What Drives Firms’ Voluntary Earnings Disclosure?
Literature Review and Observation of an Emerging “Period-Driven” Disclosure Strategy

ABSTRACT

Research is largely supportive of a high level of firm informativeness in the financial markets. The USA regulatory environment, following a shift in 1973, also encourages voluntary disclosure. Substantial theoretical research studies reasons for, and consequences of voluntary earnings disclosure (VED). Yet, empirical evidence points to a majority of firms not providing voluntary disclosure. At the same time, for those firms who disclose voluntarily, a significant quantity of VED activity is observed, often as earnings guidance, in reaction to performance surprises, or other events or interests.

Shortcomings in previous research have tended to mask the strategy behind firms’ VED frequency. This has been accentuated by limited transparency prior to the recent enactment of regulation Fair Disclosure, which has made public the full extent of firms’ voluntary disclosure.

A newly emerging disclosure profile is identified and observed. These firms provide VED regularly and frequently between mandatory earnings announcements, independently of their reported performance. This disclosure profile is named “Period-Driven” Voluntary Earnings Disclosure. Companies applying it are identified, most commonly providing mid-quarter earnings updates. This profile is specified and compared with the non-disclosing and “Event-Driven” VED profiles. Possible reasons and potential benefits are raised, leading to the conclusion that it may be a sustainable trend worthy of further investigation.

Key words: Disclosure, voluntary disclosure, voluntary earnings disclosure, management forecast, earnings guidance, corporate financial information, information asymmetry, information gap, go
1. **INTRODUCTION**

The subject of Voluntary Earnings Disclosure (VED) has been covered substantially by qualitative and quantitative research. Motivation for, and benefits of increased disclosure level have been highlighted, also pushing USA regulators into a supportive attitude. Yet, VED is still limited and mostly concentrated around earnings guidance to the financial markets and disclosure of material events – event-driven VED. The lack of transparency prior to Fair-Disclosure (FD) regulation, combined with other research shortcomings, may have restricted research on the strategy that firms apply in the frequency and regularity of their VED. This may explain why the strategy of frequent and regular disclosure at threshold periods, independent from the disclosure content and news, has not been studied so far.

This paper aims at identifying a different perspective of VED frequency and its other timing attributes. It focuses on the strategy and intention behind firm’s VED as opposed to the circumstances and situation reflected by it. It attempts to identify, name and specify a period-driven VED profile, and to suggest certain advantages it may have compared with the prevailing event-driven VED profile, based on prior VED research. Section 2 starts with a brief contextual review of the corporate financial information environment. Section 3 outlines research on VED and more specifically its time related attributes. Shortcomings in prior research are discussed in section 4, leading to the presentation and analysis of the period-driven VED profile in section 5, and concluding in section 6.

2. **CORPORATE FINANCIAL INFORMATION ENVIRONMENT**

This section reviews the subject of corporate financial information, gradually focusing on its role in market efficiency, its environment and measures, its behavioural aspects, and ending more specifically with earnings information.

**Information and Market Efficiency**

Ever since Fama (1970) introduced his Efficient Market Hypothesis theory, information has been at the centre of financial markets’ research. Fama has defined market efficiency at three levels: 1) The weak market efficiency, in which investors have full access to past information. This, therefore, cannot be used successfully to derive abnormal returns, being fully reflected in current security’s price; 2) The semi-strong market efficiency, in which investors have full access to public information, which cannot be used to derive abnormal returns, being fully reflected in current security’s price; 3) The strong market efficiency, in which even private inside information cannot lead to abnormal returns since it soon leaks and is also reflected in current prices. Since then, research has put significant efforts in trying to support or advance alternative theories to the Efficient Market Hypothesis, with strong emphasis on information and the reaction of market participants and stock returns to information.
Information Tools and Measures

With the central role of information in financial research, the need arose to measure, quantify and conceptualise it. This gave birth to the definition of several tools and measures including:

Information Content

Information content is used to measure the quantity of information, previously unknown to the public, contained in an item of news, announcement or signal. Since it is not conceivable to develop comparative benchmarks or measures for all different information signals, this has been done by way of measuring and comparing market reaction to news or signals, in order to define their information content. The implied information content of a signal is positively correlated with the specific (abnormal) stock return generated by it (Kim and Verrecchia, 1991).

