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The Effect of Audit Opinions on TOBIN'S Q and Stock Value by Panel Data Analysis

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ABSTRACT

Purpose – Financial statements of businesses contain information risk for various reasons. The most accepted way to reduce the information risk is the independent audit of the financial statements of the enterprises. It is thought that the independently audited financial statements will have a positive impact on the market value of the enterprises. The main purpose of the research under this assumption is to measure the impact of audit opinion on the market value of the companies that operated in the manufacturing sector and traded on Borsa Istanbul.

Design/methodology/approach – For measuring the impact of audit opinion on the market value of the companies that operated in the manufacturing sector and traded on Borsa Istanbul between 1998 to 2019 Tobin's Q ratio and stock price are used to represent the market value. Panel data analysis is used in the research, because of data sets consisting of both cross-section and time series. Tobin's Q ratio and stock price are determined as the dependent variables, audit opinion is determined as the independent variable and the leverage ratio and asset size are determined as control variables in the research.

Finding – It is examined within the scope of 1651 financial statements and audit reports of 110 companies. And it is examined Tobin's Q ratio values on 31 March, 30 June, 30 September, 31 December and at the time of the announcement of the audit report. Also it is examined the firm's stock price on the date of the audit firm's opinion, on the date of the one day before and after it.

Discussion – As a result of the research, it has been revealed that audit opinions do not affect the Tobin's Q ratio but affect stock price of companies in Turkey.

1. Introduction

The development of society and the more complex economic structure have increased the importance of obtaining reliable information. Investors' ability to make the right decision in line with their objectives depends on the validity and reliability of the information. Unreliable information would cause investors to make wrong decisions. For this reason, investors request assurance regarding the accuracy of the information to be used. (Sağlar and Tuan, 2009). Improving the information quality in the financial statement and securing the investor at the same time have increased the importance of independent audit (Chinedu and Chidoziem, 2017).

The purpose of the independent auditing of the financial statements is to determine whether the financial statements prepared by the enterprise customer comply with the financial reporting standards (Güredin, 2008). The audit report announced after the independent audit is a tool that provides communication between the auditor and the users of the financial statements. It is seen that the audit reports affect the investment decisions, credit decisions and stock prices of the users of the financial statements (Al-Thuneibat et al., 2007). In addition, it is seen that the audit report is widely used to reduce agency costs and increase firm value (Chen, et al., 2000). The audit report increases the reliability of the decision that financial statement users would make during the decision-making phase. This also increases the impact of the opinion determined in the audit report on the market value of the enterprises. There are 4 different types of opinions expressed in the audit reports, which are unqualified audit opinion (ISA 700), qualified audit opinion, adverse audit opinion and disclaimer of opinion (ISA-705). Brief explanations of the audit reports to be prepared regarding these opinions are given below (Güredin, 2008).

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Unqualified Audit Report: Financial statements are prepared in accordance with Generally Accepted Accounting Principles. Necessary explanations and footnotes are included in the financial statements. Audit working is completed without any scope limitations.

Qualified Audit Report: The auditor reaches the opinion that the financial statements as a whole are prepared accurately and honestly. However, either the scope of the audit is significantly limited or there is a violation of Generally Accepted Accounting Principles.

Adverse Audit Report: The auditor reaches the opinion that the financial statements as a whole are not prepared properly and honestly.

Disclaimer of Opinion: Either the auditor is unable to reach an opinion on the financial statements or the auditor would lose its independence.

The studies that deal with the impact of auditors' opinions on market value explore whether the auditor's opinions expressed in audit reports have informational value. Suppose the auditor's opinions expressed in the audit reports affect the decision-making processes of the users of the financial statements. In that case, it is concluded that these reports have informational value (Acar and Temiz, 2019). Besides that, if the unqualified audit opinion affects the decisions of the information users about the enterprises, it is thought that it would also affect the market value of the enterprises.

2. Literature review

In the literature, besides the studies investigating the relationship between the auditor's opinion and the stock return, it is seen that there are other studies investigating the impact of the audit quality, including the auditor's opinion, on the market value of the business. Below are some studies exploring the impact of an audit opinion on stock price and return.

In the study of Ameen et al. (1994), it was examined whether the adverse audit opinion had informational value for 177 small-scale companies traded in the over-the-counter market in the USA during the 1974-1978 period. As a result of the research, negative movements had been observed just before the adverse audit opinion was announced. However, no change was detected on the date of the announcement of the event and after.

