# Stock Market Reaction to Yearly Earnings Announcements for Firms in Financial Distress: Evidences from Italy[*]

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The purpose of this paper is to feed the debate regarding investor's reaction to relevant financial information releases as yearly earnings announcements (EAs) with a specific focus on financial distressed firms. Using the event study methodology and adopting two well-known tests in the literature, we analyzed Italian listed companies in the period of 2008-2016, to detect whether there is a market reaction to EAs releases for firms in financial distress, adopting as a measure of financial distress the presence in the audit report of a going concern opinion (GCO). In the Italian legislation, the GCO must be communicated immediately to the market and this can be done before, simultaneously or after EAs. The achieved results shed light on the negative impact of EAs of distressed firms receiving a GCO. On the other hand, the possibility that negative abnormal returns are mainly due to the GCO release cannot be neglected. Hence, through additional tests, we found that effects of EAs are more persistent and significant than GCOs, in accordance with the prevailing literature, which sees, on average, EAs predominant information for investors. Our study is pioneering in disentangling possible effects of confounding events for the Italian stock market. The EAs superior effect confirms the dynamics characterizing weak and small equity markets as Italy where, before GCOs releases, some relevant and more precise information (such as earnings magnitude) is often held by shareholders because of the high percentage of family firms and/or concentrated ownership, demonstrating also the weakness of auditor profession if compared with other developed countries.

*Keywords:* earnings announcement, financial distressed firms, stock market return, Italian Stock Exchange, event study

## Introduction

According to John (1993), a firm is in financial distress, at a given point in time, when the liquid assets of the firm are not sufficient to meet the current liquidity requirements of its hard contracts. Alternatively, financial distress is defined as the act of filing petition for bankruptcy (Zmijewski, 1984). A firm is identified as bankrupt if it filed a bankruptcy petition in a given period.

When a firm is in financial distress, not only its accounting performances will get worse overtime, but also its stock market price becomes more sensitive and reflects information communicated to the market. As regard, one of the most important information is represented by the yearly earnings announcements (EAs). Thus, observing significant abnormal returns around this event is something highly probable. The same reasoning could be referred to other releases into the wide spectrum of financial reporting information mandatorily disclosed by listed firms. Concerning the issue, the literature is extensive. Effects of EAs have been studied at length by scholars, in accordance with different investigation perspectives. Above all, two are the main strand of research: One sees EAs as the only explanatory variable able to determine a market reaction; the other one considers EAs with other variables jointly for explaining market response. Few studies have attempted to isolate the effects of EAs in presence of particular contingencies and/or other important financial reporting events, which could explain more effectively the market reaction observed. As regard, another mainstream of academic research is the one related effects and consequences on shareholders of going concern opinion (GCO) releases by auditors. In this study, we decided to use GCOs release as the most reliable proxy of financial distress with the purpose of testing if abnormal returns observed around the EAs releases are the result of GCOs as well or, even, are the result mainly due to the concurrent GCOs releases.

However, the literature agrees on yearly EAs as one of the main important events in determining unexpected stock market reaction.

To these ends, by using the event study methodology, we analyze a sample of 265 Italian listed firms in the period of 2008-2016. The first goal of the paper is to test whether significant abnormal returns are revealed around EAs releases, in which direction and to what extent they affect stock prices. Then, we test how and in which manner the presence of a certain degree of financial distress, revealed by the concurrent GCO release, impacts additionally on detected abnormal returns and if, eventually, the abnormal returns are mainly due to the GCOs-effect over EAs ones. Results achieved confirm the sensitiveness of the Italian stock market to these important financial events and underpin a certain degree of supremacy of EAs in affecting stock market performance according to the prevalent literature.

The choice of the Italian market is tied with the need to explore financial reporting matters taking into account the main existing international differences in financial reporting (Hatfield, 1966; Hagerman & Zmijewski, 1979; Bushman & Piotroski, 2006; Jaafar & McLeay, 2007; Kvaal & Nobes, 2010; 2012). For empirical investigation and formulation of policy suggestions, it seems useful to analyze groups of countries in relation to their culture type (Nobes, 1998; 2006). In this respect, scholars foster empirical investigation in countries characterized by common law, strong equity market, prevalence of public companies, and majority of outsider shareholders (i.e., culture type 1) because of the higher difficulty in making archival research as a result of their small stock markets and less developed accounting and auditing professions and reputations. Italy is encompassed among these countries.

This study has a multiple usefulness. In particular, it may assist investors in learning what really counts for investment/disinvestment decisions, what is actually neglected and how to link accounting and stock market performance. Moreover, it is useful for auditors and standard setters for further developments of accounting and auditing standards with respect to the market effects determined by important doubts disclosed in both audit report and financial statements concerning the ability of the firm to survive in the long run.

The remainder of the paper is organized as follows: Section 1 reviews the literature related to EAs and stock market reactions; Section 2 highlights the relevance of going concern matter for the issue and develops

hypotheses; Section 3 presents the data sample and the methodology used for the empirical analysis; Section 4 outlines the main findings and provides a critical discussion of the obtained results; and Section 5 concludes with some final remarks and implications for further research.

## EAs and Stock Market Reactions: Literature Background

The relationship between EAs and stock market reaction has not been clearly defined yet by scholars, as they continuously try to explain investors' behaviors during EAs releases in order to understand the drivers of stocks prices reactions within EAs displacement. The way in which financial markets react to earnings announced by companies represents a point of interest for educators, investors, and regulators as well.

Eddy and Seifert (1992) tried to explain abnormal market returns using EAs as one of the explanatory variables. Specifically, the authors aimed to analyze market reactions to contemporaneous earnings and dividends announcements and to non-contemporaneous earnings and dividends announcements. The authors found that joint announcements convey more information to market players, as the stock price reaction to these is much stronger than the stock price reaction to single earnings or single dividends announcements.

Through an analysis of stocks listed on the New York Stock Exchange and on the American Stock Exchange, Soffer and Lys (1999) aimed to test whether financial markets are able to incorporate the information content of EAs. Using earnings surprises and analyst coverage as explanatory variables, the authors empirically analyzed the market reaction in the time window around the earnings day. Findings show that investors incorporate information conveyed by previous EAs no earlier than mid-quarter after the announcement happened, and fail to fully incorporate information as statistically significant post earnings announcement returns are consistently found. Though it must be noted that the authors' results show that if there has been analyst coverage on the stock, investors are able to incorporate information faster, specifically as early as two weeks after the EAs were released.

A multi-factor analysis of abnormal market returns is run by D. Kim and M. Kim (2003), aiming at statistically explaining the post-earnings-announcement drift phenomenon. Building on Fama and French's (1993) three-factor model, the authors added an innovative fourth explanatory variable, namely a risk factor that controls for the firm's information environment, in a bid to explain market reactions following EAs. The authors built the risk factor using the standard deviation of analysts' forecasts as a proxy for the firm's information environment, where firms that have standard deviation equals zero possess a totally transparent information environment. The outcome of their statistical analysis evidences that the cumulative abnormal returns computed for the 60 days following an EA are statistically and economically insignificant if the firm information environment's risk factor is considered in the analysis. Thus, post-earnings-announcement drift is a persistent phenomenon only if the information environment of the firm is not taken into account by investors.

