An Appraisal of the Impact of Audit Qualifications on Firms’ Stock Exchange Price Fluctuations

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Abstract

Audit reports constitute the basic mean of communication between the auditor and the users of financial statements. Consequently, statements have to be comprehensible and inclusive, in order to be rightly appreciated and used by investors in their decision-making process. Nevertheless, the importance that the investors attribute to reports and their contents is questionable and needs to be further investigated. The results of an abundance of published on the matter lead to controversial conclusions. This aim of this paper is to examine audit reports that have been issued and published for companies with shares on the Athens Stock Exchange (ASE) during the 2005-2007 periods. By using the market model and calculating bonuses, the impact of the auditing report on a company’s stock price is examined. Research results indicate that audit reports have limited informational content for investors and do not form part of their decision making process. This may be due to the lack of understanding for the contents, importance and value of such reports.

Keywords: Audit Reports, Auditing Standards, Financial Statements, Stock Price Fluctuations
JEL Classifications: M42, M41
1. Introduction

A company’s financial statements present managers, investors, creditors and general users with the company’s financial status. It should, therefore, be ensured that data shown in financial statements are actual and provide all necessary information. As such, corporate financial statements are subject to audit by external and independent auditors.

The auditing process is completed with the drafting of the auditor’s opinion through an audit report prepared and signed by the auditor. In this report, auditors describe the findings of the audit and express their view on the true and fair condition of the company’s financial status through its published financial statements. Yet, the importance attributed by investors to these reports and their contents is rather questionable and require further examination.

As mentioned by Arens et al. (2006) the demand for audit services is triggered by many factors, including the remoteness gap between the users of the financial statements and the preparers of these statements; the conflict of interest between the users of the financial statements; the complexity of the economic transactions; and the expected effect of the financial statements on decision making. However, because the audit report is the medium of communication between the auditor and the users of the audit report, this report must be understandable, objective and accepted by the users as a relevant source of information.

The importance of audit reports is significant and the weight placed on their informational content is substantial. Many researchers examined audit reports as part of their field of research, both at a theoretical and an empirical level. Studies have been performed not only in Europe and the US but, also, in Australia and within the continuously growing auditing market of China. Results include certain contradicting conclusions.

This aim of this paper is to examine the impact of audit reports that have been issued and published for companies, on the shares prices’ fluctuations at the Athens Stock Exchange (ASE) during the 2005-2007 periods. By using the market model and calculating bonuses, the effect of the auditing report on a company’s stock price is examined. In order to evaluate the informational content of audit reports, the various types of audit opinions expressed are examined, while in order to assess market response, stock price changes are examined resulting from the communication of the contents of audit reports.

2. Audit Reports

According to the Hellenic Auditing Standard 7700 (par 3), Audit Reports provided by Certified Auditors must share a common structure. Audit reports for financial statements can be divided into four main categories, depending on the auditor’s opinion: (a) unqualified opinion reports, (b) qualified opinion reports, (c) disclaimer of opinion reports, and (d) adverse opinion reports.
**Unqualified opinion reports:** Auditors, following the results of the activities performed, reach the conclusion that the financial statements of the company under examination present in a true and fair manner the company’s financial position. A basic requirement is that the auditing process is not impeded in any way and that no unusual uncertainties or risks exist that cannot be predicted or taken care of.

Auditors provide qualified opinion reports when, following the auditing process that took place, they believe that the financial statements present in a true and fair manner the company’s financial position, but are unsure of certain values or ways to handle certain facts. This type of report does not question the accuracy of financial data, but expresses hesitation with regard to its wholeness, like deviation from international auditing standards, lack of consistency in financial statements among different fiscal years, limited scope by fault of the examined company or not, etc.

**Disclaimer of opinion reports** are used in cases when the auditor is not satisfied with the evidence collected and is not convinced about the accuracy of financial statements. The disclaimer of opinion report does not constitute an opinion, and auditors must be in position to justify their disclaimer. Their report must include in detail the reasons for the disclaimer and any reservations on the accuracy and regularity of the financial statements.