In his study, Chen et al. (2000) carried out on the Shanghai Stock Exchange, they investigated whether the audit reports that were given a qualified (limited-positive) opinion between the years 1995-1997 had an impact on the abnormal return of the stock. The result provides evidence that audit reports with a qualified opinion had a negative impact on abnormal return. In addition, in the same study, no significant difference was found between qualified opinion and adverse opinion which were analyzed. Therefore, it can be concluded that the qualified opinion and the adverse opinion had the same impact on the abnormal return.

In the study that was conducted by Martinez et al. (2004), it was examined whether there was any relationship between audit reports of companies traded between 1992-1995 in the Spanish Stock Exchange, which qualified (limited-positive) opinion was given, and their stocks. In the study, 740 audit reports were used and this result highlights that the audit reports did not have any informational value for the investors and that the audit reports did not affect stock prices.

In their study, Aygören and Uyar (2007) showed whether the audit opinions announced in the audit reports had an impact on the abnormal returns, using data of 101 companies traded on the ISE (IMKB) for the years 2004 and 2005. Implications of the study revealed that investors obtained abnormal returns. In addition, another promising finding was that investors responded to the qualified (limited-positive) audit opinion more quickly than the unqualified audit opinion.

Tahinakis et al. (2010) conducted research on companies traded on the Athens Stock Exchange between 2005 and 2007. It was examined whether the audit reports had an impact on the stock return. From the results in the study it is clear that the audit report did not have an important impact on stock prices. Based on the findings it can be thought that no impact was observed due to the use of a 3-year time frame.

In his study, Kara (2015) found the impact of auditors' opinions on stock returns of 88 companies traded in Borsa Istanbul (excluding the financial sector). Data for the years 2009-2014 were used in the study. An

increase was observed in the stock returns of the companies that reported an unqualified audit opinion, and a decrease was observed in the stock returns of the companies that reported a qualified (limited-positive) opinion.

In their study, Acar and Temiz (2019) demonstrated whether the opinions of the companies that were traded in the 2005-2017 period and that disclosed their adverse or disclaimer of opinions in their audit reports had an impact on the stock return. It was observed that stocks with adverse or disclaimer-of-opinion auditor opinion in only 2 of 22 events had both day-to-day and cumulatively significant negative abnormal returns on the day of the event and the day after.

In the study of Karcıoğlu et al. (2021), they examined whether audit opinions caused a change in the stock prices of companies. In this context, the stock returns of 364 companies traded in Borsa Istanbul between the years 2019-2020 were examined in 6-month periods. From the findings, it is clear that adverse audit opinions created an increase in stock returns. In the context of the findings, it was concluded that the investors did not act rationally during the decision-making process and that they did not give importance to the audit opinions, and did not act rationally and made decisions with cognitive bias.

There are also some studies that were conducted by Chow and Rice, 1982; Dodd et al 1984; Tahinakis et al. 2010; Moradi et al, 2011; Wickramasingha and Nanayakkara 2015 showing discussions regarding the relationship between audit opinion and stock return. While no impact was found between audit opinion and stock return in these studies above, in the studies conducted by Firth 1978, Dopuch et al, 1986; Loudder et al. 1992; Choi and Jetter, 1992 a significant impact was found (Chen et al. 2000:434).

In addition to the studies on the stock price and return of the auditor's opinion, there are also studies investigating the impact on financial performance. When these studies are taken into consideration, it is seen that the auditor's opinion is generally taken as an element of audit quality. In these studies which discuss the relationship between independent audit quality and market value, other quality elements are also emphasized along with the auditor's opinion. Below are the studies investigating the impact of an auditor's opinion on market value as a variable of audit quality.

Ardiana (2014) investigated the impact of audit quality on firm value of firms that were continuously traded on the Indonesian Stock Exchange between 2007 and 2013. Data from 2,240 companies were used and a multiple linear regression analysis was performed. Audit duration, size of audit firms and unqualified audit opinion were used as variables affecting firm value. Firm size and firm age were also added to the model as the control variables. Firm value was measured with P/E, P/B and Tobin's Q. The result of the study delivers that the long duration of the audit affects all the variables that measure the firm value negatively and that working with large audit firms and the companies that receive unqualified opinions positively affect all the variables that measure the firm value.