Myring (2006) provided insights between the relationships existing among unexpected earnings, market returns, and accounting regimes. The author divided global financial markets into eight different accounting regimes: North American, Other Anglo-Saxon, Nordic, Developed Latin, Emerging Latin, Germanic, Japanese, and Emerging Asian/Near East, collecting data for firms from 34 countries in the years that span from 1987 to 1998. He found that a significant market reaction in the same direction as that of the earnings surprises is found in all accounting regimes, evidencing that earnings information plays a fundamental role to investors worldwide. Furthermore, by performing a multi-period analysis, the author found that the explanatory power of EAs has increased over the years for all accounting regimes.

A comprehensive analysis of the influence of revenues and earnings surprises on market returns has been conducted by Kama (2009). Building on the concept that revenues are an indicator of earnings persistence (Jegadeesh & Livnat, 2006) and of future operating performance, the author aimed to test the importance of revenues surprises in companies where earnings are more uncertain, namely in high R&D companies. The author analyzed market reactions and thus post-earnings-announcement drift returns for firms in the time window spanning from 2-60 days after the EAs, using earnings surprises and revenues surprises as explanatory variables. Findings show that there is a statistically significant market reaction in the same direction as that of earnings and revenues surprises; deepening his analysis, the author found that the explanatory power of market returns of earnings over revenues diminishes significantly in high R&D companies. In a bid to broaden his analysis, Kama (2009) showed also that within oligopolistic competition industries, revenues have a higher explanatory power than earnings. Furthermore, for all firms, earnings' explanatory power over revenues slightly diminishes for fourth quarter announcements if compared to the previous three quarters.

The relationship between market returns of previous stock market winners and investors' limited attention is examined by Aboody, Lehavy, and Trueman (2010). The authors defined limited attention as the belief that investors are more likely to buy stocks that capture their attention. Building on Trueman, Wong, and Zhang (2003), they tested whether market returns following around EAs of past stock market winners can be partly explained by investors' limited attention. The outcome of their empirical analysis highlights that there exists evidence that confirms the behavioral pattern of small and medium sized investors having a significant positive abnormal order imbalance of trades related to past stock market winners; the abnormal order imbalance is found to be statistically insignificant for large investors. Limited attention of less sophisticated investors (i.e., small and medium-sized ones) has partial explanatory power of market returns during EAs of past stock market winners.

Bamber, Barron, and Stevens (2011) built the first all-around literature review related trading volume around EAs. They collected and analyzed all the existing research papers that examine market reactions around EAs through its trading volume component. The authors explicitly concluded that research confirms early hypothesis that trading volume is a proxy of the lack of consensus of firm value, meaning that they reflect individual investors' ever changing expectations about firm value, while stock price reactions are the reflections of a holistic change of aggregate market expectations.

The relationship between EAs and price discovery in dual-class firm as explanatory variables for market returns is provided for by Wang and Yang (2015). Dual-class firms are enterprises that issue two different types of common stock: control shares (which provide higher voting powers to their holders) and public shares. Price discovery is measured by the authors with two proxies, namely, information share and common factor weight, which are in turn explained as the proportion of price variance and of permanent component of price adjustment attributable to that given share market. The statistical analysis provides evidence stating that information share component is traded higher per control share rather than per public share, meaning that the price of control shares varies more than that of public shares following EAs. Furthermore, control shares react quicker to positive EAs, while for negative ones no statistical evidence is found for this phenomenon. Moreover, deepening the analysis, the authors found that trading volume of control shares statistically increases prior to EAs, thus more informed and sophisticated investors are those that drive mainly the market reactions to dual-class firm's announced earnings.

Song (2013) analyzed the relationship between market reactions, EAs, and the number of analysts forecasts issued at the time of the actual EA. The author viewed analysts' forecasts issued at the time of the announcement as a proxy for market players' interpretation of news conveyed within the EAs. The time window in which the cumulative abnormal returns are calculated spans from the day of the announcement to four days later. Results of the author's analysis evidence that trading volume and stock prices following EAs react in a positive, statistically significant manner with the numbers of analysts' earnings forecasts issued at the time of the actual EA. The relationship between trading volume, stock price reactions, and the number of analysts' forecasts weakens when there is large dispersion in analysts' announcement forecasts.

The impact of aggressive downward earnings guidance on market returns around EA is empirically documented by Billingsley and Resnick (2014). The authors found in their analysis that there exists a positive, same-direction relationship between stock prices and earnings surprises, and thus an opportunity for investors to make an arbitrage profit by buying stocks that experience positive earnings surprises. Furthermore, the authors have examined that in most profitable funds' portfolios, the firms that experience positive earnings surprises are also those that are subject to aggressive downward earnings guidance.

The effect of ambiguity on market responses to EA is put forth by Williams (2014). The author defined ambiguity as the phenomenon in which decision makers possess incomplete information about the probabilities of the possible outcomes and are unable or unwilling to develop them prior to the event triggering the outcome. The Volatility Index (VIX) computed daily by the Chicago Board Options Exchange is the proxy used to measure market players' ambiguity during EAs. The author found that VIX partially explains financial market's returns after EAs: Following an increase in VIX, the absolute market reaction is statistically higher for bad news than for good news conveyed in EAs; following a decrease in VIX, the absolute market reaction to bad news and good news conveyed in EA is statistically equal. Thus, a clear asymmetric market response to EAs is identified in cases where ambiguity is present among market players.

Chen and Tiras (2015) examined the extent to which "other information" affects and influences opposite market reactions to earnings surprises. Building on the evidence provided by Atiase, Li, Supattarakul, and Tse (2005), the author states that investors tend to trade other information (relevant but less reliable) for earnings information (less relevant but reliable). Results from the statistical analysis indicate that "other information" has significant incremental explanatory power for market reactions that goes in the opposite direction of the EAs. Further, findings suggest that "other information" is statistically significant in understanding opposite market response to earnings surprises equal to or smaller than one cent: the market is more skeptical and thus adversely respond to those earnings surprises as it is suspicious of high levels of earnings management.

The relation between intra-industry information transfers, EAs, and market reactions is investigated by Kovacs (2015). Intra-industry information transfers are proxied by recurring EAs of industry peers. The author, in order to analyze the effect of same-industry firms' earnings announcements on financial markets, divided earnings into two components: a firm-specific one and an industry-wide one. Building on Fama and French's (1993) industry classification, the author collected data for 53 different industries. Findings suggest that information transfer within an industry is positive both when a firm has to announce its earnings and when it has already done so. There is a statistically significant positive relationship between market's abnormal returns and both firm-specific earnings and industry-wide earnings: This confirms the hypothesis that industry-wide earnings work as a channel to transfer information to investors faster.

Market returns around EAs are affected by weather-induced moods of market players, as evidenced by deHaan, Madsen, and Piotroski (2016). The authors used the term negative mood to describe the overall impact of unpleasant weather (defined as a mix of cloud cover, wind, and rainfall) on market analysts. By collecting data from the National Atmospheric and Oceanic Administration, the authors found that there is a negative relationship between unpleasant weather and analysts' actions (i.e., issuance of buy-hold sell recommendations and target price recommendations) during EAs. As analysts' recommendation activity is positively related with market returns, the authors found that unpleasant weather negatively affects the market's responses to announced earnings.

Luo and Zhou (2017) examined the causal relationship among market returns, EAs, and managerial ability (defined as the ability to transform corporate resources into revenues) in making such announcements with a given tone. The managerial tone used during earnings conferences is measured by the spread between negative and positive words, while managerial ability itself is measured by using the ranking developed by Demerjian, Lev, and McVay (2012). The empirical analysis shows that there is a statistically significant positive relationship between market reactions to EAs and tone used in making such announcements. Furthermore, evidence shows that more able management teams make announcements using positive tones.

