financial statements is reduced to a reasonable level. Minimizing the risk of error and fraud directly affects the investment decisions of investors. Transparent and accurate information is of great importance in attracting investment. For listed companies, auditing become more important because public companies must share information about them as soon as it becomes available. Because the information is always needed for both stakeholders and third parties. Besides, managers can deceive investors and stakeholders for the benefit of the company. Therefore, investors and stakeholders can obtain information from third parties in the most reliable way. The greatest benefit of the audit report is that it provides confidence in critical financial and non-financial matters and looks after the interests of investors and stakeholders. Audit firms check the accuracy of the declared financial and non-financial information and give an audit opinion.

In this study, the effect of audit quality on investors was investigated. The extent to which the market prices the work of the listed companies with Big-Four and the share return effect of the audit firm selection were examined. In the study, the effect of audit firm selection of companies traded in Borsa Istanbul between 2008-2020 on the stock returns of the relevant companies was investigated using the event study method. For 328 companies in each period, which audit firm they worked with and the dates of their announcements were obtained from the Public Disclosure Platform (KAP), and the monthly stock price data of the stocks between 2008-2020 were compiled from the Investing.com database.

In the study, the event was kept as 5 periods before the event (t) (t-5) and 5 periods after (t+5), but the period (2008-2020) when the stock exchange companies that changed the audit firm made the announcements. In addition, the stock values of 328 stock exchange companies were used in the analysis according to the market model in the specified periods. Within the scope of the study, approximately 800 switching of audit firms between 2008 and 2020 constitute a sample of switching announcements. The period between 5 periods before and 5 periods after the date of these announcements is defined as an event. It may not be available 5 days before and 5 days after each switch. The reason of that some audit firm switching announcements is made in the near period to the 5th periods.

As a result of the study, it was observed that there are a number of significant periods in the table where all the events were analyzed, and the month in which the audit firm switch announced, was at the 5% statistical significance level. However, four more specific analyzes were performed to obtain better and certain results. Audit firms are classified as local and big four audit firms. These analyzes were made separately for Big-Four to Big-Four, Big-Four to Local, Local to Big-Four and Local to Local switching events. Although there were some significant periods in each analysis result, the results were not consistent over subsamples. In other words, in every specific analysis were concluded that statistically significant average abnormal returns could not be obtained in the month of the announcement and statistically significant abnormal returns could not be obtained 5 months before and after the event window.

As a result, in this study, it has been observed that the effect of the companies that announcement of the switching of audit firm in Borsa Istanbul between 2008 and 2020 on the stock returns is not significant across subsamples. So, announcement of switching audit firm may not be priced to the listed companies' stock returns by the stock market.

REFERENCES

Alchian, A. A., & Coase, R. H. (1977). *Economic forces at work* (p. 301). Indianapolis: Liberty press.

Arnold, B., & De Lange, P. (2004). Enron: an examination of agency problems. Critical Perspectives on Accounting, 15(6-7), 751-765.

Billing, M., & Evans, K. (2005). A Sarbanes-Oxley road map: Improving real estate data, dialogue and decision making in support of good corporate governance. Journal of Corporate Real Estate.

Blitz, D. Falkenstein, E., & Van Vliet, P. (2014). Explanations for the volatility effect: An overview based on the CAPM assumptions. The Journal of Portfolio Management, 40(3), 61-76.

Bonner, S. E. (1999). Judgment and decision-making research in accounting. Accounting Horizons, 13(4), 385.

Carey, P., & Simnett, R. (2006). Audit partner tenure and audit quality. The accounting review, 81(3), 653-676.

Cheng, Y. S., Chen, Y. S., & Chen, Y. C. (2013). Direct and mediating effects of auditor quality on auditor size and performance. International Business Research, 6(11), 134.

Cohen, J., Krishnamoorthy, G., & Wright, A. M. (2002). Corporate governance and the audit process. Contemporary accounting research, 19(4), 573-594.

Dalğar, H. (2011). MUHASEBE ÖĞRENİMİ GÖREN ÖĞRENCİLERİN TMS/TFRS HAKKINDAKİ FARKINDALIKLARINA YÖNELİK BİR ARAŞTIRMA. Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 16(1), 217-230.

Daugherty, B. E., Dickins, D., Hatfield, R. C., & Higgs, J. L. (2013). Mandatory audit partner rotation: Perceptions of audit quality consequences. Current Issues in Auditing, 7(1), P30-P35.

De George, E. T., Li, X., & Shivakumar, L. (2016). A review of the IFRS adoption literature. Review of accounting studies, 21(3), 898-1004.

Demsetz, H. (1967). Towards a theory of property rights, American Economic Journal, 347–359. Ownership, control and the firm, 57(2), 347-359.

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. Academy of management review, 14(1), 57-74.

Emery, G. W. (1998). Corporate Finance Principles and Practice. Addison-Wesley Longman Inc. United States of America.

Erdoğan, S., & Solak, B. (2016). Türkiye'de şeffaflık raporları ve bağımsız denetim sektörüne yönelik ampirik bir çalışma. Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 6(2), 175-196.

Eshitemi, P. B., & Omwenga, J. (2016). Effect of audit quality on the financial performance of listed parastatals in Nairobi Securities Exchange. Social Science and Humanities Journal, 3(12), 186-199.

Gordon, M. J. (1959). Dividends, earnings, and stock prices. The review of economics and statistics, 99-105.

Güngör Akpınar, F. (2020). http://www.tuyid.org/files/makaleler/EBulten_10_sayi_FGA.pdf

Hay, D., Knechel, W., & Willekens, M. (2014). The Routledge companion to auditing (1st ed., pp. 10-12). USA: Taylor & Francis Ltd.