Cengiz et al. (2017) examined the data of 90 companies operating in the BIST manufacturing sector for the years 2010-2014 and the relationship between audit quality and financial performance with multiple regression analysis. They measured the independent variable of the study, audit quality with four large audit firms and audit opinion variables, and the dependent variable, financial performance with Tobin Q, Return on Assets and Return on Equity ratios. The leverage ratio and company size were added to the analysis as control variables. As a result of the study, it has been determined that the independent audit quality had a significant and positive impact on financial performance.

In their study, Önder and İrkörücü (2018) examined the impact of independent audit quality on financial performance of companies traded in the BIST-100 Index between 2012 and 2016. In the study, the financial performance, which was the dependent variable, and the audit quality, which was the independent variable, were measured with the size of the independent audit firm (4 large audit firms) and the auditor's opinions. The control variable of the study was determined as the size of the traded company and the leverage ratio. Panel Data Analysis method was used using 480 company-year data. In the study, it was concluded that there was a significant and positive relationship between independent audit quality and financial performance.

Kesen and Salur (2020) investigated in their study whether the quality of independent audit had an impact on the financial performance of firms. For this purpose, they analyzed the financial statements of 148 companies traded in the BIST manufacturing sector between 2013 and 2018 and applied multiple linear regression

analysis. While financial performance, which was the dependent variable of the study, was measured with ROA, ROE and Tobin Q, audit quality, which was the independent variable, was measured with the size of the audit firm (4 large audit firms) and the opinions of the auditors. The control variables of the study were the leverage ratio and the asset size of the firms. As a result of the study, it was determined that audit quality had a positive impact on ROA among financial performance criteria and that audit quality did not affect ROE as much as ROA, but while it explained Tobin's Q ratio at a significant level, this ratio did not reveal a statistically reasonable result.

The studies mentioned above are the studies that examine the impact of audit and audit opinion on financial performance. Enterprises with a Corporate Governance Committee and Audit Committee are also considered to have an impact on the market value. Some similar studies in the related literature are presented below.

Coleman (2007) investigated the impact of corporate governance on firm performance in his study. In the study, Panel Data Analysis was applied with the data of 103 companies operating in Ghana, South Africa, Nigeria and Kenya during the years 1997 to 2001. While the independent variable was the characteristics of the management and the characteristics of the audit committee, the dependent variable was determined as Asset Profitability and Tobin Q. As a result of the study, it was observed that the size of the board of directors increased the value of the company, that the active role of the CEO in the board of directors had a negative impact on profitability, that the long-term service of the CEO increased the profitability of the company, and that the size of the audit committee and the frequency of meeting increased the Tobin Q while setting no relationship with firm profitability.

In their study, Fooladi and Shukor (2012) examined the relationship between independent audit quality and firm performance using the linear multiple regression method. In the study, data from 400 (non-financial) companies registered on the Malaysia Stock Exchange in 2009 were used. The market value, which was the dependent variable of the study was measured by considering Tobin Q and return on assets (ROA), and the independent variables of the study were measured by considering the independence of the board of directors, CEO Duality, board size, audit firm size (4 large audit firms). The size of the firm, the age of the firm and the leverage ratio were determined as the control variables of the study. In the study, it was concluded that there was a significant and positive relationship between the quality of independent audits and company performance. In addition, a significant positive relationship was found between the independence of the board of directors and Tobin's Q, and a significant negative relationship between CEO Duality and Tobin's Q. They also found out that there was no relationship between the characteristics of the board of directors and CEO duality and ROA.

Al Ani and Mohammed (2015) made use of the data of 117 companies (industry, services, finance) traded in the Oman Stock Exchange for the years 2009-2013 while examining the impact of auditor quality on the performance of companies. In the study, 4 large or 4 small audit firms represented the auditor quality as the independent variable while ROA, ROE, fair value of stocks and leverage ratio represented firm performance as the dependent variable. In the study conducted with the MANOVA test, it was concluded that there was a statistically significant and positive relationship between the audit firm, which was among the 4 largest, ROE and the market value of the stocks. In addition, it was determined that the impact of the audit firm, which was among the 4 largest in the industrial sector, only on ROE was statistically significant. For companies in the finance and service sector, it was concluded that the impact of the 4 large audit firms on the market value of the companies' stocks was statistically significant. Finally, it was determined that the 4 large audit firms did not have any impact on ROA and leverage ratio.