Market response to EAs is influenced by voluntary disclosure, as Fernando, Giboney, and Schneible (2017) documented. The authors defined voluntary disclosure as providing relevant information about the firm to the public in addition to the minimum legal information to be disclosed. Voluntary information is disclosed using the 8K form, the same as that used to disclose mandatory information. The authors built a variable named VDISC that captures the frequency with which firms voluntarily disclose information through the year and use it as a proxy for voluntary disclosure in the statistical analysis. Results show that there is a negative, statistically significant relationship between voluntary disclosure and absolute abnormal returns around the EAs for firms that voluntarily disclose information through the year. As abnormal returns proxy for the information content of EA incorporated by the market, it is stated that voluntary disclosure reduces the information content of EAs.

Asymmetric trading costs' impact on market responses to EAs is analyzed by Johnson and So (2017). Specifically, the authors examine the impact of financial intermediaries that provide liquidity by serving as the counterparty when there is a buy-sell trade imbalance. Their statistical analysis finds that market returns are abnormally positive prior to the EAs and less positive, or even negative, after the announcement is made. Abnormal preannouncement returns that reverse are empirically influenced by asymmetric trading costs due to the compensation asked by financial intermediaries. Further, data show that financial intermediaries require higher compensation for providing liquidity that is higher for seller-initiated rather than buyer-initiated trades, with this effect more pronounced before the EAs take place. Thus, it is found that asymmetric trading costs influence investors' trades around EAs, which in turn influence market returns.

Yin, Mazouz, Benamraoui, and Saadouni (2017) provided evidence related to the relationship between market reactions to EAs as well as to all other profit warnings in the Hong Kong Stock Exchange. The authors included in their event-study analysis also another explanatory variable, namely the time-varying betas, to adjust for time-varying risk and event-induced variance. Their findings highlight that time-varying betas statistically fully explain the apparent market overreaction to negative EAs and other negative profit warnings in the Hong Kong Stock Exchange.

A comprehensive analysis among accounting quality, the term structure of implied volatility, and market responses around EAs has been developed by Anagnostopoulou and Tsekrekos (2017). The authors considered accounting quality, which they measured as the quality of accounting accruals of a firm, as a proxy for firm-specific information risk. Further, term structure volatility of equity is measured through option implied volatility. Evidence is found that stronger changes in the term structure of implied volatility, which is directly influenced by the accounting quality of a firm, are determinants of higher future realized stock market volatility for future returns following EAs.

Chen, Lobo, and Zhang (2017) examined the relation between post-earnings-announcement drift and liquidity risk. Building on Sadka (2006), the authors defined liquidity risk as the covariation of a firm's stock return with market-wide liquidity shock. Liquidity risk is split in an accounting-associated component and a non accounting-associated one, and the first is proxied by firm-specific accounting quality. Findings evidence that the two components of liquidity risk are both positively correlated with market returns following EAs, but the accounting-associated one has higher explanatory power over abnormal market returns. Stocks with higher liquidity risk experience larger absolute post-earnings-announcement drift returns.

The relation between stock overvaluation around EAs and short sale constraints is tested by Feng, Chan, and Yang (2017). Building on the work done in the field by Miller (1977), the authors tested short-term market cumulative abnormal returns in the Shanghai and Shenzhen Stock Exchanges, where investors can take short positions only in selected stocks. Findings of their analysis clearly show the impact of EAs on overpriced stock, as these adjust downward following EAs stocks with short sale constraints experience a larger price drop after EAs are made, signaling a negative relationship among market returns and short sale constraints.

## Going Concern Matter and Hypotheses Development

From the literature background conducted, it is possible to conclude that many other explanatory variables can be used together with EAs to investigate market reactions. In this study, starting from the idea regarding EAs and GCOs mutual influence proposed by Myers, Shipman, Swanquist, Whited, and Wild (2017), we propose different event studies in which market reactions to EAs are studied for financial distressed firms which received a GCO.

The going concern assumption takes on a pivotal role in the International Financial Reporting Standards conceptual framework, as it assumes that a company will not liquidate in the near future and it will continue to exist in order to carry out its objectives and its commitments. The auditors of a company are obliged to issue a GCO in their audit report when they believe that the financial conditions of the company under examination underpin the company's ability to going concern. As one can easily imagine, a GCO released by the firm's auditor can convey useful market information to stakeholders, and in particular to investors trading in the stocks market. It is indeed interesting to study how such investors react to earnings announced by firms that receive a GCO in a time window close to that of the EA date.

The timing relationship between the release of GCO and EA is a matter of fundamental importance in the Italian company legal framework and, consequently, for both internal and external validity of this study. As stated by the Company Law Reform of 2003, which modified Art. 2364 of the Italian Civil Code, corporations and partnerships have 120 days (or 180 if there is a clear motivation to extend the term) for the Financial Statement's approval. During this period, Board of Directors has to approve the Financial Statements (FS) draft, and immediately, has to transmit it to external auditors and to the internal statutory board, according to

Art. 154-ter of the Consolidated Law of Finance. At the same time, Board of Directors has to call the ordinary shareholders' meeting for the final approval. The transmission of the FS draft, according to Art. 66 of the Issuers' Regulation, has to happen at least 15 days earlier than FS's market disclosure. A gap of at least 21 days has to exist between the draft of the FS (and thus of the disclosure of EAs) and the ordinary shareholders' meeting date. Art. 2429 of the Civil Code and Art. 154-ter of TUF state that the auditor, at least within 15 days from the ordinary shareholders' meeting, must issue the audit report and file it to the company's registered office.

As the regulations laid out in the above explained laws show, there are three main possibilities in the Italian context related to the timing between EA and GCO dates. The first, in which the audit report, thus the GCO, is released before earnings are announced. The second, in which the GCO is released on the same date as when EAs are released; the third, in which the GCO is released after EAs are made available to the public: In this case, earnings are announced before the GCO is received by the company. The timing relationship can be of influence in analyzing market reactions to EAs for firms that received or have to receive a GCO near the EAs date.

Studies focused on the market reaction to audit report containing GCO, are, most of times, aimed at detecting effects on current or future shareholders in different dates from the audit report release. However, these studies do not achieve univocal results (Brunelli, 2018). In fact, a negative return could be registered during the days after the GCO as demonstrated by Menon and Williams (2010) for US, by Citron, Taffler, and Uang (2008) for UK, and by Hsu, Young, and Chu (2011) for Taiwan. In particular, Menon and Williams (2010), considering various types of information included in a GCO, showed that the reaction is more negative if the audit report cites problems related with obtaining financing. This implication is relevant since it highlights that investors take into account also the content of the audit opinion.

A large number of studies suggest that GCOs are very relevant for investors. However, the strand of researches includes also cases showing negative effects on stock prices in the period prior to the GCO's issues (Dodd, Dopuch, Holthausen, & Leftwich, 1984; Herbohn, Ragunathan, & Garsden, 2007), concluding that audit opinions do not have an information content because they simply reflect what is already known to investors. This suggests that other information and conditions may determine abnormal stock market returns. As argued by Dodd et al. (1984), the release of a GCO could occur in the same days of the annual public EA. This consideration is in line with evidences collected by Firth (1981) and Rippington and Taffler (1995). They showed that in the UK, the preliminary announcement of the annual results, which contains full earnings and other information, is viewed by the stock market as the firm's main year-end information release. Bartov, DeFond, and Konchitchki (2013) found a negative market reaction to all late filing announcements, especially in the case of late quarterly filing and when accounting problems explain the delay.