Information Asymmetry

Information asymmetry, or the information gap between insiders and outsiders (Lev 1992), has also been widely researched. Most importantly, the distinction between the semi-strong and the strong Efficient Market Hypothesis rests on insider’s information and its ability to generate abnormal returns for its possessors. It follows from the definition that asymmetry is high when no announcements or other signals are communicated by insiders to the market. Announcements and publication of results reduce asymmetry.

Information Efficiency and Information Gap

Efficient markets, certainly under the strong Efficient Market Hypothesis, anticipate announcements based on pre-announcement and other information. They move stock prices accordingly to be closer to the post-announcement level that incorporates all the announcement information. The absolute deviation between the price on any given day prior to the announcement and the post-announcement price measures the information gap. The smaller it is the more efficient the market is to the given announcement (Heflin, Subramanyam and Zhang, 2003). The market is efficient to an information set “only if revealing that information to all investors would change neither equilibrium price nor portfolios” (Latham, 1986).

Information in Behavioural Finance

Financial markets participants use valuation methods, based on the value of corporate net assets and a risk-adjusted discounted value of future earnings or cash flow streams (Demodaran, 1994). They derive objective values for companies and their shares. The Efficient Market Hypothesis (Fama, 1970) implies that actual share prices will not deviate significantly and consistently from such values.
Yet, empirical studies have demonstrated several such deviations — ‘anomalies’ (Shleifer, 2000). When such anomalies could not be explained by the rational behaviour embedded in Fama's Efficient Market Hypothesis, research has turned to behavioural explanations using phenomena originating from psychological research (e.g. Barberis and Huang, 2001; Shleifer, 2000), developing into the behavioural finance discipline. Here, too, debates centred around reaction to major information events and whether they are under-reactions, reaction to recurring or reversing information signals, and more.

One of the most widely researched market anomalies is known as the Post-Earnings-Announcement Drift (PEAD) (Shleifer, 2000). Researchers studying market reactions to earnings announcements observed two distinct periods: the initial reaction, usually considered the window of 3-5 days surrounding the announcement day, and the subsequent reaction of up to 60 days (Bodie, Kane and Marcus, 1999; Shleifer, 2000). The subsequent period is characterized by the fact that the full information content of the earnings announcement is publicly known. Under the Efficient Market Hypothesis, it is expected to be reflected in the stock return and price at the outset of this period (Fama, 1970). Contrary to the Efficient Market Hypothesis prediction, empirical studies find significant and consistent evidence of cumulative abnormal returns (CAR) during this subsequent period - PEAD. This leads to the claim that the initial reaction was an under-reaction (Foster, Olsen and Shevlin, 1984, cited in Bodie, Kane and Marcus, 1999). Underlying this claim is the assumption that the overall share price and value adjustment, over a long enough period, accurately reflects the change in the company valuation. Slow diffusion of information (Bernard, Thomas and Marais, 1989) is prominent, but not unique, among the several explanations advanced for the PEAD.

**Corporate Information Environment**

Healy and Palepu (2000) provide a scheme of the role of disclosure and information in the working of capital markets. They include the firms, information intermediaries and the household savings. Expanding and detailing upon it, the following table (table 1) provides a simplified summary of the firm level (financial) information flow, as presented in the various related studies. The major participating groups are listed along the major information flows and the related activities and processes undertaken by the respective participating groups. Media is considered here in its broadest definition, so it is often an intermediary between information sources and investors. Stock prices and behaviour, reflect all investors’ decisions, and provide information about it to all market participants. More information flows, particularly feedback, are not illustrated here for simplification purpose.
Table 1: Firm level information environment

<table>
<thead>
<tr>
<th>Participants</th>
<th>Information flows</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm</td>
<td>Generation, delivery</td>
<td></td>
</tr>
<tr>
<td>Markets</td>
<td>Signals, noise, background</td>
<td></td>
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<tr>
<td>Analysts</td>
<td>Analysis, forecast,</td>
<td>Recommendation</td>
</tr>
<tr>
<td>Media</td>
<td>Interpretation, diffusion</td>
<td></td>
</tr>
<tr>
<td>Investors</td>
<td>Collection, reaction,</td>
<td>decision</td>
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<td></td>
<td>decision</td>
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<tr>
<td>Stock</td>
<td>Price, return, volume,</td>
<td>behaviour</td>
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</table>

