

THE INFORMATION EFFECTS OF ANNUAL REPORT RELEASES AND INVESTORS' LIMITED ATTENTION

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ABSTRACT

This paper examines the informedness and consensus effects that occur during the release periods of annual reports, and explains how the investors' limited attention may affect price and volume of market reaction. The informedness effect indicates the degree to which investors become more knowledgeable, and this effect increases investors' demands causing increases in price changes and volume. The consensus effect, on the other hand, measures the extent of agreement among investors. Investors with limited attention may solely pay attention on specific financial information that yields different beliefs. Accordingly, an agreement in market consensus results in an increase in prices changes but a decrease in trading volume. The empirical results show that price changes present significant positive reaction as the informedness effect strengthens when the information search cost is decreasing. The market is fully reflected at announcement date under efficient market hypothesis, but when investors have limited attention, the market still shows significant reaction in the days following the announcement. Moreover, investors with limited attention may have an incomplete understanding in the annual report contents, in which present significant positive and negative reaction of trading volume at different years. We also find that there are different market reactions for different annual report released periods due to investors' limited attention.

1. Introduction

When financial reports are released to the market, changes in equilibrium prices or portfolio choice imply that announcements contain information — that is, they alter investors' beliefs (Stice, 1991). However, the empirical evidence of market reaction around earnings announcement dates shows mixed results. Although these discrepancies in findings may be the result of differences in sample and methodology, they are also the result of changes in information technology that affect the timing and pervasiveness of obtaining accounting information.

Under the Securities and Exchange Law in Taiwan, listed companies must transmit their annual reports to MOPS (Market Observation Post System) in electronic file format within four months after the end of each fiscal year. Similarly, the U.S. SEC (Securities and Exchange Commission) launched its electronic filing system in 1996. The innovation of information technology has since then allowed the implementation of the EDGAR (Electronic Data Gathering, Analysis, and Retrieval) system in the U.S., a counterpart of MOPS in Taiwan, which provides the most comprehensive and detailed single source of financial information to investors available over the Internet (Griffin, 2003). Asthana and Balsam (2001) argue that EDGAR reduces the cost of obtaining financial reports, while it increases the speed and uniformity of those reports disseminated to the market.

Early studies find limited market reaction to a pre-EDGAR 10-K report (e.g., Cready and Mynatt, 1991; Stice, 1991; Easton and Zmijewski, 1993), perhaps because in the paper filing system the 10-K report becomes available over a period of days to the market, such that it is difficult to detect exactly when investors receive the 10-K report. In turn, the electronic filing system provides condensed and accelerated information to the market, and theoretically most

investors can simultaneously view the reports via online, which has prompted market reaction to the filing of the 10-K report in the post-EDGAR period (e.g., Qi et al., 2000; Asthana and Balsam, 2001; Griffin, 2003).

In studies of market reaction to an earnings announcement, researchers generally agree that unexpected price changes imply information content. In contrast, researchers cannot draw a consistent conclusion regarding the interpretation of volume reactions (Verrecchia, 1981). Thus, Holthausen and Verrecchia (1990) argue that the informedness effect and consensus effect (the two information effects) usually occur jointly when financial information is released. The informedness effect measures the degree to which investors become more knowledgeable about a company, resulting in an increase of unexpected price changes and trading volume. The consensus effect, on the other hand, measures the extent of agreement among investors, resulting in an increase of unexpected price changes, but a decrease in trading volume as investors' opinions become homogeneous.

Morse (1981) documents a protracted progress of adjusting prices and portfolios to earnings announcement, and leaves several questions for future research, among them: (1) What factors cause this slow adjustment process? (2) When do investors actually receive the information? Thus, the answers to these questions can be found in this study.

The empirical results of this paper show that in the early stage of MOPS when the attention is costly limited, there is a negative market reaction on return variability. Later, the upgraded version of MOPS has prompted investors' attention to be less costly in searching information, in which we find positive price change reactions during the filing period.¹ Nonetheless, the market

¹ Internet usage is increasing every year. For example, America Online reported that it had 26.7 million subscribers at the end of 2000 compared with 6.2 million at the middle of 1996 (Asthana et al., 2004). The reported Internet population in Taiwan was 9.4 million at the middle of 2005 compared with 3.01 million in 1998

still shows a significant reaction even in days following the release of annual reports, and our preferred argument points to limited investor attention. Moreover, there are different market reactions for different release periods of annual reports.

This paper uses a sequential information release and selection problem that has come to be known as the Secretary Problem.² The releases of sequential annual reports and investors' limited attention accommodate this kind of problem, though the analyses in this paper are a simplified version for such an application. Hong and Stein (2007) argue that limited attention per se is not sufficient to generate interesting patterns in prices or volume; rather, it needs to be combined with the assumption that investors are unsophisticated and interpret the earnings news differently. Thus, our paper contributes to the existing empirical work on investor inattention to earnings releases and heterogeneous beliefs to public information.

The remainder of this paper is organized as follows. Section 2 presents an overview of studies on limited attention. Section 3 sets up a basic model of limited attention. Section 4 describes variables measurement and presents the results. Section 5 concludes. Finally, the Appendix describes the original statement of the Secretary Problem and its derivation.

2. Related Studies on Limited Attention

In comparison with the rationality assumption in traditional economics, Simon (1956) proposes the notion of *bounded rationality*, using the metaphor of a pair of scissors, where one blade represents the “cognitive limitations” of actual humans and the other is the “structure of

(<http://www.find.org.tw>).

² The Secretary Problem has a variety of names according to the way in which it is analyzed, such as the Beauty Contest Problem or the Dowry Problem. The common feature of these problems is to find sequentially the maximum of a random sequence of fixed length (Gilbert and Mosteller, 1966).

the environment.” Studying only one blade is not enough, as it takes both for the scissors to cut.

There are three classes of processes that a model of bounded rationality typically specifies: (1) simple search rules; (2) simple stopping rules; (3) simple decision rules. One reason that these simple heuristics work is that people can exploit structures of information by applying fast and frugal rules, while demanding less information and computational power (Gigerenzer and Selten, 2001).

A main feature of bounded rationality is limited attention. Since attention is a scarce resource, demanding tasks draw more resources (Kahneman, 1973). Many research studies have shown that when primary and secondary tasks overlap temporally, the response to the secondary task suffers. Thus, poor performance on a secondary task may reflect a depletion of resources (Milliken and Tipper, 1998). Pashler (1998) argues that the term attention not only refers to limitations in perceiving multiple stimuli, but also refers to more general limitations in mental functioning, such as in making decisions, storing information in memory, and planning actions. The allocation of attention is not a goal in and of itself; but rather it is driven by some primary goal that we have in ordinary life.³

In a world where attention is a major scarce resource, information may be an expensive luxury, for it may turn our attention from what is important to what is unimportant (Simon, 1978). In financial markets, attention is a major factor in determining individual investors’ stock buying (Baber and Odean, 2007). Moreover, individual investors may face a search problem when choosing from among thousands of stocks, thereby limiting their search to stocks that have recently caught their attention, with contrarian investors buying previous losers and momentum

³ For example, the human visual system accomplishes object recognition by visually selecting a relevant or salient part of the visual image and operating only on that cluster, then selecting another part of the image, and so forth. This strategy reduces the complexity of object recognition by limiting it to only one or a small number of elements at a time (Yantis, 1998).

investors buying previous winners (Odean, 1999). Merton (1987) points out that individual investors tend to hold only a few different common stocks in their portfolios, since gathering information on stocks requires resources.