Tuan (2019) measured the relationship between the quality of independent audit service and financial performance applying the Fixed Effects Model, using 1206 company year data of 176 companies operating in the BIST 100 Index. The independent variable of the study was Abnormal Working Capital Accruals and the dependent variable was Return on Assets. As a result of the study, it was concluded that the quality of independent audit affected financial performance.

In addition to the studies that investigate the relationship between the auditor's opinions in the audit reports and the company's stock return or financial performance, there are also some studies investigating whether the auditor's opinion has informational value through investment and borrowing decisions that shape the

market (Bessel et al., 2003; Duréndez Gómez-Guillamón, 2003; Contreras et al., 2007; Chen et al., 2016; Kabajeh et al., 2012, Wickramasingha and Nanayakkara, 2015).

Financial performance measures a firm's policies and operating results (such as sales growth, profit growth, and firm success) in monetary terms. In other words, financial performance is defined as a subjective measure that shows how much profit the company makes and how well it uses its assets (Cengiz et al. 2017: 178). The financial performance of businesses is measured in two ways, accounting-based and market-based. Accounting-based measurement is based on the results of operations that occur in a certain period. Performance criteria in this group return on equity (ROE), return on assets (ROA), return on invested capital, and earnings per share. In market-based performance measurement, criteria that take into account the market performance of companies are used. Examples of these criteria are Tobin's Q, market cap/book value, and price/earnings ratio. It is seen that the criteria based on market performance are widely used by investors and analysts (Şenol and Ulutaş, 2018). The most important external criterion of financial performance is the market value of the firm (Vergili, 2017:105).

When the literature is analyzed, it is seen that accounting-based criteria and market-based criteria are used together from time to time. Although there are studies that include audit opinion as an element of audit quality, no study has been found that only examines Fixed Effects Model of audit opinion on market value. This study only examines the influence of the audit opinion on the market value of the company. The market-based Tobin's Q ratio is used to measure market value.

When the literature is examined, it is seen that there is no significant difference between qualified (limited-positive) opinion and adverse opinion, and between adverse opinion and disclaimer of opinion. Therefore, in this study, two variables are assigned as unqualified opinion and deviation from unqualified opinion.

3. Methodology

3.1. Data and descriptive statistics:

The purpose of this study is to determine the Fixed Effects Model of the independent audit opinions of 110 companies traded in the manufacturing sector of Borsa Istanbul (BIST) between 1998-2019 on the market value of the companies. In this study, 1941 financial tables, auditing reports and relevant data of these 110 companies are collected. Only 1651 of these financial statements are included in the research and tested with Panel Data Analysis. In the research, only the manufacturing sector is taken as a basis in order to ensure homogeneity.

Dataset based on the research: The main body of the research is the manufacturing companies traded in Borsa Istanbul. While collecting the data, the companies that are the basis of merging over time are excluded from the scope. The variables of auditor opinion, leverage ratio, asset size and stock prices have been collected as 22 years' data of 110 companies whose data are accessed and then Tobin's Q ratio is calculated. This information is obtained directly from the Public Disclosure Platform (www.kap.org.tr), the database where historical stock prices are published İş investment[1](www.isyatirim.com.tr), and the websites of companies and other regulatory institutions.

The number of companies traded in the manufacturing sector on the stock exchange between 1998 and 2019 and whose data we managed to access is 110 (excluding mergers). Businesses announce their annual reports in March. The data of the companies that announced their annual reports after March were excluded from the scope. In addition, the data of the companies for which the independent audit opinion could not be reached were not included in the research. In this context, 1651 company year data (1538 unqualified opinions, 113 deviations from unqualified opinions) are used in the research.

The variables of the research: In the research, the impact of the independent audit opinion on the market value is investigated. In this context, the independent variables of the research are determined as audit opinion (unqualified opinion and deviation from the adverse opinion), the leverage ratio and asset size. The leverage ratio and asset size are determined as control variables. As the independent variable of the research, the stock

[1] İS Investment was established in 1996 as the investment banking arm of Isbank Group in Istanbul. IS Investment provides a wide array of financial services to local and foreign investors, including Corporate Finance, Investment Advisory, Asset Management, Institutional Sales, Market Making and Liquidity Providing.

price and as the market value, the Tobin's Q Ratio, which is frequently used in the literature, are taken as a basis.

3.2 Research hypothesis and model

In order to examine the impact of audit opinion on market value, two different research hypotheses were prepared as follows.