Recently, Khan, Lobo, and Nwaeze (2017), feeding the debate of media impacts on the market, have tested the effect of re-release of GCO provided by media after the GCO issuance. Observing a five-year time span for US firms, they found that abnormal returns are detected also in case of GCO re-release.

Even if EA is worldwide recognized as the main variable affecting stock market, also the effect of earnings disclosure on other variables has been investigated extensively in the literature (Easton & Zmijewski, 1989; Freeman & Tse, 1989; Elliott & Hanna, 1996; Cho & Jung, 1991; Choi & Jeter, 1992; Hackenbrack & Hogan, 2002; Taffler, Lu, & Kausar, 2004; Wilson, 2008).

Adopting a different perspective, Dong, D. Robinson, and M. Robinson (2015) investigated the effect of auditors' first going concern modifications (GCMs) on the informativeness of earnings, by assessing the market's responsiveness to earnings surprises subsequent to GCMs. They found evidence of a shift in earnings response coefficients (ERCs) after firms receive the first GCM. Moreover, the earnings disclosure is related with the GC status as showed by Subramanyam and Wild (1996), who found a negative relation between earnings informativeness and the Altman Z-score used as a proxy for GC status. Differently, as demonstrated by Myers et al. (2017), the GCMs are redundant to existing management disclosures. The authors, analyzing US market, showed a significant negative market reaction to EAs for a sample of GCOs' companies, concluding that the informational value of GCMs is not very significant as reported previously.

Summing up evidences collected, it should be noted that Italy is a country where effects of EAs release for financial distressed companies have never been explored.

For this reason, we developed an event study by fixing the EA as event date, to understand whether and how this information is relevant for investors. In this respect, we suppose that EAs of a company in financial distress produce a negative investors' reaction. Therefore, we propose the following hypothesis:

H1: The EAs release for financial distressed companies has a significant negative effect on stock prices, as revealed by abnormal returns.

If the hypothesis is confirmed, the interest in disentangling whether effects are also or more due to the GCO releases arises. In this respect, according to Myers et al. (2017), it is interesting to perform additional tests. First of all, observations where GCOs and EAs are disclosed simultaneously have been removed from the sample. In fact, in this case an attempt to isolate the single effect of the two releases would be more a discretional exercise than an effective way to proceed. Then, to isolate the magnitude of each phenomenon, we run additional event studies. In particular, at first, we divided observations where GCOs were released before or after EAs, then, we replicated the event study, for each subsample by fixing GCOs and EAs as event dates separately. Given the absence of literature referred to the Italian context, it is impossible to make reliable forecast in favor of an event (EAs or GCOs) superior effect over another. Hence, formulating hypotheses might be a discretional exercise. On the other hand, to the best of our knowledge, the international literature agrees higher stock market sensitiveness to EAs than GCOs.

Thus, the following hypothesis can be formulated:

H2: By fixing the EAs (GCOs) releases as event date, if abnormal returns are mainly due to EAs (GCOs), mainly pre (post)-announcement effects will be highlighted when GCOs (EAs) are released after EAs (GCOs) and mainly post (pre)-announcement effects when GCOs (EAs) are released before EAs (GCOs).

After all, other studies highlighted that EAs could be affected by concurrent disclosures in the same period (Holthausen & Verrecchia, 1988; Kim & Verrecchia, 1991; Demski & Feltham, 1994; Francis, Schipper, & Vincent, 2002). Scholars found that reactions to EAs are affected by ex-ante information, especially considering the quality of the first disclosure, which is negatively correlated with the quality of the second signal. In particular, Holthausen and Verrecchia (1988) presented a model to examine price changes accompanying a sequence of information release. They showed that the information content of EA is function of its precision relatively to the precision of prior information and the extent to which prior reports co-varied with the information content of the current report. This reasoning could be useful for our study. In particular, it could be confirmed or reversed depending upon evidences achieved. In fact, by developing parallel event studies for EAs and GCOs, we may get insights on the magnitude of the effects of the two types of information.

## Research Design and Methodology

**Data Sample Description and Use**

The dataset used for the analysis was gathered from different sources: stock market prices, the main Italian stock market index (FTSE MIB), EAs dates and ratios used for the sample description were retrieved from Datastream Thomson Reuters, while audit reports containing GCOs were collected by downloading the firms' annual reports from their official websites. The covered period goes from 2008 to 2016 (fiscal years). The sample selection started by considering any new listed or delisted firm in the period under investigation. In this way, all the listed companies, even those listed only one year during the time-span, were investigated. It is important to stress once more that we use the GCO release as a reliable proxy of financial distress for the receiving firm.

Starting from a potential sample of 2,659 firms/observations, we removed companies with missing opinions. In this way, the total sample dropped to 2,050 firms/observations.

Then, we separated audit reports containing GCO from those not containing GCO. During this phase, we found firms for which some data were missing (such as availability of market share, or unreliable stock return data). At the end, the total sample is composed by 1,990 firms/observations. The majority of observations ($n$ = 1,672, 84.02%) have not received a GCO. Hence, only 318 observations (15.98%) contain a GCO. We eliminated other observations for which stock return data were missing, obtaining 295 firms/observations. Lastly, we erased three observations because of the unavailability of EAs dates. Thus, the clean sample used for our purposes is represented by 292 observations. The breakdown of the sample by year is provided in Table 1.

Table 1

*Sample Definition*

|  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | Total obs. |
|---|---|---|---|---|---|---|---|---|---|---|
| Number of listed companies | 300 | 296 | 296 | 304 | 296 | 290 | 285 | 282 | 310 | 2,659 |
| Removed firms | (65) | (59) | (60) | (68) | (69) | (64) | (72) | (66) | (86) | (609) |
| Sample selection | 235 | 237 | 236 | 236 | 227 | 226 | 213 | 216 | 224 | 2,050 |
| Missing opinions | (6) | (10) | (10) | (9) | (8) | (5) | (6) | (3) | (3) | (60) |
| Remaining firms | 229 | 227 | 226 | 227 | 219 | 221 | 207 | 213 | 221 | 1,990 |
| Not GCO | 201 | 199 | 189 | 191 | 174 | 178 | 174 | 177 | 189 | 1,672 |
| GCO | 28 | 28 | 37 | 36 | 45 | 43 | 33 | 36 | 32 | 318 |
| Firms missing data (from GCO) | (0) | (1) | (2) | (3) | (4) | (6) | (2) | (2) | (3) | (23) |
| Total GCO (number of firms) | 28 | 27 | 35 | 33 | 41 | 37 | 31 | 34 | 29 | 295 |
| Missing data (from EA date) | (0) | (0) | (0) | (0) | (1) | (2) | (0) | (0) | (0) | (3) |
| Final sample analyzed (GCO) (number of firms) | 28 | 27 | 35 | 33 | 40 | 35 | 31 | 34 | 29 | 292 |

*Note*. Sources: Authors' elaboration.

Table 2 presents descriptive statistics for the final sample regarding distressed firms selected for the study.

Considering that firms receiving GCO present, by definition, a certain degree of financial distress (even in the cases related to unmodified opinions containing a GCO), we choose financial statements items and ratios mainly related with GCO, in accordance with Carson, Fargher, Geiger, Lennox, Raghunandan, and Willekens (2013) and Taffler et al. (2004). Not surprisingly, Italian listed firms show, on average, a low or medium market capitalization (SIZE mean = 55.42 million €) and a negative net income (NI mean = -291 million €). The sample presents a high variability in terms of total assets, equity, net income, and net sales. In line with the financial distress definition, it is worth to highlight an average negative return on assets (ROA mean = -11.85%) and an average high leverage (LEV mean = 502.39 million €). It is also important to consider that almost all of observations are related with firms that in the given year showed a net loss (89.7%).