In contrast to the traditional approach in finance, several studies depart from rationality, assuming that investors have limited attention and cognitive processing power. For instance, there is a crowding-out effect wherein a salient disclosure distracts attention from another disclosure, and thereby reduces welfare (Hirshleifer et al., 2002). Investors with limited attention usually do not make full use of balance sheet information and solely focus on accounting profitability that neglects cash profitability information, showing predictability in the stock return (Hirshleifer et al., 2004). Hence, the consequences of limited attention and firms' reporting choices have effects on market prices (Hirshleifer and Teoh, 2003).

Stock market misreactions to different earnings components and post-earnings announcement drift anomalies are a consequence of limited investor attention (Hirshleifer and Teoh, 2005). Peng and Xiong (2006) find that investors process more market and sector-wide information than firm-specific information due to limited attention, which determines the cross-sectional patterns of stock returns.⁴ In addition, weekends distract investor attention temporarily with delayed stock responses on Friday announcements (Della Vigna and Pollet, 2006). Thus, our paper differs from these others in that it compares the market reaction to the hypothesized "attention-grabbing" zone to the reaction on the earliest and latest filing companies. The evidence supports the limited attention hypothesis, in which investors pay attention to only a subset of the sequential annual reports releases (measured as informedness effect), and they also

⁴ For instance, during Internet bubble period, firms that changed their companies' name to dot.com without any fundamental changes exhibited significant abnormal returns around their name-change announcement (Cooper et al., 2001)

interpret the content of annual reports differently (measured as consensus effect).⁵

3. A Basic Model of Limited Attention

In financial markets, investors who have incomplete attention frequently limit their search to stocks that have recently captured their attention (Odean, 1999; Barber and Odean, 2007). Because of limited cognitive resources when searching for information on stocks, individual investors are more likely to hold only a few stocks in their portfolios (Merton, 1987).

This section starts with a probabilistic model that is an application of the Secretary Problem. The model describes the process in which investors adopt a simple investment-decision rule that will have a chance to select the best performance stock.

Consider that during the release periods of annual reports, there are n listed companies announcing their annual reports in a successive sequence, and the order of annual reports released is random and equally likely. Whenever the attention is a scarce cognitive resource, investors apply a simple search rule to select the company with the best performance.

Suppose that the best company H is in position i in the sequence of annual report announcements. At the instance of the announcement, investors cannot identify whether company H is indeed the best company, as they have to wait and observe until the last company's announcement. Since searching out annual reports costs time and attention, investors apply a simple search rule by letting the first j annual reports go by and then selecting the first one that is better than all of those first j , $0 \leq j < n$.

⁵ This paper uses the economic rationale of both return and volume effects at the time of information releases in Holthausen and Verrecchia (1990). As other empirical studies on limited attention, our paper provides indirect evidence since direct tests are scarce, because human attention and its allocation are difficult to measure in financial market settings (see e.g., Corwin and Coughonour, 2007)

Two conditions occur. First, the company with the best performance appears among the first j companies — that is, $i \leq j$. Due to the simple search rule, investors are inattentive to the annual reports of company H . At this time, the informedness effect of annual reports has not yet been activated, and accordingly their announcements do not alter investors' beliefs. The conditional probability of selecting company H is zero. It thus follows that:

$$P_j(H|X=i) = 0, \text{ if } i \leq j. \quad (1)$$

Second, company H appears after the first j companies, and the financial performances of companies in the position from j to $i-1$ are not better than the first j companies. At this moment, the informedness effect of annual reports attracts investors' attention and helps them to make investment decisions. When there is less diversity of belief among investors, trading volume decreases, and this is the consequence of the consensus effect. The conditional probability of being attentive and selecting company H is:

$$P_j(H|X=i) = \frac{j}{(i-1)}, \text{ if } i > j. \quad (2)$$

Hence, the probability of selecting the best company H is:

$$P_j(H) = \sum_{i=1}^n P_j(H|X=i)P(X=i) \quad (3)$$

$$= \frac{1}{n} \sum_{i=1}^n P_j(H|X=i) \quad (4)$$

$$\cong 1/e. \quad (5)$$

Investors who rely on heuristics, as modeled in Fischer and Verrecchia (1999), should be able to influence price, earn enough profits to survive, and act as important players in a financial market. Thus, investors with limited attention applying a simple decision rule have the chance of

selecting the best company H , and the probability is approximately $1/e$ ($\cong 37\%$). For instance, suppose that 100 companies successively release their annual reports. Investors may not be attentive to the first few companies' announcements and let approximately 37 ($\cong 100 \times 1/e$) annual reports go by. They become attentive by selecting the first one to appear that is better than the preceding announcement, thereby causing significant market reaction during this period of report releasing. We label this period as the "attention-grabbing" zone.

As stated in the first condition, when investors let the annual report of company H go by due to limited attention, they do pay attention to those annual reports in the days following the announcement, causing significant price changes and trading volume in a protracted process of adjusting prices and portfolios after the announcement. We attribute this phenomenon to two factors: (1) because of investors' limited attention, the informedness effect of annual reports cannot be activated at any one instance, but it successively attracts investors' attention in the days following the announcement; (2) even if the annual reports are under investors' attention, the interpretation of the content in the annual reports may not be complete. When the consensus of interpretations shifts upward, trading volume decreases. Only when there is ample disagreement among investors does trading volume increase.

4. Variables Measurement, Samples, and Empirical Results

4.1. Variables Measurement

Most investors' stock-buying decisions are driven by an attention-grabbing event, and the release of annual reports surely attracts the attention of investors. As the annual reports are disseminated to the market, there is a condensed focus on them resulting in a change of price variability and trading volume (Holthausen and Verrecchia, 1990; Bamber and Cheon, 1995;

Bamber et al., 1997). We employ SAR (standardized absolute return) and SAAR (standardized absolute abnormal return), as used in previous literature, to measure the market reaction on price changes (e.g., Cready and Mynatt, 1991; Asthana and Balsam, 2001). In addition, we also calculate SV (standardized volume) to measure the market reaction on the trading volume, as used in Asthana and Balsam (2001) and Asthana et al. (2004).