Hayes, A. (2022). How Does the Stock Market Work? Retrieved May 15, 2022, from https://www.investopedia.com/articles/investing/082614/how-stock-market-works.asp

Healy, P. M., & Palepu, K. G. (2003). The fall of Enron. Journal of economic perspectives, 17(2), 3-26.

Hoyle, J. (1978). Mandatory auditor rotation: The arguments and an alternative. Journal of Accountancy (pre-1986), 145(000005), 69.

James, M. L. (2005). ACCOUNTING STUDENTS'KNOWLEDGE AND PERCEPTIONS OF THE SARBANES-OXLEY ACT OF 2002. In Allied Academies International Conference. Academy of Educational Leadership. Proceedings (Vol. 10, No. 1, p. 19). Jordan Whitney Enterprises, Inc.

Jensen, M. C., & Meckling, W. H. (2019). Theory of the firm: Managerial behavior, agency costs and ownership structure. In Corporate Governance (pp. 77-132). Gower.

KAP (2021). BIST Şirketleri. Retrieved September 17, 2021, from https://www.kap.org.tr/tr/bist-sirketler

KGK (2011). Retrieved 30 September 2021, from https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=660&MevzuatTur=4&MevzuatTertip=5.

Knechel, W. R., Niemi, L., & Sundgren, S. (2008). Determinants of auditor choice: Evidence from a small client market. International journal of auditing, 12(1), 65-88.

Kramer, L. (2022). An Overview of Bull and Bear Markets. Retrieved May 16, 2022, from https://www.investopedia.com/insights/digging-deeper-bull-and-bear-markets/

Majaski, C. (2022). Private vs. public company: What's the difference? Retrieved May 18, 2022, from https://www.investopedia.com/ask/answers/difference-between-publicly-and-privately-held-companies/

Marks, W. (2021). Factors That Affect The Stock Market. Retrieved September 25, 2021, from https://finance.zacks.com/factors-affect-stock-market-2405.html

Martinez, S. (2010). The Stock Market. Pysler Publishing. https://books.google.com.tr/books?id=T0r2y4fGaNsC&printsec=frontcover&dq=stock+market&hl=tr&sa=X&redir_esc=y#v=onepage&q=stock%20market&f=false

MAUTZ, Robert K., SHARAF, Hussein A., 1961, The Philosophy of Auditing, Sarasota, FL: American Accounting Association.

Miettinen, J. (2011). The role of audit quality on the relationship between auditee's agency problems and financial information quality. Paper presented at the Department of Accounting and Finance, University of Vaasa, Finland.

Miettinen, Johanna (2007), “Audit Quality and the Relationship between Auditee’s Agency Problems And Financial Information Quality: Research Proposal”, Department of Accounting and Finance University of Vaasa, 1-33.

Morales, G. (2018). *Global Marketing Management*. Scientific e-Resources.

Moutinho, Vânia- Cerqueira, Antonio-Brandao, Elisio (2012), “Audit Fees And Firm Performance”, November, Social Science Research Network, DOI: 10.2139/ssrn.2180020 (1-30).

Muth, J. F. (1961). Rational expectations and the theory of price movements. Econometrica: Journal of the Econometric Society, 315-335.

Nagy, A. L. (2005). Mandatory audit firm turnover, financial reporting quality, and client bargaining power: The case of Arthur Andersen. Accounting Horizons, 19(2), 51-68.

New York Stock Exchange (2021). Markets. Retrieved September 12, 2021, from www.tradinghours.com/markets/nyse

Rubinstein, M. (2002). Markowitz's" portfolio selection": A fifty-year retrospective. The Journal of finance, 57(3), 1041-1045.

Sanal, R. (2002). Türkiye'de yönetsel denetim ve devlet denetleme kurulu. TODAİE, Türkiye ve Orta Doğu Amme İdaresi Enstitüsü.

Sharif, T., Purohit, H., & Pillai, R. (2015). Analysis of factors affecting share prices: The case of Bahrain stock exchange. *International Journal of Economics and Finance*, *7*(3), 207-216.

Shleifer, A. (2000). Inefficient markets: An introduction to behavioural finance. Oup Oxford.

Şakar, B. (2009). Varlık Fiyatlamada Faktör Modelleri ve Üç Faktörlü Modelin İMKB’de Testi. *Yayımlanmamış Yüksek Lisans Tezi, İstanbul Üniversitesi Sosyal Bilimler Enstitüsü İşletme Anabilim Dalı. Şamiloğlu, F.(2006),“Şirket Büyüklüğü, Defter Değeri/Piyasa Değeri ve Ortalama Getiriler: İstanbul Menkul Kıymetler Borsası’nda Ampirik Bir İnceleme”, MUFAD Dergisi*, (32).

Şenyiğit, Y. B. & Zeytinoğlu, E. (2014). Zorunlu Denetçi Rotasyonunun Denetim Kalitesi Üzerindeki Etkileri Literatür Araştırması. İ. Ü. İşletme Fakültesi İşletme İktisadı Enstitüsü Yönetim Dergisi, (77),79 - 98.

Watts, R. L. (2003). Conservatism in accounting part I: Explanations and implications. Accounting horizons, 17(3), 207-221. DOI: 10.2139/ssrn.414522

Yusuf, D., & Cengiz, S. (2014). Muhasebe Denetiminde Hata ve Hilenin Denetçi Etiği Açısından İncelenmesi: Enron Skandalı Örneği. Çankırı Karatekin Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 5(1), 221-236.

Zhong, Y., & Li, W. (2017). Accounting conservatism: A literature review. Australian Accounting Review, 27(2), 195-213.