**Adverse opinion reports** are the exact opposite from unqualified opinion reports. In these reports, auditors clearly express their opinion that the financial statements of the examined company do not reflect its financial status in a true and fair manner. Examples of adverse opinions expressed are serious incompliance with International Accounting Standards and existing Laws, ineffectiveness of the accounting system or the internal audit system, as well as, efforts by the company’s managers to deceive the users of its financial statements.

Besides the above-mentioned audit report categories, there are other types of reports for more specialized instances. These types are not very common but are easier for users, by providing useful and more specialized information. For example: (a) audit reports of consolidated financial statements, (b) audit reports of concise financial statements and (c) reports of review that concern the intermediate financial statements published by a company.

3. Past Literature

Audit reports, as a true and fair means of presenting a company’s financial data, are by now a legally established obligation for companies in most countries around the world. The methodology used in all activities is similar. The results reached by most studies are contradicting and no answers have been provided as to whether investor decisions are affected by the content of published audit reports. Some researchers believe that the type of the audit report affects the company’s stock market price, while others see no relation between the two. The studies presented below have taken place in different countries with a
With regard to the methodology followed, researchers stress that there are certain critical points. First, determining the date when the audit report contents are made known. Secondly, select the companies that will participate in the sample. Due to certain restrictions imposed by researchers (such as the company size and its inspection by different auditing companies), as well as, to the availability of the necessary data, it is possible that the companies finally selected share similar characteristics and therefore their investors respond in similar ways. Moreover, the way of determining market response to the audit report contents and the estimation of stock prices in the case of “clean” reports is a difficult and demanding research task. Finally, isolating the effect of other factors (such as published information involving the examined company, important developments in its broad economic environment, etc.), besides the audit report contents and the fluctuation of stock prices.

Firth (1978), with the occasion of the sudden increase in the number of qualified opinion reports issued in the United Kingdom in the mid 70s, carried out a study with the purpose to examine the effect of these certificates on investment decisions. The results of the study showed that certain types of qualified opinion reports contain important information that affect investment decisions, while they affect stock prices of the companies involved in a negative manner, immediately after their announcement. Ball, Walker and Whittred (1979) examined whether the issuing of a qualified audit report drives Australian investors towards changing their forecasts on stock value. From the analysis of results it emerged that the behavior of investors depends on the type of reservation that is expressed in the audit report. However, it is pointed out that these results must be interpreted with caution due to research restrictions.

Chow and Rice (1982) have studied the power in the US market of the notion that issuing a qualified audit report reveals unfavorable information, which managers intend to hide. The authors have concluded that issuing a qualified audit report has a negative impact on a company’s stock price. This relationship, which indicates solely the existence of correlation among variables and not a causal link, seems to vary depending on the reservations expressed. Elliott (1982) studied the relationship between qualified reports and the excess performance of company stocks. Elliott’s research reached that for certain types of reservations expressed, there is an important fall of company stock prices for 45 weeks prior to the announcement of profits.

Shelvin and Whittred (1984), by applying an experimental model similar to the one used by Elliott (1982), attempt to obtain further information on how the issuing of a qualified opinion report affects a company’s stock price. From the results of this study, no such effect has been documented. Yet, it has emerged that stock prices fall during the period prior to the announcement, and that the extent of this fall depends on the type of reservations presented in the certificate. Dodd, Dopuch, Holthausen and Leftwich (1984) examine the impact on stock
prices of the issuing of a qualified opinion report, while other examinations take place in order to determine the effect of disclaimer of opinion reports. From the results of the research process, it has been concluded that the publishing of a report with reservations for enterprises is a rare case; yet when it actually happens, it causes negative abnormal returns on company stocks. However, researchers cannot provide a satisfactory explanation on the nature of the results. They stress though that an increase in reports with reservations has been remarked in the latest years, and a relevant study for the period after 1982 would produce interesting findings.