SAR is obtained by subtracting the mean absolute return $\mu(|R_{it}|)$ during the non-filing period (-60, -11) from the absolute return $|R_{it}|$ during the event period (-1, +5), and then deflating by the standard deviation of absolute returns $\sigma(|R_{it}|)$ during the non-filing period. It is defined as:

$$SAR_{it} = \left(\frac{|R_{it}| - \mu(|R_{it}|)}{\sigma(|R_{it}|)} \right). \quad (6)$$

The abnormal return is calculated by using the market model, with a 200-day (-210, -11) estimation period. Thus, SAAR is obtained by subtracting the mean absolute abnormal return $\mu(|AR_{it}|)$ during the non-filing period (-60, -11) from the absolute abnormal return $|AR_{it}|$ during the event period (-1, +5), and then deflating by the standard deviation of absolute abnormal returns $\sigma(|AR_{it}|)$ during the non-filing period. It is defined as:

$$SAAR_{it} = \left(\frac{|AR_{it}| - \mu(|AR_{it}|)}{\sigma(|AR_{it}|)} \right). \quad (7)$$

The above two price reactions are measured as an unsigned daily stock return (abnormal return), because the primary concern of this study is with the magnitude of investors' reaction to the release of the annual reports. Asthana and Balsam (2001) and Griffin (2003) posit that prior

research uses the square of abnormal return as a form of measure, but the result is likely to be biased in favor of a few extreme stock returns. Hence, the use of standardized absolute return instead of standardized square return precludes the disturbance of extreme values and gives a more powerful test (Rohrbach and Chandra, 1989).

SV is obtained by subtracting the mean trading volume $\mu(VOL_{it})$ measured in shares during the non-filing period (-60, -11) from the trading volume VOL_{it} during the event period (-1, +5), and then deflating by the standard deviation of trading volume $\sigma(VOL_{it})$ during the non-filing period. It is defined as:

$$SV_{it} = \left(\frac{VOL_{it} - \mu(VOL_{it})}{\sigma(VOL_{it})} \right). \quad (8)$$

If the release of annual reports cannot attract investors' attention, then SAR and SAAR are expected to be indistinguishable from zero. On the contrary, if annual reports attract investors' attention and have information content, then the market reaction will be different from the non-filing period. The release of annual reports is said to contain information if it can alter the beliefs of market participants in a systematic way (Beaver, 1998).

With the arrival of new information during the filing period, Holthausen and Verrecchia (1990) identify two effects of new information: an informedness effect and a consensus effect. If information contained in the annual reports increases informedness, then both the variance in unexpected price change and trading volume will increase. However, if new information increases consensus, then the variance in unexpected price change will increase, but trading volume will decrease. Note that the trading volume is influenced by both informedness and consensus effects, and it may shift upward or downward depending upon which effect dominates.

4.2. Control Variables

In analyzing investors' limited attention, the information environment and firm characteristics are taken as control variables. Thus, after controlling for possible influential factors, a multiple regression test allows us to examine if systematic behavioral biases are still encountered in the market. These control variables are: (1) firm size — smaller firms generally convey more unexpected information and respond more than larger firms (Atiase, 1985; Bamber, 1987; Freeman, 1987). Moreover, the uploading of annual reports to MOPS helps smaller firms transmit their financial information to more market participants; (2) net income — prior research finds that average abnormal returns associated with the release of financial reports published earlier (later) than expected are positive (negative), indicating that early (delayed) reports carry good (bad) news (e.g., Chamber and Penman, 1984). Tsai (1995) also finds that a company with a net loss, on average, postpones its report's release time; (3) book-to-market ratio — it is taken as a proxy variable for future growth opportunities or risk (Asthana et al., 2004), because it is difficult to evaluate those firms with a low book-to-market ratio from the annual reports (Bushee et al., 2003); (4) debt ratio — this is an important indicator of a company's financial risk. A firm's debt level is associated with a different market response (e.g., Dhaliwal et al., 1991; Dhaliwal and Reynolds, 1994; Billings, 1999). When a firm's debt level is too high, there is concern for future default and financial distress. In turn, a firm with a low debt level normally shows solid financial structure, and investors pay attention to this information.

To examine different annual report filing timings that have an impact on market reaction, we conduct the following multiple regressions:

$$SAR_{it} (SAAR_{it}, SV_{it}) = \beta_0 + \beta_1 DATNT_{it} + \beta_2 DEARLY_{it} + \beta_3 DLATE_{it} + \beta_4 LOGMV_{it}$$

$$+\beta_5 NI_{it} + \beta_6 BM_{it} + \beta_7 DA_{it} + \varepsilon_{it}. \quad (3.9)$$

The dependent variable is either SAR, SAAR, or SV measured over the release of the annual reporting period for company i at filing date t . The three indicator variables related to the different filing timings are as follows: *DATTNT* (1 = report filing belongs to the “attention-grabbing” zone, 0 = otherwise); *DEARLY* (1 = report filing belongs to the top 20%, 0 = otherwise); *DLATE* (1 = report filing belongs to the last 20%, 0 = otherwise). According to the Secretary Problem, the optimum strategy is to wait until after 37% of the earnings announcements and then to select the next relatively best one. Thus, we choose those sequential annual report filings which fall within the 37% to 57% of the releasing position as the “attention-grabbing” zone.⁶

The control variables related to a firm’s characteristics are as follows: *LOGMV* is the log of the market value of common equity at two days prior to the annual reports’ filing date; *NI* is net income deflated by total assets; *BM* is common stockholders’ equity deflated by the market value of common equity; *DA* is total debts deflated by total assets.

4.3. Data and Sample

The stock return, trading volume, and financial data are collected from the TEJ (Taiwan Economic Journal) database. We also collect listed companies’ electronic filings of annual reports from MOPS (Market Observation Post System) for the fiscal years ending from 1998 to 2004, since 1998 is the first fiscal year in which annual reports appear in MOPS.⁷ Banking and

⁶ Despite the choice of the quintile 37% to 57% being an arbitrary cutoff, our purpose is to compare the response of prices and trading volume of this “attention-grabbing” zone to that of the top-quintile and last-quintile filing companies. For sensitivity analysis, we also repeat the multivariate tests by testing the “attention-grabbing” zone from 37% to 52% and 37% to 62%, and the results remain qualitatively similar.

⁷ There are many transitions in MOPS, which in turn lower the cost of obtaining annual reports to investors. For example, in the pre-stage of MOPS, investors interested in a listed firm’s financial reports had to go to a nearby

insurance industries are excluded from the sample due to special accounting treatment.

The event period (-1, +5) for the release of annual reports is evaluated over the seven-day period beginning one day before and ending five days after the electronic filing date in MOPS.⁸ If the electronic filing date meets a holiday or weekend, then it is accommodated to the next immediate business day. The choice for a test of (-1, +5) window is that not only can one observe the market reaction before and after the release of annual reports, but one can also allow for the fact that the Taiwan Securities and Exchange Corporation must take time to review after the electronic filing is submitted.⁹ The non-filing period (-60, -11), which begins 60 trading days before and ends 11 trading days before the filing day 0, is constructed over 50 days to preclude the influence of the previous third quarter financial report.