H0: Independent audit opinion has no significant impact on market value (Tobin's Q).

H1: Independent audit opinion has a significant impact on market value (Tobin's Q).

The model to be used according to the purpose determined in the research is expressed as follows.[2] This model was created from panel data models in the literature (Martinez 2001, Ardiana 2014, Cengiz et al 2017, Önder and İrkörücü 2018, Kesen ve Salur 2020, Karcıoğlu, 2021).

$$PD\ (TQ)i,t= \beta0+ \beta1\ DNTG\ i,t-1\ + \beta2KLDi,t + \beta3AKTFBi,t+ \varepsilon i,t$$

TQ= Tobin's Q value is taken as the market value indicator. This value is calculated as follows.

TQ=(Market Value of Equity+Total Liabilities)/Total Assets

In order to examine whether the audit opinion creates a value for the users of the financial statements, the Tobin's Q value at the date of the audit opinion is also included in the research. If the audit opinion creates value, it is aimed to determine when the market is supposed to react from the date of the announcement of the opinion. In this context, quarterly time periods from the date of the announcement of the audit opinion are used to determine when the auditor's opinion has an impact on the market value variable, Tobin's Q. For this reason, Tobin's Q value of the companies on March 31, June 30, September 30 and December 31 is calculated. The report prepared for any year is presented to financial information users in March of the following year. The data of the companies whose audit report date was extended to another date after March were excluded from the scope.

TOB31M = Tobin's Q value of the companies on March 31.

TOB30H = Tobin's Q value of the companies on June 30.

TOB30E = Tobin's Q value of the companies on September 30.

TOB31A = Tobin's Q value of the companies on December 31.

TOBAT = Tobin's Q value of the companies at the time of the announcement of the audit report.

The other research hypothesis is as follows:

H0: Independent audit opinion has no significant impact on stock price.

H1: Independent audit opinion has a significant impact on stock price.

The other model to be used according to the purpose determined in the research is expressed as follows.

$$PD\ (F)i,t= \beta0+ \beta1\ DNTG\ i,t-1\ + \beta2\ KLDi,t + \beta3\ AKTFBi,t+ \varepsilon i,t$$

The closing price of the stock for the day before the announcement of the audit report, the closing price of the stock at the time of the announcement of the audit report, and the closing price of the stock for the day after the announcement of the audit report are taken as a basis to examine the impact of the audit opinion on the stock price.

[2] DNTG = Represents the auditor's opinions expressed in the audit report. If the audit opinion given by the auditor in the audit report is "Unqualified Opinion", the value of 1 is given, and if it is the "Deviation from Unqualified Opinion" (Adverse Opinion, Limited- Positive Opinion, Disclaimer of Opinion), the value of 0 is given.
KLD = Leverage Ratio. It is calculated as Total Debt/Total Assets.
AKTFB = Asset Size of the Company. It is calculated by taking the natural logarithm of the company's asset amount (TL).

A-1 = The firm's stock price one day before the date of the audit firm's opinion.

A0 = The firm's stock price at the date of the audit opinion announced.

A1 = The firm's stock price the day after the date of the audit firm's opinion.

4. Data and Findings

In order to examine the effect of the audit firm's opinion, the firm's asset size and leverage ratio on the firm's Tobin's Q ratio and stock price, 1941 data are analyzed between 1998 and 2019. After removing the missing data, it is examined within the scope of 1651 financial statements and audit reports. To examine the effect on Tobin's Q ratio, the date of the audit firm's opinion announcement is taken as a basis. The difference between this date and the Tobin's Q ratio values on March 31, June 30, September 30, and December 31, respectively, is considered. Similarly, in order to examine the effect of the firm's stock price on the change, the firm's stock price one day before the date of the audit firm's opinion is taken as a basis. Between this date, and the announcement date and the next day of the announcement date change in the stock price are examined. In the research, the opinion of the audit firm, the firm's asset size and leverage ratio are determined as independent variables. As the dependent variable, Tobin's Q ratio values on 31 March, 30 June, 30 September, 31 December and at the time of the announcement of the audit report and the stock price on different days are chosen separately as dependent variables.