**Corporate Information**

Corporate disclosure provides an important vehicle for management to communicate firm and industry specific information to the market and to outside investors (Healy and Palepu, 1993). “It is critical for the functioning of an efficient capital market” (Healy and Palepu, 2000). “The primary objective of corporate disclosure is informed decision making by users” (Beaver, 1978). The discussion about information from companies to the markets is situated in the semi-efficient-market hypothesis. Public information is already reflected in market stock prices, and new information is reacted upon immediately and efficiently. Private information, held by corporate management, is not yet (fully) reflected in market prices. When it becomes public, through corporate announcements, markets react to it as reflected by changing prices and by trade volume (Kim and Verrecchia, 1991). Transferring information content from the private to the public domain therefore reduces the information asymmetry underlying the firm and its stock.

**Earnings Information**

Corporate earnings are viewed by many as the pre-eminent measure of firm performance (Heflin, Subramanyam and Zhang, 2003). Anecdotal evidence suggests that most quantitative voluntary disclosures issued provide earnings per share data. This is also confirmed by Barrett, Beaver, Cooper and Milburn (1991) who add that the main reason for it is that all entity’s activities affect the bottomline. However, “The relation between stock returns and earnings and between stock prices, earnings and book values have deteriorated over time” (Healy and Palepu, 2000).

As discussed, information in general, and corporate and earnings information in particular, are dominant determinants in the firm-level equity markets.
3. VOLUNTARY EARNINGS DISCLOSURE (VED), AND ITS TIME-RELATED ATTRIBUTES

The literature makes a clear distinction between mandatory and voluntary disclosure. The latter is the subject of this section, which looks at its definitions, theory, attributes and regulatory environment. The discussion then covers specifically the time-related VED attributes, including empirical studies of them, correlation studies with other attributes, causes and consequences.

Definitions and Types

Voluntary disclosure, as used in a Financial Accounting Standard Board (FASB) publication, is described as “disclosure, primarily outside the financial statements, that are not explicitly required by GAAP or an SEC rule” (FASB, 2001). Lev (1992) confirms this definition, adding that it may be qualitative or quantitative, prospective or retrospective in nature.

The terms management forecasts or earnings forecasts are often used for VED. Kile, Pownall and Waymire (1998) provide a broad definition of management forecasts (MF) as “earnings information disclosed by the sample firm or its managers prior to the end of the fiscal period to which the projected earnings applies, regardless of the form in which the information is expressed.” Miller and Piotroski (2000) agree while expanding it to any period “outside of earnings announcement window”, thus including pre-announcements.

VED or MF may take several forms: guidance, issued ahead or early in the projected period; update or revision, issued during the projected period to change or confirm the guidance, including profit warnings; pre-announcements, typically issued after the end of the projected period but prior to its mandatory earnings announcement. It may be positive, neutral or negative in “Tone” and it may be an “independent” announcement or “bundled” with other official announcements (Miller and Piotroski, 2000). (See below for VED attributes).

Full Disclosure Prediction

In landmark theoretical works, Milgrom (1981) and Grossman (1981) lay the starting point for research on information disclosure by sellers, and specifically for corporate information disclosure. They establish that if a firm is in a position to make credible disclosure about its value to uninformed investors, the firm will disclose all of its information independently of whether such information is positive or negative. This observation is supported by the adverse selection cost argument that failing full disclosure, investors will assume that the undisclosed information is the worst possible outcome, and will fully discount it in their assessed firm’s value.

No Disclosure, Disclosure Cost and Thresholds

The full disclosure prediction (above) holds when firms have credible news and when their disclosure is cost free. In reality, neither of these two conditions holds. Dye (1985) shows that if it is uncertain
whether a firm has news, it will not be discounted in its share price, giving the firm the choice not to disclose bad news, pretending it does not possess any. Verrecchia (1983, 1990) also explains possible non-disclosure using disclosure cost. Disclosure cost is generated by disclosure preparation and presentation, communication, loss of proprietary information, potential litigation cost and the reduction of competitive advantage (Lang and Lundholm, 1992; Lev, 1992). Verrecchia shows that only firms with sufficiently good news, whose undisclosed value is higher than their disclosure cost, will incur the cost and disclose. This creates a threshold for disclosure. Lang and Lundholm (1992) provide empirical support to Verrecchia’s model. Lev and Penman (1990) confirm that companies with good news voluntarily disclose it; however, they cannot confirm that firms in the same industries who do not disclose have particularly bad news.