4.4. Descriptive Statistics

According to the Securities and Exchange Law in Taiwan, listed companies must upload their annual reports to MOPS in electronic file format within four months after the end of each fiscal year.

The majority of listed companies adopt a calendar year for their annual financial reporting, and about 80% of companies submit an electronic file within the statutory filing date. Among those companies that have a filing date in April, 81% cluster in the last ten days of April. For

brokerage office for retrieval. MOPS then offered free access over the Internet in July 1999, and investors can now read as well as download financial and operating information via online (see http://emops.tse.com.tw/emops_all.htm).

⁸ We choose the seven-day period surrounding the filing date, because of a longer window, other than financial information being released to the market, and the attribution of the market response to the accounting report becomes difficult.

⁹ According to Griffin (2003), the SEC takes 24 hours or more to review Forms 10-K and 10-Q before they are publicly available in the United States. Thus, investors can obtain those reports at zero or low cost within one or two business days following the filing date. In order to make the financial reports timely, we presume that the review process in Taiwan is similar to that found in the United States.

companies that delay filing annual reports until May, 90.2% cluster in the first ten days of May.¹⁰ We further investigate the causes for delayed reports and find that among them, the most encountered issues are companies with a restatement of financial statements, a going-concern issued by auditors, and/or they are going private.

The original filing dates and hours data collected from MOPS are 3,744 firm-years, which are then reduced to 3,407 firm-years due to the sample selection criteria as follows: (1) it must be a listed company with at least 60 daily return data prior to the filing date; (2) the release of annual reports must be within 12 months at the end of the fiscal year. Table 1 shows the industrial distribution of the sample companies and the descriptive statistics of the filing month. The mean value of the filing month is from 4 to 4.583, indicating that filing dates are clustered in April and May.

[Insert Table 1]

Table 2 shows the market value at the end of each year, ranked by filing dates and categorized into five quintiles. Interestingly, the maximum mean, as well as the standard deviation of the market value, falls into the first and second quintiles, and the minimum mean of market value in turn falls into the fourth and fifth quintiles, with the exception found in the fiscal year 2002. This observation deserves the following analyses.

[Insert Table 2]

4.5 The Market Reaction on the Release Periods of Annual Reports

¹⁰ There are few companies that adopt a fiscal year ending in June 30, and hence their annual report releases are clustered through September to November.

MOPS has many transition stages that lead to different information search costs for investors. For example, investors had to go to a nearby brokerage office to retrieve financial information prior to July 1999, but that was then converted into free access over the Internet, and investors can now obtain timely information at home or any other Internet connection place. Other financial information for retrieval, such as important events and operating overview, were added into MOPS in August 2002. The latest version of MOPS was upgraded at the end of 2003 to furnish a variety of corporate information in an accelerated, condensed, and convenient manner.

Table 3 shows the results for SAR in examining a seven-day window beginning one day before and ending five days after the annual report is filed with MOPS. For the fiscal years 1998 through 2000, the stock return is significantly smaller (at the 1% level) than the mean return during the non-filing period on day -1, since the annual reports are not publicly available yet. Prior research has found a market reaction before earnings announcements (Ball and Brown, 1968; Ball and Kothari, 1991), and that was explained to reflect investors' belief about future earnings expectations. When there are other sources of information circulating in the market, such as dividend announcements, operating events, and/or the dissemination of unaudited financial statements, it is more likely to correct investors' expectation. Thus, the empirical result shows a significantly negative SAR from 1998 through 2000, which in turn shows a significantly positive SAR in 2002 and 2003 on day -1.

[Insert Table 3]

Because of higher information search costs prior to 1999, SAR is significantly negative, for example, on day 4 in 1998 (SAR = - 0.132, at the 5% level) and on day 2 in 1999 (SAR = -

0.249, at the 1% level). Whenever the annual reports are publicly available, the market reaction reflected on SAR is impacted by the informedness effect as well as the consensus effect. Moreover, the lowered cost and vast increase in the use of the Internet have caused SAR to show a significantly positive reaction at filing dates in 2000 and thereafter. Due to investors' limited attention, a significantly positive SAR still persists from day 2 to day 5 after the release of annual reports.

The other price reaction measure, SAAR, is consistent with the result of SAR, except for the significantly positive mean of SAAR in 1998. Taking this as a whole, there are significant SAAR responses during the event period studied, as shown in Table 4.

[Insert Table 4]

During the release periods of annual reports, trading volume also reflects both the informedness effect and the consensus effect. When reports begin to attract investors' attention (informedness effect), they usually are accompanied with an increase in trading volume as investors' demand shifts upward. However, once investors acquire and read annual reports, trading volume decreases as their opinion becomes homogeneous (consensus effect). Accordingly, the latest trading volume variation depends on which information effect dominates (Holthausen and Verrecchia, 1990).

From Holthausen and Verrecchia's (1990) model we distinguish information effects between informedness and consensus effects. Informedness, *ceteris paribus*, increases trading volume, but consensus decreases trading volume. Table 5 shows SV during the release periods of annual reports. When SV is positive (negative), it means that the trading volume during the filing period is higher (lower) than the mean of trading volume during the non-filing period. It is

shown that SV is significantly positive in the fiscal years of 1998, 2001, and 2002, indicating that the informedness effect dominates the consensus effect. On the other hand, SV is significantly negative in the fiscal years of 1999, 2000, 2003, and 2004, as the consensus effect dominates the informedness effect, and thereby there is an agreement of opinion among market participants. Thus, when investors have limited attention, they interpret differently the content of annual reports that lead to heterogeneous beliefs in some years, but homogeneous beliefs in other years.

[Insert Table 5]

4.6 The Market Reaction at Different Release Timings of Annual Reports

Attention is a scarce resource. This paper investigates if different release timings have different price and trading volume reactions as most listed companies cluster in April for releasing their annual reports. Prior research, examined on the annual report paper filing system, which is in the pre-EDGAR era, has found that there is an association between the timing of earnings announcements and abnormal return. The release of annual reports earlier (later) than expected has on average a positive (negative) abnormal return (Kross, 1981; Givoly and Palmon, 1982; Kross and Schroeder, 1984).

Table 6 shows the three different release timings of annual reports. The first is the quintile filing of companies in the “attention-grabbing” zone derived from the probabilistic model of limited attention in Section 3. The second is the top-quintile, and the third is the last-quintile of filing companies. We also compare the difference of SAR between them. Notably, companies within the “attention-grabbing” zone have a significantly positive SAR at the 1% level over day 0 to day 5, except for day -1 which is significant at 5%. This indicates that investors are attentive

to the new arrival of information into the market. When companies belong to the top-quintile filing, their SAR is significantly negative, indicating that investors are inattentive when the release of annual reports is too early.