Chen and Church (1996) have attempted to study the correlation between audit reports for a company’s Going Concern Qualifications – GC with the market response in the case of bankruptcy. The analysis results show that companies that receive a GC certificate present less negative abnormal returns on their stock prices following the announcement of bankruptcy, in comparison with companies that receive a “clean” certificate. This sanctions the notion that GC certificates have informational value to investors. Finally, it should be mentioned that bankruptcy is not the sole form of financial difficulties encountered or the only reason to issue a GC certificate.

Soltani’s study (2000) is the first empirical study that examines the case of France, and it attempts to examine the relationship between the opinion expressed by a company’s auditors and its stock prices. The general conclusion of the study is that significant negative abnormal returns appear in company stocks, for which qualified audit reports have been issued both prior to and following the announcement of their contents, thus proving that certificates have an informational value to investors. The same stands for “clean” certificates that contain a paragraph with “remarks and notes” with similar content to that of qualified audit reports.

The essay of Bessell, Anandarajan and Umar (2003) attempts to examine whether the Audit Report on a General Purpose Financial Report – AUS 702, which is issued when there is doubt on a company’s going concern qualifications in Australia, offers useful information to the users of financial statements and whether it affects their decisions. Considering the two types of reports that can be issued in such cases – unqualified opinion report with focus on a specific topic and qualified opinion report – these examine the effect that each report type has, as well the differences between the two.

The study of Lin, Tang and Xiao (2003) is one of the first attempts made within Chinese borders to examine the effect of audit reports on investment and financing decisions. The results of the questionnaire analysis indicate that the qualified opinion reports have a negative impact on the estimation of a financial statement's reliability with regard to the beliefs of banking and financial institution employees. The reservations expressed in a report have slight impact on the beliefs of managers and financial auditors. Yet, these reservations do not seem to affect the investment and financial decisions of these two groups at all. The study of Martinez et a. (2004) is one of the first empirical studies that took place in Spain and which
attempt to examine the effect of audit reports on the decisions of investors, as well as the extent of their informational content. Researchers reached the conclusion that qualified audit reports do not have any informational value to investors and do not affect company stock prices.

The study of Hamill, Pei and Opong (2004) aims at examining the consequences of audit report explanatory paragraphs on enterprises with shares in the stock exchange, as well as whether investors can understand the difference between Special Treatment (ST) reports and Modified reports. Following the analysis of results, Hamill et al. were not in position to support that the existence of explanatory paragraphs in audit reports have informational value to investors. What they seem to overlook is the existence of an ST report. It has been observed that the performance of companies that had received an ST report was notably lower than the respective performance of auditing companies for the period both prior to and following the announcement.

Al-Thuneibat, Khamees and Al-Fayoumi (2008) examine the informational value of audit reports and their contribution to investors’ decisions. The methodology used is based on market study and examines whether audit reports contain information not revealed in financial statements, and which affect prices and stock performance. The outcome was that investors probably do not understand the content of audit reports and cannot acknowledge its value. Al-Thuneibat et al propose that some kind of educational procedure takes place to inform investors on audit reports. They further suggest that the study is expanded to several different time periods besides the period around the publication of audit reports.

4. Research Methodology & Data

Based on the stock actual prices and performance, the research methodology of the market study model was used. The selected methodology has been, already, used by a great number of authors, as described in the literature review (i.e. the most recent one by Al-Thuneibad et al, 2008). As Brown and Warner (1984) concluded, the research methodology based on the market model is both well specified and relatively powerful under a wide variety of conditions. However, the applicability of these conclusions to event studies, using daily data, is an open question. Similarly, Bartholdy et al. (2007) state that it is possible to perform an event studies on a small stock exchange if certain adjustments are made. Among others, a minimum of 25 events appears necessary to obtain acceptable size and power in statistical tests.