**VED Regulatory Environment and Impact (in the USA)**

The regulatory foundation covering mandatory information requirements for all publicly traded USA firms, about 6000 firms representing 15% of world-wide listed firms, is embedded with the USA Security and Exchange Commission (SEC) Securities Act of 1933, and Securities Exchange Act of 1934. Mandatory regulated financial reports include the financial statements, footnotes, management discussion and analysis, and other regulatory filings. A quarterly report (10-Q) must be filed and published within 45 days of the end of the fiscal quarter, and an annual report (10-K) must be filed and published within 90 days of the end of the fiscal year.

Prior to 1973, the SEC had a prohibition policy towards management forecasts and other voluntary disclosure, on the grounds that it lacked credibility, and may even be deceptive or fraudulent. In 1973 the SEC reversed this policy and in 1978 it adopted a policy encouraging forecast disclosure (Pownall and Waymire, 1989). To protect firms from liability related to unattained forecasts prepared in “good faith” and on a “reasonable basis”, the SEC has enacted the Safe Harbour provision of 1979 for the voluntary disclosure of financial projections and other forward-looking information. In 1995 Congress adopted a significant revision to the federal securities laws by adopting the Private Securities Litigation Reform Act. The aim was to reduce abusive litigation through several measures protecting financial projections and other forward-looking statements (Johnson, Kasznik and Nelson, 1999).

Fair Disclosure (FD) regulation enacted in 2000 is the latest SEC regulation with important impact on voluntary disclosure. It requires all USA listed firms disclosing material non-public information to an outsider to make this information public simultaneously, or promptly in case of non-intentional disclosure, to the whole market. Its main implication is to make public previously private disclosures to analysts or other professionals. It has rendered the voluntary disclosure environment more transparent for all investors, as discussed below. As a by-product, it makes voluntary earnings disclosure transparent also for the research community.

Future SEC directions, as recently indicated by its Chairman, (Investor Relations Business, 2001) may include an initiative towards even more transparency and timeliness. This entails replacing the
current concept of “periodic disclosure” – disclosure every quarter, by “continuous disclosure” – disclosing trends and material information as soon as available to companies. Based on the premise that information is not static, and that waiting for the quarterly report is not the best that can be offered to investors, this concept will entail disclosure that is more frequent whether on a mandatory or, more likely, on a voluntary basis.

Research has been extensively involved in shaping and modifying regulation (Skinner, 1995), and in assessing its impact on firms and investors. For example, Johnson, Kasznik and Nelson (1999) have studied the impact of the Securities Reform Act of 1995 on high technology companies. They document a reduction in the litigation cost of disclosure leading high technology companies (operating in a highly litigious environment) to significantly increase the frequency of their forecasts. Other examples are the studies by Heflin, Subramanyam and Zhang (2001, 2003) of FD regulation impact, in which they document no deterioration and even improvements in the financial information environment following FD.

Attributes of VED

Prior research and literature assign several attributes to VED. These attributes, qualitative or quantitative in nature, relate to the content, the procedure, the perception or the impact of the disclosure. The following list provides brief descriptions (not definitions) of VED attributes:

1. **Complete**: Includes several performance measures such as earnings per share but also revenue, margins, operating expense, market share and others
2. **Accurate**: Ex-post, close to the actual results reported in the following mandatory quarterly report
3. **Horizon covered**: The period forecasted e.g. quarter, year, next year etc.
4. **Precise**: Is the forecast provided as a point, range, minimum, maximum etc.
5. **Unbiased**: Without intentional bias or preference for good or bad news
6. **Consistent**: Regardless of firm profitability situation, security issuing etc.
7. **Public**: Publicly and widely diffused to reach all market participants
8. **Attracting**: Interest among analysts, media, investors
9. **Credible**: Officially disclosed by the appropriate firm executive(s)
10. **Convincing**: Investors and analysts to align their expectations
11. **Frequent**: The number of times disclosure is issued during a given period
12. **Regular**: Issued in regular time intervals, or in fixed times during the reported period
13. **Scheduled**: Issuing date and time known and published in advance
14. **Timely**: Issued as soon as possible relative to the underlying period or event being reported

The prioritisation and combination of these attributes may be dictated by the content, circumstances and/or objective of the specific VED being issues, (e.g. forecast, warning,
pre-announcement), or driven by firm’s overall disclosure and communication strategy. It shapes market’s reaction, which, in turn, is an important factor driving companies’ VED decisions. The last four attributes (11-14) are time-related and are the focus of the rest of this paper.