Table 2

*Sample Descriptive Statistics (n = 292)*

| Variable | Mean | Standard deviation | Median | Minimum | Maximum |
|----------|------|--------------------|--------|---------|---------|
| TA (million euros) | 2,617.98 | 4,465.00 | 1,355.41 | 5.80 | 37,539.21 |
| SIZE (million euros) | 55.42 | 95.19 | 24.99 | 1.14 | 935.64 |
| NI (million euros) | -291.00 | 756.86 | -125.59 | -7,942.39 | 2,052.53 |
| EQ (million euros) | 205.69 | 768.12 | 103.61 | -5,687.59 | 3,578.40 |
| Net sales (million euros) | 1,501.55 | 2,750.19 | 683.05 | 0.01 | 21,352.77 |
| ROA (%) | -11.85 | 20.61 | -6.19 | -191.07 | 53.29 |
| LEV (million euros) | 502.39 | 2,177.07 | 104.21 | -7,767.84 | 20,526.84 |
| Current ratio | 1.48 | 5.89 | 0.72 | 0.01 | 79.61 |

*Notes*. Variables definition: TA = Total assets in € million; SIZE = Market capitalization in € million; NI = Net income in € million; EQ = Equity in € million; Net sales = Sales in € million; ROA = Return on assets (net income/average total assets) in percentage; LEV = Leverage (debt/common equity) in percentage; Current ratio (current assets/current liabilities). Data for descriptive statistics elaboration were gathered from Datastream. Source: Authors' elaboration.

In order to test H2 with respect to the mutual (or absent) influence between EA and GCOs, we removed from the sample those observations for which the two events have taken place on the same day. As showed in Figure 1, event dates were the same in 32 cases, so the total sample dropped to 260 observations. More in depth, 191 refers to cases in which EAs are released before GCOs, 69 the other way around. Regarding this last sub-classification, after removing few outliers, we find that the average time-lag between GCO and EA is ±11.5 days. Thus, the mainstream of confounding and/or subsequent events is confirmed for the Italian context, at least for the two events under investigation.
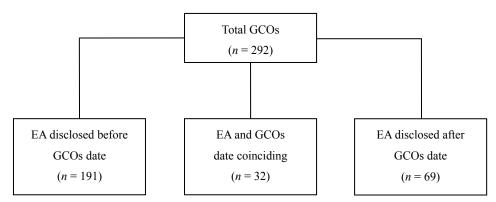


*Figure 1*. Distressed firms/observations (those receiving a GCO) disclosed before and after EAs.
Source: Authors' elaboration.

**The Event Study Approach**

As in classical event study, we mainly analyze the returns for a sample of Italian listed distressed firms which received, in the period of 2008-2016, a GCO in their audit reports, fixing as event dates EAs and GCOs releases. The main idea is that the magnitude of abnormal returns, at the time of specific events, might provide a measure of the impact of these events on the wealth of firms' claim holders (see Campbell, Lo, & MacKinlay, 1997 and reference therein for a complete survey on event study).

At the same time, the event study allows us to test the Italian stock market efficiency since abnormal stock returns different from zero and persisting after the release of financial and public available information are inconsistent with market efficiency (Fama, 1991).

The considered events (GCO and EA releases) are mainly clustered in the period of the year going from the beginning of March to the end of June. The time displacement of the considered events should preserve the hypothesis of cross-sectional independence underlying the event study, since each event date (GCO or EA) is not common to all the firms in the sample.

**Design and Statistical Tests**

To compute abnormal returns (ARs), we compare, for each firm $i$, the observed daily log-returns with the expected ones which are estimated by using the classical linear market model:

$$R_{it} = \alpha_i + \beta_i RMt + \varepsilon_{it}, \ \varepsilon_{it} \sim N(0, \sigma_i^2), \qquad t \in EP \qquad (1)$$

where $R_{it}$ is the return of firm $i$, observed at time $t$; $R_{Mt}$ is the Italian stock market index (FTSE MIB) and $\alpha_i$, $\beta_i \in R$ are parameters estimated over a period of "normal behavior", i.e., the estimation period (EP) starting 200 days before and ending 15 days before the event date.

Let $t = 0$ represents the event date, ARs are then estimated in the test period (TP) which is set equal to 60 trading days around each event, $TP = [(-30,0) \cup (0,+30)]$, and then divided into several subintervals. In particular, we focus on the following windows:$[(-15; -10); (-2; +2); (+2; +15)]$ and $[-1, 1]$. These three windows are further split into $[(-15; -10); (-10; -5); (-5; -1); (+1; +5); (+5; +10); (+10; +15)]$.

The windows (-1, 0), (0), (0, +1) are also considered for a fine-tuning analysis in proximity of the event date. The choice of the windows is tied to the willingness of checking, not only whether the disclosure of audit reports and EAs impacts on stock prices, but also if the market anticipates (or not) the release of the auditor's opinions and EAs. At last, as final additional test on the entire sample we consider also the window [-30; +30] which is split into [(-30; -15), (+15; +30)].

For each stock $i$, ARs are defined as the difference between observed returns around the day of the event, $t = 0$, and returns predicted by the market model in (1):

$$AR_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{Mt}), \qquad t \in TP \qquad (2)$$

where $\hat{\alpha}_i's$ and $\hat{\beta}_i's$ are the estimated parameters of the model, for each firm $i$.

In other words, $AR_{it}'s$ measure the difference between the conditional returns on the event and the expected unconditional returns on the event. In so doing, abnormal returns might also highlight the change in wealth of the stockholder related with the event.

To verify whether or not audit reports or EAs releases impact on stock prices ($H_0$: There are not ARs within the TP; $H_1$: Presence of ARs within the TP), the cross-sectional means of ARs are computed for each $t \in TP$:

$$\overline{AR}_t = \frac{1}{N}\sum_{i=1}^{N} AR_{it} \qquad (3)$$

with $N$ representing the number of firms included in the sample.

Then, the cross-sectional mean of the cumulative abnormal returns (CARs), $\overline{CAR}_{t_a t_b}$ is computed over each subinterval, $(t_a, t_b) \in TP$:

$$\overline{CAR}_{t_a t_b} = \sum_{t=t_a}^{t_b} \overline{AR}_t \qquad (4)$$

To obtain robust results, we apply the Mikkelson and Partch test (MP) (1988) in which a correction factor for each company in the sample is applied to remove the bias induced by the presence of serial correlation in the returns:

$$Z^{MP}_{\overline{CAR_{t_a t_b}}} = \frac{1}{\sqrt{N}} \Sigma_{i=1}^{N} \left[ CAR_{i,t_a t_b} \bigg/ \sqrt{\sigma^2_{CAR_{i,t_a t_b}}} \right] \tag{5}$$

where $\sigma^2_{\overline{CAR_{i,t_a t_b}}} = \sigma^2_{\overline{AR}_{EP}} \left[ T + \frac{T^2}{T_{EP}} + \frac{\Sigma_{t=t_a}^{t_b} R_{Mt} - T(\bar{R}_M)^2}{\Sigma_{t_{EP}=1}^{T_{EP}} (R_{Mt} - \bar{R}_M)^2} \right]$ is the variance of the cumulated prediction error of firm $i$, $\sigma^2_{\overline{AR}_{EP}}$ is the residual variance of the market model regression for firm $i$; $T = t_b - t_a + 1$ is the number of days in the window, $T_{EP}$ is the number of days in the period used to estimate the market model, $R_{Mt}$ is the market return at time $t$, and $\bar{R}_M$ is the average of market returns in the estimation period.