Panel data analysis is applied to data sets in two dimensions, both horizontal and time. Panel data analysis was used in the study, as the data in the study were spread over 22 years of time. According to Hsiao in panel data models, there are n units and t observations corresponding to each unit (Arı ve Zeren, 2011:41). Arı and Zeren emphasize that the increase in the number of observations adds more variability to the measured variables and the multicollinearity problem disappears. In the study, the data of 110 enterprises were compiled from a total of 22 years of financial statement data. Panel data analysis was used to eliminate the differences brought about by time. In the analysis, the data of 4 years was canceled. Therefore, a total of 1647 data were taken into account.

In order to select the panel data analysis model to be used in the study, F Test and Hausman test were applied first. The existence of the unit effect of the data used in the study on the dependent variables was determined by the F test. According to the F test results, there is a unit effect in the models and the classical panel data model is not suitable. For this reason, Hausman test was applied for the selection of fixed effects or random effects model in the established models. The tests were applied according to the hypotheses H_0 = Random effects estimator is correct (Fixed effects estimator is not correct) H_1 = Fixed effects estimator is correct. Test results are shown in Table 1.

Table 1. F Test and Hausman Test Results

	Dependent Variables	F Test	Hausman Test	Results Fixed effect/ Random effect
1	TOBAT	F(109, 1538) = 9.03 Prob > F = 0.0000	chi2(3) = 8.15 Prob>chi2 = 0.0431	For 5% fixed effect
2	TOB31M	F(109, 1538) = 10.67 Prob > F = 0.0000	chi2(3) = 11.05 Prob>chi2 = 0.0115	For 5% fixed effect
3	TOB30H	F(109, 1538) = 11.06 Prob > F = 0.0000	chi2(3) = 8.79 Prob>chi2 = 0.0323	For 5% fixed effect
4	TOB30E	F(109, 1538) = 3.74 Prob > F = 0.0000	chi2(3) = 5.35 Prob>chi2 = 0.1481	Random effect
5	TOB31A	F(109, 1538) = 3.38 Prob > F = 0.0000	chi2(3) = 14.43 Prob>chi2 = 0.0024	Fixed effect
6	A-1	F(109, 1538) = 13.67 Prob > F = 0.0000	chi2(3) = 24.25 Prob>chi2 = 0.0000	Fixed effect
7	A0	F(109, 1538) = 13.60 Prob > F = 0.0000	chi2(3) =24.03 Prob>chi2 = 0.0000	Fixed effect
8	A+1	F(109, 1538) = 13.71 Prob > F = 0.0000	chi2(3) = 24.24 Prob>chi2 = 0.0000	Fixed effect

According to the Hausman test result, it is appropriate to evaluate the effect of the independent auditor's opinion on TOBIN's Q (TOBIN's Q values for the day of the auditor's opinion, 31 March, 30 June, and 31 December) and share values (Share values of the day, the day before and the day after the independent auditor's opinion was announced) according to the fixed effects model. It seems appropriate to evaluate only the effect of September 30 on TOBİN's Q value according to the random effects model. In order to ensure integrity in the study, all evaluations were made according to the fixed effects model and the Driscoll-Kraay estimator was used as the resistant estimator.

The results of the Driscoll Kraay estimator on the effect of the auditor's opinion on the TOBİN's Q value at the date of the announcement of the opinion are given in Table 2.

Table 2. Effect of Auditor's Opinion on TOBIN's Q value on the day the Opinion was announced

Regression with Driscoll-Kraay standard errors Method: Fixed-effects regression Group variable (i): id Maximum lag: 2				Number of obs = 1651 Number of groups = 110 F (3, 109) = 275,27 Prob>F = 0,0000 Within R-squared = 0,1564		
TOBAT	Coef.	Drisc.Kraay Std.Err.	t	P>|t|	%95 conf.	Interval
audit opinion	-0,465763	0,2116502	-0,22	0,826	-0,4660602	0,3729075
leverage ratio	0,9066996	0,0343477	26,40	0,000	0,8386235	0,9747757
asset size	-0,1206935	0,05877	-2,05	0,042	-0,2371737	-0,0042133
Cons.	3,370185	1,210012	2,79	0,006	0,9719804	5,76839

According to the results of the analysis, the leverage ratio of the control variables was found to be statistically significant at the 99% significance level, on the TOBİN's Q value of the day the auditor's opinion was announced. The effect of asset size was significant at the 95% significance level. However, the effect of the auditor's opinion was statistically insignificant.