Empirical Studies of Time-related VED Attributes

Research findings concerning the frequency of VED vary considerably as function of the period covered, the definition and the method used, and thus do not allow for a unified conclusion.

- Skinner (1994) reports an average of one VED on every ten quarterly earnings releases during his 1981-90 study period. Poor earnings are more likely to be pre-empted by voluntary disclosure than good ones.

- Johnson, Kasznik and Nelson (1999) compare management forecast statistics pre and post 1995 Securities Litigation Reform Act for computer, software and drug firms. They find respectively 44 percent pre 1995 Act and 49 percent post Act of firms issuing at least one forecast during a year. The mean number of forecasts by issuing companies is respectively 2.1 and 2.5 per annum.

- Kile, Pownall and Waymire (1998) studied a broader definition including all forward-looking statements disclosed prior to earnings release during 10 years. They find an average of 46 percent disclosure level per firm-year, with annual percentage of disclosing firms ranging from 39 to 52.

- Heflin, Subramanyam and Zhang (2001) evidence a much higher frequency. Using the First-Call database and counting every earnings related disclosure in between two mandatory earnings releases, they find that 40 per cent of the sample firms issued a VED during the test quarter post-FD. This compares with 20 and 29 percent in two control quarters pre-FD. In addition, the disclosing companies show a high and growing VED frequency with more than two VED per quarter post-FD compared to 1.7-1.8 pre-FD.

- National Investor Relations Institute, NIRI survey (2001) indicates that 37 percent of the companies surveyed disclose earnings projections, and 78 percent provide earnings guidance, mostly by public conference calls.

The common direction emerging from the first three studies above is a majority of non-disclosing firms contrasted with a minority of disclosing firms whose disclosing frequency is considerable. The frequency evidenced is much higher in the latter two studies, probably with guidance included in the
statistics adding a frequent stream of voluntary disclosures to the guiding firms’ numbers, regardless of the direction and attractiveness of their earnings news.

While research about the frequency of VED is abundant, much less exists concerning the other time-related attributes. Timing is studied but mostly in relation to the mandatory earnings announcements rather than VED. Chen and Mohan (1994) find half the firms reporting at fixed scheduled dates. Firms that vary the timing of their earnings-releases report doing so mostly as a function of unexpected earnings, usually of a negative nature. Discretion is also used to decide on whether to release before, during or after market hours. Small firms tend to be less regular than large ones.

Scheduling is found by Ederington and Lee (1996) to make a difference in the implied volatility. A pre-scheduled disclosure creates volatility prior to and during the event, which abates later. An unscheduled surprise, however, does not generate pre-event volatility, as its occurrence is unknown in advance, but leads to greater volatility during and following the event, lasting much longer as the underlying asset is perceived to be more risky.

Correlation with Other Firm or Stock Attributes

According to Miller and Piotrosky (2000), the following firms are more likely to provide voluntary disclosure:

- Firms with high book to market value, since they are likely to have undervaluation concerns and future positive earnings news - two disclosure causes.
- Firms that operate in high litigation industries, concerned about potential litigation if negative news is not disclosed early enough.
- Firms possessing strong institutional ownership, subject to greater potential pressure.
- Firms having greater stock option-based compensation, and thus insiders’ interest in preventing an undervalued stock price.
- Firms facing larger non-equity stakeholders who look at the stock behaviour for indication about the business and the firm’s health.

Lang and Lundholm (1992) examine determinants of a firm’s level of disclosure. Although they use analysts’ evaluation as a measure of level of disclosure, which include more than time related attributes, their findings are worth mentioning here:

- A firm’s level of disclosure is increasing in its past, present and future return on equity.
- It is increasing in its past and present stock returns (both return on equity and stock return are proxies for a firm’s performance).
- It is increasing with the firm’s size.

Inverse correlations with disclosure activity include:

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1 The classification of determinants as correlation, causes and consequences of VED, is not always unique. While suggesting such classification, this chapter aims at a complete combined list avoiding repetition.
Firms that provide alternative financial signals, such as share repurchase and dividend increases, are less likely to make forward-looking disclosure. (Miller and Piotrosky, 2000).