The purpose of the present study is to examine whether the information provided through audit reports - which constitute the final product of the auditing process - are thought as relevant and useful by investors for taking decisions. In order to study the informational content of audit reports, unqualified opinion reports and disclaimer of opinion reports during 2005-2007 were used for companies with shares in the Athens Stock Exchange. From a total of 388 companies with shares in the Athens Stock Exchange during these three years, 40
unqualified opinion reports have been found (corresponding to 28 companies), 16 qualified audit reports (corresponding to 16 companies), while no disclaimer of opinion reports have been found. As a result, the final sample consisted of 51 audit reports, corresponding to 39 companies.

In order to examine the value of audit report informational content to users and the reactions produced following their announcement, the stock prices for the corresponding companies have been used.

The research process is based on the examination of the following two assumptions:

**H$_{0}$**: Qualified, unqualified or disclaimer of opinion reports have no significant impact on the stock prices of the corresponding companies.

**H$_{1}$**: Qualified, unqualified or disclaimer of opinion reports have a significant impact on the stock prices of the corresponding companies.

In order to estimate market response to the announcement of a “non-clean” audit report, the change of a company stock performance is used, because of such an announcement. If a certain unexpected stock performance takes place on the day of the audit report announcement, this would signify that this report has informational content for its users.

The date used to determine the announcement of audit report contents is the one chosen by the company’s managers. In case there is no clear date reference, Greek Legislation defines that financial statements along with the audit report must be published at least 20 days prior to the General Assembly of the shareholders; therefore, the 20th day prior to this Assembly is used for the purposes of our study. The examination period in each case has been determined at 11 days around the announcement date (5 days prior to the announcement, the announcement day and 5 days following the announcement). The time period used to estimate the variables is 5 months prior to day 1 of the examination period, which is the 5th day prior to the announcement of the audit report contents.

The following steps were followed for carrying out our study: First, the actual stock performance was estimated based on the data on actual stock prices for the participating companies that received a “non-clean” report; these were calculated using the following equation:

\[
R_{i,t} = \frac{(P_{i,t} - P_{i,t-1})}{P_{i,t-1}}
\] (1)
where: \( R_{i,t} \) the actual performance of stock (i) on day (t) \\
\( P_{i,t} \) the closing price of stock (i) on day (t) \\
\( P_{i,t-1} \) the closing price of stock (i) on day (t-1).

The same process was followed to estimate the performance of the general price index of the Athens Stock Exchange (ASE), which was used as a typical market index. The equation used is:

\[
R_{m,t} = \frac{(MP_{i,t} - MP_{i,t-1})}{MP_{i,t-1}}
\]

(2)

where: \( R_{m,t} \) the performance of the market portfolio on day (t) \\
\( MP_{i,t} \) the closing price of the market index on day (t) \\
\( MP_{i,t-1} \) the closing price of the market index on day (t-1)

In order to estimate the parameters \( \alpha_i \) and \( \beta_i \) of the regression line for each “non-clean” report, the actual stock prices and actual market index were used for the evaluation period (5 months prior to the examination period). Based on these parameters (\( \alpha_i \) and \( \beta_i \)) and the type of market model, the expected performances were calculated for each stock during the examination period (11 days around the announcement date).

\[
ER_{i,t} = \alpha_i + \beta_i(R_{m,t}) + \epsilon_i
\]

(3)

where: \( ER_{i,t} \) the expected performance of stock (i) on day (t) \\
\( R_{m,t} \) the performance of the market portfolio on day (t) \\
\( \alpha_i \) the constant \\
\( \beta_i \) the systematic risk

Then, the Abnormal Return (AR) was estimated for each stock, as the difference between the actual and expected performance.

\[
AR_{i,t} = R_{i,t} - ER_{i,t}
\]

(4)
In order to avoid the effect of turmoil because of the fluctuation of stock prices, the daily Average Abnormal Return (AAR) of the sample stocks was also calculated.

\[ AAR_{t,d} = \frac{\sum AR_{t,d}}{N} \]  

(5)

Finally, the Cumulative Average Abnormal Return (CAAR) was estimated, in order to determine the overall effect of “non-clean” audit reports during the examination period.

\[ CAAR = \sum AAR_{t,d} \]  

(6)

The assumptions examination was carried out with the assistance of t distribution tests, using the SPSS application.