Notwithstanding its higher reliability, the MP-test has been modified overtime from scholars in order to correct for the cross-sectional correlation in abnormal returns. In this respect, Boehmer, Musumeci, and Poulsen (1991), Mentz and Schiereck (2008), and Kolari and Pynnönen (2010) made relevant improvements. Firstly, Mentz and Schiereck (2008) based on Boehmer et al. (1991) calculated standardized abnormal return on stock $i$ at day $t$ ($SR_i$) as:

$$SR_i = CAR_{i,t_a t_b} \bigg/ \sqrt{\sigma^2_{CAR_{i,t_a t_b}}} \tag{6}$$

and then, used (6) to calculate a $Z$ statistic defined here as $Z_M$:

$$Z_M = \frac{1}{N} \Sigma_{i=1}^{N} SR_i \bigg/ \sqrt{\frac{1}{N(N-1)} \Sigma_{i=1}^{N} \left( SR_i - \Sigma_{i=1}^{N} \frac{SR_i}{N} \right)^2} \tag{7}$$

Finally, Kolari and Pynnönen (2010) have proposed a new test statistic test (hereafter MP corrected) that further modifies the one proposed by Boehmer et al. (1991) introducing $h = \sqrt{\frac{1-\bar{\rho}}{1+(N-1)\bar{\rho}}}$, that is a correction factor to the above defined $Z^M$ where $\bar{\rho}$ is the average of the sample cross correlations of the estimation period residuals, and $N$ is the number of observations in the considered sample.

## Findings and Discussion

In order to detect the ability of EAs for financial distressed firms in determining significant negative cumulative abnormal returns (H1), the event study is performed by considering the EA as event date. The results of this test are showed in Table 3.

Table 3

*Stock Market Reaction to EAs*

| Event window | EA date ($n$ = 292) | | Negative % of CAR |
| | $T$ | $p$-value | |
|---|---|---|---|
| (-15; -2) | | | |
| MP | 0.60 | 0.547 | 51.37% |
| MP-corrected | 0.32 | 0.749 | |
| (-2; +2) | | | |
| MP | -2.87 | 0.004*** | 57.33% |
| MP-corrected | -1.66 | 0.099* | |
| (+2; +15) | | | |
| MP | -3.29 | 0.001*** | 59.93% |
| MP-corrected | -1.77 | 0.078* | |
| | $T$ | $p$-value | |
| (0) | | | |
| MP | -0.58 | 0.565 | 51.71% |
| MP-corrected | -0.32 | 0.746 | |
| (-1; 0) | | | |
| MP | -0.30 | 0.766 | 51.03% |
| MP-corrected | -0.17 | 0.868 | |
| (0; +1) | | | |
| MP | -4.57 | 0.000*** | 61.99% |
| MP-corrected | -2.68 | 0.008*** | |
| (-1; +1) | | | |
| MP | -3.94 | 0.000*** | 62.33% |
| MP-corrected | -2.31 | 0.022** | |
| | $T$ | $p$-value | |
| (-15; -10) | | | |
| MP | -0.96 | 0.340 | 52.74% |
| MP-corrected | -0.52 | 0.606 | |
| (-10; -5) | | | |
| MP | -0.34 | 0.737 | 49.66% |
| MP-corrected | -0.18 | 0.853 | |
| (-5; -1) | | | |
| MP | -0.01 | 0.994 | 50.00% |
| MP-corrected | 0.00 | 0.998 | |
| (+1; +5) | | | |
| MP | -4.89 | 0.000*** | 62.67% |
| MP-corrected | -2.73 | 0.007*** | |
| (+5; +10) | | | |
| MP | -1.98 | 0.049** | 54.45% |
| MP-corrected | -1.12 | 0.265 | |
| (+10; +15) | | | |
| MP | -3.23 | 0.001*** | 57.19% |
| MP-corrected | -1.77 | 0.077* | |

*Notes*. Mikkelson and Partch test; MP-corrected, Mikkelson and Partch test with correction factor. Significant at: *: 10%, **: 5%, ***: 1%. Event date = EA date. Source: Authors' elaboration.

Above all, we found a systematic negative impact of EA on stock returns. Going in-depth in the analysis, it emerges that negative abnormal returns are significant or highly significant in the days close to the event date and after. On the contrary, pre-announcement effects have not been detected. By looking carefully at the sub-windows, we report that negative effects become significant at the ongoing event date. In summary, H1 is confirmed. These results represent a signal that Italian investors are, on average, not able to capture in advance earnings trends. Moreover, when effects have been detected, the two used statistical tests (MP and MP-corrected) provide not contradictory results.

Thus, as we expected, EAs cause average negative abnormal returns in the Italian stock market during the covered period. As outlined in the sample breakdown, in the period of 2008-2016, on average, the time-lag between EAs and GCOs releases is given by ±11.5 days. The variability of the averaged time-lag is low. Hence, the possibility that one event induces greater effects on stock returns than the other or that only one causes real effects, must be taken into consideration by analyzing the possible mutual or *per se* influence of the two events. In this respect, Tables 4 and 5 show the results of additional event studies. In particular, Table 4 displays the results obtained when the event date is fixed by GCOs releases and distinguishing whether GCO releases follow/anticipate EAs. Similarly, Table 5 provides results obtained when EA release is considered as event date, distinguishing whether EAs releases follow/anticipate GCOs. It is worth to remark here that, during the considered period, the majority of Italian firms used to disclose the EA before the audit report (191 vs. 69).

Looking at the results displayed in Table 4, significant cumulative abnormal returns are detected in the main window and relative sub-windows, which are very close to the event date for those firms/observations for which GCOs follow EAs. This result confirms previous studies: the information content of a financial reporting disclosure is function of the precision related with the precision of prior information (Holthausen & Verrecchia, 1988; Kim & Verrecchia, 1991; Demski & Feltham, 1994; Francis et al., 2002). In this case, the prior information is given by EAs. At the same time, moderate post-announcement effects are verified when GCOs are released before EAs in the window (+1; +5). This evidence suggests that the effect could be due to the proximity of EA rather than post-announcement effects derived from GCO releases. This result could suggest accepting H2. In order to definitely clarify this issue, the consideration of the same event study, fixing EA as event date, is necessary. In this respect, mixed results emerged (see Tables 6 and 7).

In particular, negative effects are confirmed around the event date, independently from the chronological issuance of the two events. Looking at the windows before and after the event date, moderate negative effects are detected in the post-announcement windows (+2; +15), for both EAs disclosed before/after GCOs. On the other hand, negative pre-announcement effects are observed when EAs follow GCOs in the two sub-windows, (-15; -10) and (-5; -1). Strong post-announcement effects are detected instead when EAs are released prior GCOs. According to these results, we cannot accept or reject H2, since it is quite hard to establish whether pre-announcement effects detected when EAs follow GCOs are due to EAs closeness or consequences of GCOs. At the same time, regardless of the chronological order of the two events, post-announcements effects due to EAs releases are always detected. Thus, the more significant impact on stock market prices of EAs is verified one more time.

Summing up the results discussed above, even though the collected evidence does not suggest an unequivocal supremacy of EAs over GCOs, we foster the acceptance of H2 since the results confirm findings of previous studies and shed a light on the greater relevance of EAs for shareholders.