[Insert Table 6]

When the release of annual report is later than expected, it is a sign of bad news for delayed reports (Chambers and Penman, 1984). Table 6 shows SAR for the last-quintile filing companies, in which SAR is significantly positive from day -1 to day 3, negative but insignificant on day 4, and finally significantly negative on day 5. This switch of SAR sign means that delayed reports have changed investors' beliefs, indicating a shift to consensus effect from informedness effect. Additionally, comparing the three different filing timings, the mean SAR belonging to the "attention-grabbing" zone is significantly greater than the top-quintile (Diff. SAR = 0.354, at the 1% level) and the last-quintile filing (Diff. SAR = 0.192, at the 1% level), respectively. Moreover, the mean SAR of the top-quintile filing is significantly smaller than the last-quintile filing (Diff. SAR = -0.162, at the 1% level). Table 7 shows the results for SAAR that reaches a similar conclusion in Table 6.

[Insert Table 7]

In examining the effect that different filing timings have on trading volume, Table 8 shows that there is no significant SV for the "attention-grabbing" zone, except for a significantly positive SV on day 4 (SV = 0.201, at the 10% level). For the top-quintile filing, in spite of the significantly positive mean of SV over the entire event period (SV = 0.086, at the 1% level), there is no significant SV on the single day measure. This fact can be explained as the informedness effect countervailing the consensus effect. Note that for the last-quintile filing, SV

is significantly negative, indicating that the consensus effect dominates the informedness effect. In other words, there is a consensus on investors' belief about delayed reports, resulting in a decrease of trading volume. Consequently, in comparison with the other two filing timings, the mean SV for the last-quintile filing is significantly smaller than that of the "attention-grabbing" zone (Diff. SV = 0.246, at the 1% level) and the top-quintile filing (Diff. SV = 0.285, at the 1% level).

[Insert Table 8]

4.7. After Controlling for Firm Characteristics

We employ a multiple regression analysis to examine the different filing timings that have an impact on stock return and trading volume after controlling for firm size, net income, book-to-market ratio, and debt ratio. Table 9 shows that in the "attention-grabbing" zone, the coefficients on DATTNT in regressions SAR (at the 1% level) and SAAR (at the 5% level) are significantly positive, which support the hypothesis of limited attention. For the top-quintile and last-quintile filings, the coefficients on DEARLY and DLATE are significantly negative in regression SAR as well as SAAR.

Measuring the market reaction in terms of SV, for the top-quintile and last-quintile filings, the coefficient on DEARLY is significantly positive at the 5% level, whereas the coefficient on DLATE is significantly negative at the 1% level. However, there is a countervailing informedness effect and consensus effect found in the "attention-grabbing" zone, such that the coefficients on DEARLY and DLATE are insignificant, which is consistent with the result of univariate test in Table 8.¹¹

¹¹ Some investors may have preemptive information about the operating performance of the next first quarter. Thus,

For those control variables, we use market value as a proxy for firm size, which supports prior findings wherein smaller firms respond more than larger firms during the release of annual reports (e.g., Atiase, 1985; Freeman, 1987). In contrast to larger firms that have other sources of information disseminated in the market, smaller firms usually convey more unexpected financial information. Hence, the coefficients LOGMV in the SAAR regression (LOGMV = -0.013) and in the SV regression (LOGMV = -0.052) are significantly negative. We also find that the coefficient on BM is significantly negative in the SAAR regression (BM = -0.026, at the 1% level), since it is difficult to evaluate a firm's value for companies that have a low book-to-market ratio, thereby creating a larger negative market reaction after the release of an annual report. While the coefficients on DA in regression SAAR (DA = -0.1) and in regression SV (DA = -0.285) are significantly negative, the coefficients on NI in the three regression models are insignificant.

[Insert Table 9]

5. Conclusion

Although the annual report is pivotal to investors' investment decision, the financial information contained in the annual reports must capture investors' attention and information processing in order to create market response. In this paper we examine the informedness effect and consensus effect that occur during the release periods of annual reports and explain how investor attention may affect the price and volume of market reaction.

The informedness effect measures the degree to which investors become more

we include the earnings deflated by total assets of the next first quarter as a control variable and the results remain qualitatively unchanged.

knowledgeable about a company, thereby increasing the investors' demand, which in turn causes an increase in price changes and trading volume due to investors' attention. With the advances in information technology, the Internet increases the uniformity, acceleration, and convenience of obtaining annual reports, in which the informedness effect is evidently strengthened. Thus, the market is supposed to be immediately and fully reflected at the announcement date under efficient market hypothesis. However, when investors have limited attention, the market still shows a significant reaction even in the days following the announcement.

The consensus effect, on the other hand, measures the extent of agreement among investors. Although investors can obtain timely annual reports, they have an incomplete understanding of the report's content or the inattention leads them to focus on specific information, resulting in a diversity of opinion among investors. From changes in trading volume, one can examine the degree of market consensus. Thus, the trading volume decreases as consensus increases, holding the informedness effect constant.

The empirical results show that the electronic filing of annual reports has a significant impact on the price changes and trading volume of market reaction. For price reaction, investors have higher information search costs for fiscal years before 1999, such that the informedness effect is small as the attention is costly limited by that time. Consequently, the variability of return during the filing period is smaller than the mean return of the non-filing period. Later, the advance in information technology strengthens the informedness effect, resulting in a larger return response during the filing period.

In measuring trading volume response, the informedness effect dominates the consensus effect in years 1998, 2001, and 2002, showing significantly positive trading volume changes. In contrast, the consensus effect dominates the informedness effect in years 1999, 2000, 2003, and

2004, presenting significantly negative trading volume changes. Thus, investors with limited attention interpret each year differently about the content of annual reports, which may not yield a consensus in belief. In addition, the reaction of stock return is larger in the attention-grabbing filing period than for the earliest and latest filing companies. Because of countervailing between the informedness effect and consensus effect, there is no significant trading volume reaction for the attention-grabbing filing companies.

The results for the market responses during the annual report releases support the hypothesis of limited attention. Further works on the attention-grabbing event in the content of the accounting report, as well as if managers strategically time the release of financial information could prove fruitful in improving our understanding of the usefulness of the financial reporting.

Appendix The original statement of the Secretary Problem

There are many variations on the Secretary Problem, but all have the following common features. Suppose a secretarial position is available and the number n of applicants is known. The applicants are interviewed sequentially in random order, each order being equally likely. The decision to accept or reject an applicant must be based only on the relative ranks of those applicants interviewed so far. An applicant once rejected cannot later be recalled. The payoff is 1 if the boss chooses the best of the n applicants and 0 otherwise. The optimum strategy for the Secretary Problem has a simple solution — that is, to wait until about 37% of the applicants have been interviewed and then to select the next relatively best one (see detailed discussion of the problem in Ferguson, 1989).

The derivation of the optimal probability in equation (5) is as follows (see Ross, 2003).