Tasker (1998) finds significant inverse relation between the likelihood of the use of quarterly conference calls and the informativeness of the firm’s financial statements. This is in line with Verrecchia’s (1990) hypothesis that the probability of disclosure of management’s private information is negatively related to the precision of prior information on firm value.

Firms with volatile past return on equity disclose less (Lang and Lundholm, 1992), as they face a greater danger of not meeting their forecasts and thus exposure to litigation.

Causes of VED

- The full disclosure prediction leads companies to disclose in order to minimise the adverse selection cost of their stock in their competition for capital.

- Ajinkya and Gift (1984) and King et al (1990) posit that managers release forecasts to align equilibrium prices of stocks with managers’ valuations. Lev (1992) argues that a disclosure strategy is aimed at assuring that security values and stakeholders’ perceptions reflect the overall strategy of a company and the results of its activities. It is aimed at correcting misvaluations between a firm’s intrinsic value and its market value. Such misvaluations stem from information asymmetry and can be temporary or permanent. Both are important as they may cause undue gains or losses to investors and/or internal option holders. “Managers have an implicit responsibility to investors to continually maintain market values as close as feasible to intrinsic ones”.

- Stock prices and market expectations are shaped by analysts’ forecasts. The correction of analysts’ forecasts, when they deviate from management forecasts, is a main incentive for management to provide forecasts (Waymire, 1986).

- The threat of litigation prompts companies to pre-empt earnings disappointment or earnings decline by public early warnings (Lev 1992). The more adverse the news, the higher the incentive of managers to pre-disclose it (Skinner, 1997).

- Venkatachalam and Wang (2000) compare the outcome of lowering guidance against not doing so, in different circumstances, and find that the cost associated with lowering expectations, i.e. the ensuing reduction in share price, is significantly lower than the subsequent appreciation when beating the revised analysts’ forecast. They conclude that lowering expectations, when needed, is cost beneficial. At the same time, lowering expectations as a strategy to meet or beat analysts’ forecast does not yield significant benefits, especially since meeting reduced guidance results in negative returns.

- Change in guidance, following FD regulation, must be made public rather than limited to analysts. Extrapolating Venkatachalam and Wang’s (2000) conclusion will indicate a clear incentive for firms to update their outlook publicly when a downward revision is warranted.

- Market and price manipulation, or their absence, are strongly influenced by the quality and intensity of information available to the market. Deliberate manipulation of prices is an old phenomenon, which is taking a new dimension with the proliferation of internet use by investors.
This may include massive dissemination of wrong information, fraudulently ‘putting words’ into the mouth of firm officials and more (Investor Relations Business, 1999). Regular and scheduled earnings disclosure by firm’s officials reduces the opportunities for such attempts. It reduces the need for company officials to publish surprising unscheduled announcements. It also reduces market expectations for such announcements and, with it, its likelihood of being misled by disinformation.

- A firm’s level of disclosure is increasing with the sensitivity of that firm to outsiders’ perceptions, as proxied by current or future security issuance (Lang and Lundholm, 1992).

Against the reasons for disclosure, there are also arguments justifying why firms limit disclosure, or do not voluntarily disclose:

- Management belief that markets are efficient and thus security prices reflect the company’s value, regardless of their disclosure (Lev 1992).
- Compared with private analyst conversations, firms may disclose less to the public (post FD regulation) for fear of litigation arising from misinterpretations of their public announcements (Heflin, Subramaniam and Zhang, 2001).
- The fear that public disclosure of details will benefit competitors (Heflin, Subramaniam and Zhang, 2001; Nagar, 1999), including the attraction of new entrants to the sector (Nagar, 1999).
- Concerns and uncertainty about managers’ performance evaluation may deter voluntary disclosure (Nagar, 1999).
- Investors will not heavily penalize non-disclosing managers (Nagar’ 1999).

These reasons, in contrast with all regulatory efforts and other reasons for disclosure, still weigh on firms’ disclosure strategy, with many not regularly providing voluntary earnings disclosure, as discussed in section 3.