Table 4

*Stock Market Reaction to GCOs, Distinguishing If GCOs Have Been Released Before or After EAs*

| Event window | GCO released after EA (n = 191) | | Negative % of CAR | GCO released before EA (n = 69) | | Negative % of CAR |
|---|---|---|---|---|---|---|
| | T | p-value | | T | p-value | |
| **(-15; -2)** | | | | | | |
| MP | -1.17 | 0.242 | 58.12% | 1.36 | 0.177 | 43.48% |
| MP-corrected | -0.63 | 0.530 | | 0.72 | 0.471 | |
| **(-2; +2)** | | | | | | |
| MP | -2.29 | 0.023** | 56.54% | -1.22 | 0.228 | 50.72% |
| MP-corrected | -1.30 | 0.195 | | -0.61 | 0.545 | |
| **(+2; +15)** | | | | | | |
| MP | -1.03 | 0.302 | 53.40% | -1.65 | 0.105 | 53.62% |
| MP-corrected | -0.56 | 0.578 | | -0.83 | 0.408 | |
| | T | p-value | | T | p-value | |
| **(0)** | | | | | | |
| MP | -2.52 | 0.013** | 59.16% | -0.83 | 0.408 | 55.07% |
| MP-corrected | -1.43 | 0.155 | | -0.48 | 0.632 | |
| **(-1; 0)** | | | | | | |
| MP | -2.16 | 0.032** | 55.50% | -0.31 | 0.757 | 49.28% |
| MP-corrected | -1.20 | 0.232 | | -0.17 | 0.863 | |
| **(0; +1)** | | | | | | |
| MP | -1.91 | 0.058* | 57.07% | -0.46 | 0.644 | 55.07% |
| MP-corrected | -1.07 | 0.286 | | -0.27 | 0.790 | |
| **(-1; +1)** | | | | | | |
| MP | -1.95 | 0.053* | 52.36% | -0.48 | 0.632 | 53.62% |
| MP-corrected | -1.06 | 0.289 | | -0.26 | 0.795 | |
| | T | p-value | | T | p-value | |
| **(-15; -10)** | | | | | | |
| MP | -1.08 | 0.282 | 52.36% | 1.83 | 0.072 | 40.58% |
| MP-corrected | -0.62 | 0.538 | | 1.03 | 0.305 | |
| **(-10; -5)** | | | | | | |
| MP | -2.47 | 0.015** | 56.54% | -0.14 | 0.892 | 50.72% |
| MP-corrected | -1.39 | 0.167 | | -0.07 | 0.942 | |
| **(-5; -1)** | | | | | | |
| MP | -1.27 | 0.206 | 54.97% | -0.57 | 0.570 | 52.17% |
| MP-corrected | -0.43 | 0.670 | | -0.19 | 0.849 | |
| **(+1; +5)** | | | | | | |
| MP | -2.76 | 0.006*** | 57.07% | -2.61 | 0.011 | 66.67% |
| MP-corrected | -1.54 | 0.126 | | -1.65 | 0.104 | |
| **(+5; +10)** | | | | | | |
| MP | -0.48 | 0.628 | 49.74% | -1.25 | 0.215 | 49.28% |
| MP-corrected | -0.28 | 0.780 | | -0.69 | 0.494 | |
| **(+10; +15)** | | | | | | |
| MP | 0.04 | 0.965 | 48.69% | -0.21 | 0.834 | 46.38% |
| MP-corrected | 0.04 | 0.965 | | -0.12 | 0.909 | |

*Notes*. Mikkelson and Partch test; MP-corrected, Mikkelson and Partch test with correction factor. Significant at: *: 10%, **: 5%, ***: 1%. Event date = GCOs release. 191 observations are GCO's companies which register EA date before GCO release; 69 observations are GCO's companies which register EA date after GCO release. Source: Authors' elaboration.

Table 5

*Stock Market Reaction to EA, Distinguishing if EAs Have Been Released Before or After GCOs*

| Event window | EA released before GCOs ($n = 191$) | | Negative % of CAR | EA released after GCOs ($n = 69$) | | Negative % of CAR |
|---|---|---|---|---|---|---|
| | $T$ | $p$-value | | $T$ | $p$-value | |
| **(-15; -2)** | | | | | | |
| MP | 1.76 | 0.079* | 48.17% | -1.28 | 0.204 | 53.62% |
| MP-corrected | 0.91 | 0.362 | | -0.68 | 0.500 | |
| **(-2; +2)** | | | | | | |
| MP | -1.10 | 0.273 | 53.93% | -2.53 | 0.014** | 63.77% |
| MP-corrected | -0.63 | 0.530 | | -1.36 | 0.178 | |
| **(+2; +15)** | | | | | | |
| MP | -2.50 | 0.013** | 61.26% | -2.10 | 0.039** | 57.97% |
| MP-corrected | -1.31 | 0.191 | | -1.07 | 0.290 | |
| | $T$ | $p$-value | | $T$ | $p$-value | |
| **(0)** | | | | | | |
| MP | -0.36 | 0.719 | 51.31% | 0.84 | 0.404 | 44.93% |
| MP-corrected | -0.20 | 0.844 | | 0.48 | 0.633 | |
| **(-1;0)** | | | | | | |
| MP | 0.93 | 0.355 | 47.12% | -0.23 | 0.821 | 53.62% |
| MP-corrected | 0.51 | 0.607 | | -0.12 | 0.904 | |
| **(0; +1)** | | | | | | |
| MP | -3.46 | 0.001*** | 60.73% | -1.24 | 0.218 | 57.97% |
| MP-corrected | -2.00 | 0.047** | | -0.70 | 0.485 | |
| **(-1; +1)** | | | | | | |
| MP | -2.27 | 0.024*** | 59.69% | -2.01 | 0.048** | 65.22% |
| MP-corrected | -1.34 | 0.183 | | -1.11 | 0.270 | |
| | $T$ | $p$-value | | $T$ | $p$-value | |
| **(-15; -10)** | | | | | | |
| MP | 0.08 | 0.934 | 51.31% | -1.93 | 0.057* | 59.42% |
| MP-corrected | 0.04 | 0.965 | | -0.99 | 0.326 | |
| **(-10; -5)** | | | | | | |
| MP | 0.16 | 0.870 | 48.69% | -0.57 | 0.571 | 59.42% |
| MP-corrected | 0.09 | 0.930 | | -0.30 | 0.765 | |
| **(-5; -1)** | | | | | | |
| MP | 1.35 | 0.180 | 48.69% | -3.09 | 0.003*** | 56.52% |
| MP-corrected | 0.44 | 0.663 | | -1.08 | 0.284 | |
| **(+1; +5)** | | | | | | |
| MP | -3.91 | 0.000*** | 61.78% | -1.96 | 0.054* | 65.32% |
| MP-corrected | -2.16 | 0.032** | | -1.07 | 0.290 | |
| **(+5; +10)** | | | | | | |
| MP | -1.31 | 0.192 | 54.97% | -1.64 | 0.105 | 55.07% |
| MP-corrected | -0.71 | 0.478 | | -0.97 | 0.334 | |
| **(+10; +15)** | | | | | | |
| MP | -2.83 | 0.005*** | 56.02% | -1.27 | 0.208 | 57.97% |
| MP-corrected | -1.51 | 0.133 | | -0.68 | 0.500 | |

*Notes*. Mikkelson and Partch test; MP-corrected, Mikkelson and Partch test with correction factor. Significant at: *: 10%, **: 5%, ***: 1%. Event date = EA date. 191 observations are GCO's companies which receive GCO after the EA; 69 observations are GCO's companies which receive GCO before the EA.