From equations (1) and (2) we obtain that:

$$P_j(H) = \frac{j}{n} \sum_{i=j+1}^n \frac{1}{j-1} \approx \frac{j}{n} \int_j^{n-1} \frac{1}{x} dx \quad (\text{A1})$$

$$= \frac{j}{n} \log\left(\frac{n-1}{j}\right) \approx \frac{j}{n} \log\left(\frac{n}{j}\right). \quad (\text{A2})$$

Now, if we consider the function $g(x)$, then:

$$g(x) = \frac{x}{n} \log\left(\frac{n}{x}\right). \quad (\text{A3})$$

The value of x that maximizes equation (A3) can be found by setting the derivative with respect to x equal to zero and then solving for x .

$$g'(x) = \frac{1}{n} \log\left(\frac{n}{x}\right) - \frac{1}{n}. \quad (\text{A4})$$

$$g'(x) = 0 \Rightarrow \log\left(\frac{n}{x}\right) = 1. \quad (\text{A5})$$

Hence:

$$x = n/e. \quad (\text{A6})$$

Substituting equation (A6) back into equation (A3) gives $g(x) = 1/e$. Thus, the result is proven.

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Table 1 Summary Statistics of Industry Composition and Filing Month

Industries	Sample size (firm-year)	Mean (month)	1 st Quartile (month)	3 rd Quartile (month)
Cement	56	4.357	4	5
Foods	132	4.447	4	4.5
Plastics	124	4.202	4	4
Textiles	330	4.315	4	5
Electronic & Machinery	194	4.165	4	4
Appliance & Cable	97	4.464	4	5
Chemicals, Biotech & Healthcare	181	4.243	4	4
Glass & Ceramics	48	4.583	4	5
Paper & Pulp	48	4.208	4	4
Steel & Iron	158	4.152	4	4
Rubber	61	4.328	4	5
Automobile	29	4.483	4	5
Electronics	1148	4.205	4	4
Construction	208	4.231	4	4.5
Transportation	102	4.304	4	5
Tourism	37	4.000	4	4
Wholesale & Retail	73	4.260	4	4
Others	381	4.172	4	4
Total	3407			

Table 2 Summary Statistics of Market Value

Filing date order	Fiscal year-ends						
	1998	1999	2000	2001	2002	2003	2004
1 (first 20%)	18586 (29671)	23905 (48332)	12909 (34266)	20217 (86737)	9021 (21920)	26222 (122772)	17926 (70106)
2	23741 (59372)	37521 (158191)	20203 (101920)	24033 (149262)	14533 (57058)	14947 (52223)	24851 (112922)
3	16523 (31976)	18043 (40625)	11321 (31076)	8370 (20110)	14829 (34972)	14849 (45712)	14052 (50665)
4	14166 (31925)	34247 (105719)	17605 (79145)	15173 (37425)	8761 (20727)	20398 (53027)	10773 (23006)
5 (last 20%)	10391 (16681)	13442 (35464)	13303 (59930)	12438 (30960)	15575 (74706)	9264 (25256)	20960 (54526)
Sample size	315	348	424	490	584	621	625

This table presents the market value (in NT\$ millions) at the end of each year. Standard deviations are in parentheses.

Table 3 Standardized Absolute Return Around Annual Report Filing Dates

Day	Fiscal year-ends						
	1998	1999	2000	2001	2002	2003	2004
-1	-0.128*** (-2.68)	-0.222*** (-4.67)	-0.231*** (-4.60)	0.073 (1.57)	0.778*** (13.88)	0.069* (1.79)	-0.028 (-0.65)
0	0.014 (0.24)	-0.046 (-0.89)	0.123** (2.24)	0.157*** (3.19)	0.432*** (7.68)	0.357*** (7.82)	0.029 (0.58)
1	0.010 (0.17)	0.057 (1.06)	0.302*** (4.76)	0.306*** (5.74)	0.468*** (8.76)	0.240*** (5.58)	0.101** (2.03)
2	-0.017 (-0.33)	-0.249*** (-5.05)	0.240*** (4.06)	0.288*** (5.62)	0.296*** (5.52)	0.305*** (6.94)	0.171*** (3.50)
3	-0.056 (-1.04)	-0.024 (-0.46)	0.347*** (5.59)	0.381*** (7.08)	0.395*** (7.12)	0.593*** (12.11)	0.134*** (2.64)
4	-0.132** (-2.41)	-0.201*** (-3.97)	0.102* (1.94)	0.284*** (5.03)	0.142*** (2.85)	0.457*** (9.69)	0.070* (1.67)
5	-0.112** (-2.02)	-0.313*** (-6.46)	0.143** (2.39)	0.228*** (4.45)	0.058 (1.23)	0.386*** (8.36)	-0.061 (-1.56)
Average (-1, +5)	-0.060*** (-2.96)	-0.143*** (-7.41)	0.147*** (6.66)	0.245*** (12.49)	0.367*** (18.00)	0.344*** (20.09)	0.059*** (3.39)

The standardized absolute return (SAR) is obtained by subtracting the mean absolute return during the non-filing period (-60, -11) from the absolute return during the event period (-1, +5), and deflated by the standard deviation of absolute returns during the non-filing period; t-statistics are shown in parentheses. The symbols *, **, and *** represent significance at 10%, 5%, and 1% levels, respectively.

Table 4 Standardized Absolute Abnormal Return Around Annual Report Filing Dates

Day	Fiscal year-ends						
	1998	1999	2000	2001	2002	2003	2004
-1	-0.017 (-0.29)	-0.220*** (-4.46)	-0.232*** (-4.16)	0.064 (1.28)	0.478*** (8.00)	-0.020 (-0.51)	-0.027 (-0.63)
0	0.124* (1.70)	-0.098* (-1.88)	0.159*** (2.73)	0.091* (1.92)	0.442*** (7.32)	0.026 (0.67)	0.061 (1.11)
1	0.127* (1.87)	-0.107** (-2.20)	0.273*** (4.19)	0.129*** (2.63)	0.439*** (7.86)	0.092** (2.02)	0.119** (2.20)
2	0.102 (1.62)	-0.171*** (-3.22)	0.158*** (2.62)	0.185*** (3.44)	0.414*** (6.73)	0.058 (1.30)	0.127** (2.50)
3	0.025 (0.39)	-0.289*** (-5.50)	0.123** (2.10)	0.079 (1.49)	0.435*** (7.09)	0.134*** (3.06)	0.099** (2.13)
4	0.043 (0.61)	-0.174*** (-3.43)	0.081 (1.45)	0.143** (2.47)	0.268*** (4.47)	0.147*** (3.19)	0.031 (0.71)
5	0.015 (0.21)	-0.318*** (-6.35)	0.114* (1.90)	0.162*** (3.08)	0.098* (1.89)	0.111** (2.42)	-0.045 (-1.14)
Average (-1, +5)	0.060** (2.38)	-0.197*** (-10.19)	0.097*** (4.29)	0.122*** (6.20)	0.368*** (16.50)	0.078*** (4.76)	0.052*** (2.88)
Sample size	299	338	412	474	563	606	619

The standardized absolute abnormal return (SAAR) is obtained by subtracting the mean absolute abnormal return during the non-filing period (-60, -11) from the absolute abnormal return during the event period (-1, +5), and deflated by the standard deviation of absolute abnormal returns during the non-filing period. The abnormal return is calculated by using a market model, with a 200-day (-210, -11) estimation period; t-statistics are shown in parentheses. The symbols *, **, and *** represent significance at 10%, 5%, and 1% levels, respectively.