Table 3. Effect of Auditor's Opinion on TOBİN's Q value as of 31 March

Regression with Driscoll-Kraay standard errors Method: Fixed-effects regression Group variable (i): id Maximum lag: 2				Number of obs = 1651 Number of groups = 110 F (3, 109) = 374,92 Prob>F = 0,0000 Within R-squared = 0,2002		
TOB31M	Coef.	Drisc.Kraay Std.Err.	t	P>|t|	%95 conf.	Interval
audit opinion	-0,581403	0,2081187	-0,28	0,780	-0,4706248	0,354342
leverage ratio	0,9266444	0,030971	29,92	0,000	0,8652609	0,9880278
asset size	-0,1456264	0,0614214	-2,37	0,019	-0,2673615	-0,0238912
Cons.	3,840469	1,286058	2,99	0,003	1,291543	6,389394

According to the results of the analysis, the leverage ratio of the control variables was found to be statistically significant at the level of 99% significance on the TOBİN'sQ value dated March 31. The effect of asset size was significant at the 95% significance level. However, the effect of the auditor's opinion was statistically insignificant.

Table 4. Effect of Auditor's Opinion on TOBİN's Q value dated 30 June

Regression with Driscoll-Kraay standard errors Method: Fixed-effects regression Group variable (i): id Maximum lag: 2				Number of obs = 1651 Number of groups = 110 F (3, 109) = 477,33 Prob>F = 0,0000 Within R-squared = 0,1675		
TOB30H	Coef.	Drisc.Kraay Std.Err.	t	P > | t |	%95 conf.	Interval
audit opinion	-0,1584421	0,2386207	-0,66	0,508	-0,6313806	0,3144964
leverage ratio	0,9373655	0,027984	33,50	0,000	0,8819023	0,9928288
asset size	-0,1385365	0,063218	-2,19	0,031	-0,2638326	-0,0132405
Cons.	3,859097	1,255399	3,07	0,003	1,370937	6,347258

According to the results of the analysis, the leverage ratio of the control variables was found to be statistically significant at the level of 99% significance on TOBİN's Q value dated 30 June. The effect of asset size was significant at the 95% significance level. However, the effect of the auditor's opinion was statistically insignificant.

Table 5. Effect of Auditor's Opinion on TOBİN's Q value dated September 30

Regression with Driscoll-Kraay standard errors Method: Fixed-effects regression Group variable (i): id Maximum lag: 2				Number of obs = 1651 Number of groups = 110 F (3, 109) = 204,11 Prob>F = 0,0000 Within R-squared = 0,0292		
TOB30E	Coef.	Drisc.Kraay Std.Err.	t	P > | t |	%95 conf.	Interval
audit opinion	-0,4041304	0,4363807	-0,93	0,356	-1,269023	0,460762
leverage ratio	0,895686	0,0482846	18,55	0,000	0,7999875	0,9913844
asset size	-0,0868269	0,0863476	-1,01	0,317	-0,2579651	0,0843114
Cons.	3,233671	1,397811	2,31	0,023	0,4632551	6,004087

According to the results of the analysis, the leverage ratio of the control variables was found to be statistically significant at the level of 99% significance on TOBİN's Q value dated September 30. The effect of asset size and auditor's opinion was statistically insignificant.

Table 6. Effect of Auditor's Opinion on TOBİN's Q value as of 31 December

Regression with Driscoll-Kraay standard errors Method: Fixed-effects regression Group variable (i): id Maximum lag: 2				Number of obs = 1651 Number of groups = 110 F (3, 109) = 177,39 Prob>F = 0,0000 Within R-squared = 0,0324		
TOB31M	Coef.	Drisc.Kraay Std.Err.	t	P > | t |	%95 conf.	Interval
audit opinion	-0,7553026	0,5709083	-1,32	0,189	-1,886824	0,3762191
leverage ratio	0,876608	0,043811	20,01	0,000	0,789776	0,9634399
asset size	-0,1729561	0,161546	-1,07	0,287	-0,493135	0,1472228
Cons.	5,366579	2,871246	1,87	0,064	-0,3241371	11,05729

According to the results of the analysis, the leverage ratio of the control variables was found to be statistically significant at the level of 99% significance on TOBİN's Q value dated 31 December. The effect of asset size and auditor's opinion was statistically insignificant.

Table 7. The effect of the Auditor's Opinion on the Share value of the day before the announcement of the Opinion.