Table 6

*Stock Market Reaction to GCO – Additional Test*

| Event window | GCO all ($n$ = 292) | | Negative % of CAR |
|---|---|---|---|
| | $T$ | $p$-value | |
| (-30; +30) | | | |
| MP | -0.99 | 0.323 | 55.82% |
| MP-corrected | -0.45 | 0.654 | |
| (-30; -15) | | | |
| MP | -0.59 | 0.553 | 54.45% |
| MP-corrected | -0.29 | 0.772 | |
| (+15; +30) | | | |
| MP | -0.83 | 0.408 | 52.74% |
| MP-corrected | -0.39 | 0.696 | |

*Notes*. Mikkelson and Partch test; MP-corrected, Mikkelson and Partch test with correction factor. Significant at: [*]: 10%, [**]: 5%, [***]: 1%. Event date = GCOs release. Source: Authors' elaboration.

Table 7

*Stock Market Reaction to EA – Additional Test*

| Event window | GCO all ($n$ = 292) | | Negative % of CAR |
|---|---|---|---|
| | $T$ | $p$-value | |
| (-30; +30) | | | |
| MP | -1.15 | 0.251 | 54.11% |
| MP-corrected | -0.57 | 0.571 | |
| (-30; -15) | | | |
| MP | -2.29 | 0.023[**] | 55.14% |
| MP-corrected | -1.10 | 0.272 | |
| (+15; +30) | | | |
| MP | -0.77 | 0.441 | 56.16% |
| MP-corrected | -0.38 | 0.703 | |

*Notes*. Mikkelson and Partch test; MP-corrected, Mikkelson and Partch test with correction factor. Significant at: [*]: 10%, [**]: 5%, [***]: 1%. Event date = EAs release. Source: Authors' elaboration.

At last, we conduct a test on the entire sample by fixing GCO and EA releases as separated event date and using a larger window (-30; +30), and two sub-windows (-30; -15) and (+15; +30). Results are reported in Tables 6 and 7. In this respect, when fixing EAs releases as event date, we found evidence of negative abnormal returns only in the window (-30; -15). On one hand, this result supports H2 since it clarifies the supremacy of the EA effect in the case of distressed firms; on the other hand, it reduces the relevance of GCO, whose impact is bounded to a very short period, which is immediately before and right after its release.

Overall, the results of the analysis suggest that the investors' perceptions of EA, in conjunction with a GCO, systematically determine negative abnormal returns. In addition, some issues emerge when considering the main features of the Italian listed firms, accounting system, market environment and corporate governance mechanisms. Indeed, according to Nobes (1998; 2006), the Italian accounting system is encompassed in culture Type 2 where the primary users of financial statements are government and creditors and where listed firms are mainly family owned. This latter evidence feeds the debate on corporate governance mechanisms (Cremers & Nair, 2005) and modifies the traditional agency problem, placing Italian firms among those with agency problems of Type 2 (Di Pietra, Grambovas, Raonic, & Riccaboni, 2008). Thus, more conflicts should exist

between majority and minority shareholders rather than ownership and managers. For this reason, we can support the thesis for which shareholders company assessments lie more on unequivocal evidence as EAs rather than the issuance of other information, such as GCO, provided by auditors whose interests are more aligned with prevalent shareholders. This point could theoretically explain and justify the weaker effects of GCOs found in this study. Minority shareholders do not believe in the auditor's independence, or have not the necessary background to fully understand information contained in the audit report. Hence, whatever it is the degree of severity of an opinion, the minority shareholders are more confident toward official EAs than audit reports and their information content. Past researches focused on the issue of minority shareholder's trust from different perspectives suggest different solutions such as an increase of non-executive and/or independent directors (Fama & Jensen, 1983; Core, Guay, & Rusticus, 2006; Barontini & Bozzi, 2011; Ianniello, 2013) and several financial and non-financial incentive systems for managers (Pott, Tebben, & Watrin, 2014; Ye, 2014). Most of the time, these "remedies" failed in solving problems and conflicts. In addition, the poor persistence of GCOs effects could generate suspicions about the weakness of the auditor profession in small stock markets as Italy. After all, it seems that the highly concentrated ownerships and the prevalence of family businesses might be effective explanations of the collected evidence.

## Final Remarks and Implications for Further Research

Many factors can affect stock market prices and their trends. Among these, some are completely unrelated with financial reporting events or facts regarding specifically listed firms. Thus, stock market reaction is the result of mixed effects where attempts in isolating one from the other could be just an exercise for statisticians (Cohen & Kaimenakis, 2007; Jones, 2011; Lev & Gu, 2016). However, the issue of whether and to what extent the release of financial information affects stock price arises and deserves to be investigated. Bearing in mind the referred difficulties, we tried to detect the effects of EAs for financial distressed firms in the Italian stock market. After the research path pursued, our hypothesis is confirmed: distressed firms receiving a GCO worsened their stock market performance when EAs were released throughout the period under investigation. At the same time, dividing the sample between firms receiving first the GCO and then EA and vice versa, we found that effects are mainly due to EAs release and that effects found for GCOs release are, most of the time, the result of a previous knowledge regarding earnings in accordance with the prevailing literature.

This work contributes to the literature in a threefold way. First, we highlight that also in countries with small stock markets and auditing profession, as Italy, relevant financial reporting events, such as EA and GCO, determine abnormal stock market returns, conditioning the normal operating stock market activity; second, at the same time, we verify that EAs have a more significant and persistent effect than GCOs, as it is well known in the literature; third, we detect that GCOs effects are bounded to few days before and right after the event date.

It is worth to mention here that a certain sensitivity of results to the used tests is observed, even if the reliability of the tests used is quite high.

Finally, this research makes it possible to outline some basic policy implications addressed to investors, auditors, and academics. As concerns investors, we stress the need of an information dissemination process aimed at explaining in depth the different meanings that a GCO could assume for different degrees of financial distress. If on one hand receiving GCO is a good proxy of financial distressed (as considered in this study), on the other investors should be able to analyze in depth how much the firms, for which they have shares in portfolio, are really distressed. In this respect, the role of accountants and financial analysts is not negligible.

On the same wavelength, an investment on auditor reputation seems necessary in a country where the structure of the legal framework makes it possible the GCO release before official EAs. In this respect, a higher auditor reputation could permit investors in entrusting more to important news like the audit reports and its contents. To this end, domestic regulatory enforcement for better isolating auditors from majority shareholders is encouraged. At last, the auditor judge, especially in civil law countries, is too much based on only accounting performance. If on one hand the document certified by auditors is only financial statements, on the other, it seems the right time to expand certification to the entire annual report including also non financial perspectives besides the financial ones. This way to proceed is in accordance with macro objectives encompassed in the 2030 United Nations (UN) Agenda and related UN Sustainable Development Goals (UN SDGs). In this respect, in a very recent study, Kausar and Lennox (2017) highlighted the relation between balance sheet and audit reporting conservatism, demonstrating that one of the main drivers for issuing a GCO is the lower firm market value over its book value. This evidence demonstrates a monoperspective approach by auditors, which is no longer suitable for providing reliable depictions of listed firms in the contemporary economy.

For academics, the use of quantitative methods needs to be strongly enforced to support the conclusions achieved. Anyway, focused qualitative and exploratory case studies as well as experimental studies aimed at denying or confirming over time the collected empirical evidence are strongly encouraged, to get more unequivocal results and interpretations.

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