Table 5 Standardized Volume Around Annual Report Filing Dates

Day	Fiscal year-ends						
	1998	1999	2000	2001	2002	2003	2004
-1	0.392*** (4.04)	-0.512*** (-11.70)	-0.261 (-1.52)	0.487*** (3.21)	0.475*** (5.87)	-0.415*** (-10.48)	-0.328*** (-6.80)
0	0.428*** (4.40)	-0.594*** (-15.82)	-0.037 (-0.11)	0.425*** (3.04)	0.523*** (5.17)	-0.406*** (-11.57)	-0.282*** (-4.44)
1	0.532*** (5.04)	-0.541*** (-8.43)	-0.213 (-1.60)	0.285*** (3.00)	0.465*** (3.96)	-0.441*** (-13.07)	-0.298*** (-4.95)
2	0.637*** (5.79)	-0.554*** (-12.40)	-0.155 (-0.87)	0.371*** (2.99)	0.413*** (3.91)	-0.452*** (-9.51)	-0.184*** (-3.39)
3	0.721*** (6.49)	-0.586*** (-12.89)	-0.173 (-1.05)	0.268** (2.53)	0.508*** (2.71)	-0.434*** (-9.91)	-0.030 (-0.22)
4	0.802*** (6.76)	-0.560*** (-8.62)	-0.322*** (-3.50)	0.307** (2.58)	0.314*** (2.99)	-0.411*** (-9.70)	-0.212*** (-3.48)
5	0.657*** (5.71)	-0.637*** (-17.95)	-0.154 (-0.55)	0.233*** (2.64)	0.485*** (3.56)	-0.487*** (-13.19)	-0.306*** (-7.24)
Average (-1,+5)	0.596*** (14.56)	-0.569*** (-30.58)	-0.188** (-2.40)	0.339*** (7.51)	0.455*** (9.76)	-0.435*** (-28.70)	-0.234*** (-8.46)

The standardized volume (SV) is obtained by subtracting the mean trading volume, measured in shares, during the non-filing period (-60, -11) from the trading volume during the event period (-1, +5), and deflated by the standard deviation of trading volume during the non-filing period; t-statistics are shown in parentheses. The symbols *, **, and *** represent significance at 10%, 5%, and 1% levels, respectively.

Table 6 Standardized Absolute Return at Different Annual Reports' Filing Time

Day	"Attention-grabbing" zone (a)	Top 20% (b)	Last 20% (c)	Difference (a)–(b)	Difference (a)–(c)	Difference (b)–(c)
-1	0.098** (2.34)	-0.002 (-0.04)	0.155*** (3.68)	0.100* (1.66)	-0.057 (-0.96)	-0.157*** (-2.61)
0	0.242*** (5.25)	-0.056 (-1.34)	0.295*** (6.47)	0.298*** (4.79)	-0.053 (-0.81)	-0.351*** (-5.67)
1	0.381*** (8.19)	-0.080* (-1.87)	0.179*** (4.16)	0.461*** (7.28)	0.202*** (3.18)	-0.259*** (-4.27)
2	0.467*** (10.20)	-0.052 (-1.24)	0.141*** (3.16)	0.519*** (8.38)	0.326*** (5.09)	-0.193*** (-3.16)
3	0.421*** (9.01)	-0.015 (-0.35)	0.170*** (3.69)	0.436*** (6.93)	0.251*** (3.83)	-0.185*** (-2.96)
4	0.454*** (9.23)	-0.106*** (-2.75)	-0.000 (-0.02)	0.560*** (8.97)	0.454*** (7.24)	-0.106* (-1.92)
5	0.137*** (3.04)	0.029 (0.71)	-0.083** (-2.03)	0.108* (1.79)	0.220* (3.62)	0.112*** (1.95)
Average (-1,+5)	0.314*** (17.99)	-0.040** (-2.57)	0.122*** (7.47)	0.354*** (15.11)	0.192*** (8.02)	-0.162*** (-7.18)

This table presents the standardized absolute returns (SAR) of annual reports' filing time belonging to the "attention-grabbing" zone, the top-quintile, and the last-quintile. The definition of SAR can be found in Table 3. The sample period of fiscal year covers from 1998 to 2004; t-statistics are shown in parentheses. The symbols *, **, and *** represent significance at 10%, 5%, and 1% levels, respectively.

Table 7 Standardized Absolute Abnormal Return at Different Annual Reports' Filing Timing

Day	"Attention-grabbing" zone (a)	Top 20% (b)	Last 20% (c)	Difference (a)–(b)	Difference (a)–(c)	Difference (b)–(c)
-1	-0.041 (-0.99)	-0.011 (-0.24)	0.129*** (2.72)	-0.030 (-0.49)	-0.170*** (-2.69)	-0.140** (-2.14)
0	0.152*** (3.11)	-0.031 (-0.70)	0.284*** (5.86)	0.183*** (2.78)	-0.132* (-1.93)	-0.315*** (-4.82)
1	0.250*** (5.23)	-0.066 (-1.56)	0.151*** (3.21)	0.316*** (4.96)	0.099 (1.46)	-0.217*** (-3.43)
2	0.334*** (6.92)	-0.049 (-1.19)	0.096** (2.02)	0.383*** (6.04)	0.238*** (3.52)	-0.145** (-2.31)
3	0.292*** (5.69)	-0.080** (-2.13)	0.070 (1.50)	0.372*** (5.85)	0.222*** (3.18)	-0.150** (-2.50)
4	0.260*** (4.99)	-0.121*** (-3.11)	0.074 (1.58)	0.381*** (5.86)	0.186*** (2.65)	-0.195*** (-3.20)
5	0.044 (0.95)	-0.037 (-0.98)	-0.098** (-2.37)	0.081 (1.36)	0.142** (2.29)	0.061 (1.08)
Average (-1,+5)	0.184*** (10.10)	-0.056*** (-3.64)	0.101*** (5.72)	0.240*** (10.06)	0.083*** (3.28)	-0.157*** (-6.76)

This table presents the standardized absolute abnormal returns (SAAR) of annual reports' filing time belonging to the "attention-grabbing" zone, the top-quintile, and the last-quintile. The definition of SAAR can be found in Table 4. The sample period of fiscal year covers from 1998 to 2004; t-statistics are shown in parentheses. The symbols *, **, and *** represent significance at 10%, 5%, and 1% levels, respectively.