Regression with Driscoll-Kraay standard errors Method: Fixed-effects regression Group variable (i): id Maximum lag: 2				Number of obs = 1651 Number of groups = 110 F (3, 109) = 26,07 Prob>F = 0,0000 Within R-squared = 0,0682		
A-1	Coef.	Drisc.Kraay Std.Err.	t	P>|t|	%95 conf.	Interval
audit opinion	12,70991	5,598432	2,27	0,025	1,614002	23,80582
leverage ratio	0,0813772	1,396852	0,06	0,954	-2,687137	2,849892
asset size	6,668351	1,525434	4,37	0,000	3,644989	9,691712
Cons.	-129,2412	30,41628	-4,25	0,000	-189,5263	-68,95717

According to the results of the analysis, the effect of the auditor's opinion on the share value the day before the announcement of the auditor's opinion was found to be statistically significant at the 95% significance level, and the control variable at the 99% significance level. However, the effect of leverage ratio was statistically insignificant.

Table 8. Effect of the Auditor's Opinion on the Share value on the day the Opinion is announced

Regression with Driscoll-Kraay standard errors Method: Fixed-effects regression Group variable (i): id Maximum lag: 2				Number of obs = 1651 Number of groups = 110 F (3, 109) = 26,55 Prob>F = 0,0000 Within R-squared = 0,0674		
A0	Coef.	Drisc.Kraay Std.Err.	t	P>|t|	%95 conf.	Interval
audit opinion	12,88656	5,658414	2,28	0,025	1,671764	24,10135
leverage ratio	0,0741294	1,407558	0,05	0,958	-2,715605	2,863864
asset size	6,674489	1,52322	4,38	0,000	3,655517	9,693461
Cons.	-129,5027	30,41907	-4,26	0,000	-189,7923	-69,21312

According to the results of the analysis, the effect of the auditor's opinion on the share value at the date of the announcement of the auditor's opinion at the 95% significance level and the control variable's asset size at the 99% significance level was found to be statistically significant. However, the effect of leverage ratio was statistically insignificant.

Table 9. Effect of the Auditor's Opinion on the Share value of the day following the announcement of the Opinion.

Regression with Driscoll-Kraay standard errors Method: Fixed-effects regression Group variable (i): id Maximum lag: 2				Number of obs = 1651 Number of groups = 110 F (3, 109) = 26,84 Prob>F = 0,0000 Within R-squared = 0,0680		
A+1	Coef.	Drisc.Kraay Std.Err.	t	P>|t|	%95 conf.	Interval
audit opinion	12,99758	5,68704	2,29	0,024	1,726051	24,26911
leverage ratio	0,1013367	1,404828	0,07	0,943	-2,682986	2,88566
asset size	6,660269	1,509342	4,41	0,000	3,668803	9,651735
Cons.	-129,359	30,17673	-4,29	0,000	-189,1683	-69,54974

According to the results of the analysis, the effect of the auditor's opinion on the share value one day after the announcement of the auditor's opinion was found to be statistically significant at the 95% significance level and the control variable at the 99% significance level. However, the effect of leverage ratio was statistically insignificant.

5. CONCLUSION

The audit opinion, which provides the communication between the auditor and the users of the financial statements during the independent audit process and which is explained in the audit report, can affect the decision-making processes of the decision makers. When the related studies are analyzed in the literatüre section, it is clearly seen that there are studies examining whether the audit opinions have informational value and that the impact of audit opinions on the decision-making processes differs. In this research, the impact of the audit opinions, which are included in the announced audit reports of 110 companies trading in the manufacturing sector between 1998 and 2019 in Borsa Istanbul, on the financial performance of the enterprises is examined by using panel data analysis.

In order to examine the impact of the audit opinion on financial performance, Tobin's Q value on the date the audit opinion is declared and Tobin's Q value on March 31, June 30, September 30 and December 31 from the date on which the opinion is expressed are calculated. In the examination, it has been understood that the auditor's opinion has no effect on the firm performance TOBİN's Q value.

In order to see the impact of the audit opinion on the stock price, the changes in the closing price of the stock on the date of the announcement of the audit opinion and in the closing prices of the stock 1 day before and 1 day after are monitored. In the examination, it has been determined that the auditor's opinion has an effect on the share value of the enterprise. However, the effect level is the same the day before the auditor's opinion is announced, and the day and the day after it is announced. This may also be because the outcome of the auditor's opinion is known before the day it is announced.

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