5. Research Results

The results of the (t) distribution tests with regard to the variable of the arithmetic mean of the Average Abnormal Return (AAR) of stocks are shown in Table 1. These tests are performed for the examination period, defined at 11 days from the day of announcement of the audit report contents. As has been remarked, the values of the AAR variable do not have a fixed sign (positive or negative) for the duration of the examined period. For the fifth and second day prior to the announcement of the report contents, as well as, for the first day following the announcement, the performance is negative, while it is positive for the remaining days. These values reveal that there is no standard means of response for stock prices.

However, for all these values, with the exception of the day prior to the announcement, the value of the level of significance is over 5%. This fact leads to the acceptance of the zero assumption and therefore to the conclusion that unqualified opinion, qualified opinion and disclaimer of opinion reports have little effect on stock prices and performance of the companies involved. This conclusion does not only stand for the day prior to the announcement, when the alternative assumption is accepted. During this day, unqualified opinion, qualified opinion and disclaimer of opinion reports have significant results on
company stock prices, as a statistically significant positive reaction has been observed in the performance of stock prices.

Table 1: t distribution tests with regard to the variable of the arithmetic mean of the Average Abnormal Return (AAR)

<table>
<thead>
<tr>
<th>Days</th>
<th>AAR</th>
<th>SD</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>-5</td>
<td>-4.1523</td>
<td>24.2894</td>
<td>0.491</td>
</tr>
<tr>
<td>-4</td>
<td>3.5226</td>
<td>8.2672</td>
<td>0.098</td>
</tr>
<tr>
<td>-3</td>
<td>4.2303</td>
<td>8.7802</td>
<td>0.064</td>
</tr>
<tr>
<td>-2</td>
<td>-3.3652</td>
<td>26.3559</td>
<td>0.606</td>
</tr>
<tr>
<td>-1</td>
<td>4.4425</td>
<td>7.7650</td>
<td>0.031</td>
</tr>
<tr>
<td>0</td>
<td>3.1268</td>
<td>7.2123</td>
<td>0.093</td>
</tr>
<tr>
<td>1</td>
<td>-2.2922</td>
<td>17.5089</td>
<td>0.597</td>
</tr>
<tr>
<td>2</td>
<td>2.8844</td>
<td>8.3713</td>
<td>0.175</td>
</tr>
<tr>
<td>3</td>
<td>2.6684</td>
<td>5.4986</td>
<td>0.063</td>
</tr>
<tr>
<td>4</td>
<td>2.3985</td>
<td>9.0352</td>
<td>0.290</td>
</tr>
<tr>
<td>5</td>
<td>2.5041</td>
<td>8.2119</td>
<td>0.227</td>
</tr>
</tbody>
</table>

The uneven behavior of the variable of the arithmetic mean of the stocks average abnormal return (AAR) cannot be established through the variable graph (Graph 1). For the duration of the examination period, this variable has both positive and negative values, both prior to and following the announcement day, without the hint of a specific method.

Graph 1: the arithmetic mean of the Average Abnormal Return (AAR)
In order to ascertain whether there are significant differences in the impact on stock prices and performances depending on the day of the examination period, the method used is the analysis of variance (ANOVA) of the arithmetic mean of the Average Abnormal Return (AAR) on company stocks.

From the analysis results shown in Table 2, it can be seen that the value of the level of significance is higher than 5%. It is, therefore, concluded that there are significant differences in the impact produced on stock prices depending on the day of the examination period.

**Table 2: t distribution tests with regard to the variable of the arithmetic mean of the Average Abnormal Return (AAR) of stocks**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAR</td>
<td>33</td>
<td>1.4516</td>
<td>3.1292</td>
<td>0.155</td>
</tr>
</tbody>
</table>

From the calculations and tests of the variable of the cumulative arithmetic mean of the Average Abnormal Return (CAAR), it is remarked that the significance is higher than 5%. This fact leads to the acceptance of the zero assumption and therefore to the conclusion that unqualified opinion, qualified opinion and disclaimer of opinion reports have little effect on stock prices and performances of the companies involved.