Table 8 Standardized Volume at Different Annual Reports' Filing Timing

Day	“Attention-grabbing” zone (a)	Top 20% (b)	Last 20% (c)	Difference (a)–(b)	Difference (a)–(c)	Difference (b)–(c)
-1	0.077 (0.70)	0.028 (0.46)	-0.235*** (-5.04)	0.049 (0.39)	0.312*** (2.60)	0.263*** (3.43)
0	-0.094 (-1.21)	0.109 (1.39)	-0.222*** (-4.65)	-0.203* (-1.84)	0.128 (1.41)	0.331*** (3.61)
1	-0.026 (-0.29)	0.075 (0.96)	-0.172*** (-3.36)	-0.101 (-0.84)	0.146 (1.39)	0.247*** (2.65)
2	0.060 (0.59)	0.079 (1.09)	-0.157*** (-2.59)	-0.019 (-0.15)	0.217* (1.83)	0.236*** (2.51)
3	0.027 (0.40)	0.200 (1.43)	-0.171*** (-2.96)	-0.173 (-1.11)	0.198** (2.22)	0.371** (2.45)
4	0.201* (1.93)	0.040 (0.57)	-0.212*** (-3.01)	0.161 (1.28)	0.413*** (3.28)	0.252** (2.53)
5	0.082 (0.74)	0.069 (1.02)	-0.223*** (-3.70)	0.013 (0.10)	0.305** (2.43)	0.292*** (3.23)
Average (-1, +5)	0.047 (1.28)	0.086*** (2.68)	-0.199*** (-9.25)	-0.039 (-0.81)	0.246*** (5.82)	0.285*** (7.39)

This table presents the standardized volume (SV) of annual reports' filing timing belonging to the “attention-grabbing” zone, the top-quintile, and the last-quintile. The definition of SAR can be found in Table 5. The sample period of fiscal year covers from 1998 to 2004; t-statistics are shown in parentheses. The symbols *, **, and *** represent significance at 10%, 5%, and 1% levels, respectively.

Table 9 Annual Report Filings and Market Responses with Controls for Firm Characteristics

$$SAR_{it} (SAAR_{it}, SV_{it}) = \beta_0 + \beta_1 DATTNT_{it} + \beta_2 DEARLY_{it} + \beta_3 DLATE_{it} + \beta_4 LOGMV_{it} + \beta_5 NI_{it} + \beta_6 BM_{it} + \beta_7 DA_{it} + \varepsilon_{it}.$$

	SAR	SAAR	SV
Intercept	0.200*** (3.20)	0.327*** (4.92)	0.515*** (3.14)
<i>DATTNT</i> _{it}	0.088*** (4.14)	0.044** (1.97)	0.075 (1.56)
<i>DEARLY</i> _{it}	-0.272*** (-13.58)	-0.192*** (-9.48)	0.114** (2.55)
<i>DLATE</i> _{it}	-0.093*** (-4.51)	-0.036* (-1.65)	-0.184*** (-4.92)
<i>LOGMV</i> _{it}	0.003 (0.52)	-0.013* (-1.96)	-0.052*** (-4.19)
<i>NI</i> _{it}	0.085 (0.84)	-0.172 (-1.54)	-0.228 (-0.99)
<i>BM</i> _{it}	-0.005 (-0.57)	-0.026*** (-3.16)	0.029 (1.77)
<i>DA</i> _{it}	0.002 (0.03)	-0.100* (-1.82)	-0.285* (-1.74)
F-Value	37.98***	17.57***	10.23***
Adjusted <i>R</i> ²	0.011	0.005	0.003

This table presents the regression of SAR, SAAR, and SV over days (-1, +5) around annual reports' filing dates. *DATTNT*_{it} (1 = report filing belongs to the "attention-grabbing" zone, 0 = otherwise); *DEARLY*_{it} (1 = report filing belongs to the top 20%, 0 = otherwise); *DLATE*_{it} (1 = report filing belongs to the last 20%, 0 = otherwise); *LOGMV*_{it} = log of market value of common equity at two days prior to the annual reports' filing dates; *NI*_{it} = net income deflated by total assets; *BM*_{it} = common stockholders' equity deflated by the market value of common equity; *DA*_{it} = total debts deflated by total assets. The maximum VIF among variables is 1.574, which means that there is no multicollinearity problem. The White's (1980) heteroscedasticity-corrected standard errors are in parentheses. The symbols *, **, and *** represent significance at 10%, 5%, and 1% levels, respectively.

An annual report is a document that public corporations must provide annually to shareholders that describes their operations and financial conditions. The front part of the report often contains an impressive combination of graphics, photos, and an accompanying narrative, all of which chronicle the company's activities over the past year and may also make forecasts about the future of the company. The back part of the report contains detailed financial and operational information. Key Takeaways. An annual report is a corporate document disseminated to shareholder that spells out the comp The Company Annual Report is the medium of communication between the company and its shareholders, investors and other readers. It is the best source to... Most of the time, he's busy reading the annual reports of different companies that either he's planning to invest or already invested in. And believe me, reading the annual report of multiple companies is not an easy task as each report easily consists of 200-300 pages or more. So I do more reading and thinking, and make less impulse decisions than most people in business. I do it because I like this kind of life. Warren Buffett. In this article, we are going to discuss what is a company annual report, its meaning, purpose, why investors read annual reports and finally how to read annual r... An annual report is a comprehensive report detailing a company's activities throughout the preceding year. Its purpose is to provide users, such as. The reports contain information, such as performance highlights, a letter from the CEO, financial information, and objectives and goals for future years. There are many users of annual reports, including shareholders and potential investors, employees, and customers. What Does an Annual Report Contain? Annual reports provide a significant amount of information for its readers who will be able to get a good overview of the company's overall performance in the preceding year. Financial Reporting. Shareholders' Information. Chairman's Communication. Investor Contacts. Sh Kiran Thomas 00:07:38 " 00:20:20 (Jio Platforms Limited). Sh Anshuman Thakur 00:20:21 " 00:26:26 (Jio - Financials). Sh Dinesh Thapar 00:26:29 " 00:44:23 (Reliance Retail). RIL's subsidiaries like Reliance Retail Limited and Reliance Trading Limited have participated in various initiatives across several areas. These include farm engagement activities, training and skill development of youth, community development activities and promotion of education, among others. View Major Subsidiaries & Associates. Media Releases. 06 Apr. Reliance Jio Announces Signing of Definitive Agreement for Trading of Right [...] The Directors submit their Annual Report, together with the Company's Statement of Assets and Liabilities, Statement of Operations, Statement of Changes in Net Assets, Statement of Cash Flows and the related notes for the year ended 31 December 2020 (Audited Financial Statements). The Master Fund is a limited partner of Third Point Offshore Master Fund L.P. (the "Master Partnership"), an exempted limited partnership under the laws of the Cayman Islands, of which Third Point Advisors II L.L.C., an affiliate of the Investment Manager, is the general partner. Third Point LLC is the Investment Manager to the Company, the Master Fund and the Master Partnership. The buybacks effected during the financial year led to an accretion to NAV per share of 51 cents.