**Table 3: t distribution tests with regard to the variable of the Cumulative arithmetic mean of the Average Abnormal Return (CAAR) of stocks**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAAR</td>
<td>51</td>
<td>1.4516</td>
<td>5.4982</td>
<td>0.292</td>
</tr>
</tbody>
</table>

In order to determine whether there are any consequences on the variable of the cumulative arithmetic mean of the average abnormal return (CAAR), the variable values are calculated for every two opposite days around the day of the audit report announcement, and these values were tested with the use of the (t) distribution.

From the results shown in Table 4, it is deducted that the negative impact on stock performance only exists for the period T(2) and T(-2). Yet this result, as well as, the results of all the remaining periods, is not statistically significant if the level of significance is over 5%.

**Table 4: t distribution tests with regard to the variable of the Cumulative arithmetic mean of the Average Abnormal Return (CAAR) of stocks**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Sig.</th>
</tr>
</thead>
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<tr>
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<td>0.292</td>
</tr>
</tbody>
</table>
Table 4: t distribution tests with regard to the variable of the Cumulative arithmetic mean of the Average Abnormal Return (CAAR)

<table>
<thead>
<tr>
<th>Days</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(1) and T(-1)</td>
<td>51</td>
<td>1.0751</td>
<td>7.3338</td>
<td>0.554</td>
</tr>
<tr>
<td>T(2) and T(-2)</td>
<td>51</td>
<td>-0.2404</td>
<td>15.5798</td>
<td>0.950</td>
</tr>
<tr>
<td>T(3) and T(-3)</td>
<td>51</td>
<td>3.4493</td>
<td>6.8420</td>
<td>0.054</td>
</tr>
<tr>
<td>T(4) and T(-4)</td>
<td>51</td>
<td>2.9606</td>
<td>7.9720</td>
<td>0.145</td>
</tr>
<tr>
<td>T(5) and T(-5)</td>
<td>51</td>
<td>0.8241</td>
<td>11.8214</td>
<td>0.777</td>
</tr>
</tbody>
</table>

6. Conclusions

The audit report as drafted by a company’s external auditor and the results of the audit conducted and expressed through this report form the basis of the auditing process. Through this report, all those involved can obtain information on the plausibility and accuracy of the data presented in a company’s financial statements.

The issue of the informational value of the audit report contents and its effect on investment decisions has occupied several researchers in the past. Studies cover various time periods and several countries. The results reached by these studies are conflicting, making it impossible to reach a single conclusion.

From the results of variables estimated and the tests performed, no specific model has been found to exist for the reaction of investors, as expressed through stock performance, for those companies that received unqualified opinion, qualified opinion and disclaimer of opinion reports. Therefore, the zero assumption is accepted, which determines that unqualified opinion, qualified opinion and disclaimer of opinion reports have no clear and statistically significant effect on stock prices during the announcement date of the report contents, as well as, around this date. The exception is the positive and statistically significant reaction on stock performance one day prior to the day of announcement. Despite the above, this fact cannot be justified based on theoretical background.

The results of this study indicate that audit reports have limited informational content for investors and do not form part of their decision making process. This may be due to the lack of understanding for the contents, importance and value of such reports.

It must, also, be mentioned that the present study does not consider the likely existence of other important events taking place during the examined period and which have possibly affected company stock prices. In addition, due to the absence of previous relevant researches in the Greece market, it would be interesting and useful for business analysts and practitioners to start performing more studies on the subject that cover different time periods and use different research processes.
References


Publications Ath. Stamouli, Athens
Official Journal of the Hellenic Republic 1589, Copy Second, October, 2004
Official Journal of the Hellenic Republic 364B/7-5-97