Consequences of VED

- Pownall and Waymire (1989) test the credibility of voluntary management forecasts based on the market reaction to them. They establish that forecasts are not discounted in market reaction, so they are not less credible compared to more regulated reporting. They even find larger stock price effects associated with forecasts, possibly due to timing.
- Waymire (1984) finds that price reactions to management forecasts are associated with the deviations of these forecasts from market expectations, both in sign and in magnitude.
- Lev (1992) suggests that an even flow of credible information will reduce stock price volatility over time, improving their risk and liquidity characteristics.
- Venkatachalam (2000) looks at the impact of disclosure practices on return volatility, and sees a dubious effect: on one hand, improved disclosure timeliness, frequency and quality could
drive volatility higher due to increased rate of information arrival; on the other hand, it reduces information asymmetry and reduces the magnitude of surprises, thus reducing volatility.

- Healy, Palepu and Hutton (1995, 1999) investigate whether firms benefit from expanded voluntary disclosure. They find that following an increase in disclosure, firms experience reduction in undervaluation, an increase in stock liquidity, analyst following and institutional holding, which suggest a lower cost of capital.

- Lang and Lundholm (1996) find that firms with more informative disclosure have a larger analyst following, more accurate analyst earnings forecasts with lower dispersion between their forecasts, and less volatility in their forecast revisions. These would suggest a potential increase in investor following, reduced information asymmetry and reduced estimation risk, all theoretically leading to reduced cost of capital. Waymire (1986), also investigating analysts’ reaction to management forecasts, finds that they are adjusting their forecasts in line with the management forecasts, which are found to be more accurate.

- Lang and Lundholm (1997) find that firms that maintain a consistently high level of disclosure enjoy price increases prior to security offering with only minor declines at the offering announcements. These firms experience no unusual return declines following the announcement. This is in contrast with firms that only increase their level of disclosure prior to offering, “hyping”. These firms also see price increases leading to the offering, but suffer a price correction at the announcement and following it.

- Lundholm and Myers (2000) find that firms with more informative disclosure “bring the future forward”, better reflecting credible relevant future earnings information in current prices and returns.

- Botosan (1997) looks at firms with lower analyst following, thus lower information availability, and finds that for these firms greater disclosure is associated with lower cost of capital. She does not find the same association for firms with high analyst following.

- Botosan and Harris (2000) look at determinants and consequences of expanded segment disclosure frequency. They find an increase in analyst following resulting from the expanded disclosure.

- King et al (1990) argue that frequent disclosure reduces investors’ need to acquire costly information, thus reducing information asymmetry and transaction costs.

- More timely disclosure is associated with lower settlement amounts in stockholders’ litigations (Skinner, 1997).

Although the above-mentioned consequences are not all related directly to the pure frequency attribute of VED, they point mostly to potential benefits of higher or expanded VED activity. Such potential benefits may be viewed as strong motivators for firms to engage in more frequent and regular VED, which is the focus of this study.

In conclusion of this section, abundant research on the frequency of VED, its association, causes and results, do not clearly point to an optimal strategy. This is also reflected in firms’ behaviour as shown
by the wide split between disclosing and non-disclosing firms. More research may be needed in the area of VED time-related strategy.

4. SHORTCOMINGS IN RESEARCH OF VED TIME-RELATED ATTRIBUTES

Several shortcomings hinder conclusive research in time-related attributes of VED, and prevent the emergence of proposed strategies in this respect.

(1) “Timely” and “Voluntary” Disclosure Overlap

The SEC timely disclosure rule requires disclosure of “material” “non-public” information in many situations, including (as defined by example) forecasts, which deviate materially from historical trends. Disclosures made by firms in compliance with this rule, although mandatory, overlap considerably with voluntary disclosure (Frost and Pownall, 1994; Healy and Palepu, 2000). The distinction between the two is ignored in practically all VED research, thus considering and counting as voluntary, disclosures that should be classified as mandatory. The implications are that it is not always possible to assert whether disclosure has been issued as part of a strategy or in reaction to extraneous events (see also 4.4), reducing considerably the understanding of VED causes and consequences. This gap may be explained by the practical infeasibility of differentiating between the timely and voluntary disclosure, short of applying legal expertise on every disclosure.

(2) “More” and “More Frequent” VED Overlap

Research often refers to “more disclosure”, “expanded disclosure”, “more informative disclosure”, etc., in relation with the frequency of disclosure during the study period. However, certainly in studies based on disclosure counts, no distinction is made as to whether a particular disclosure contains new information, which otherwise may not have been disclosed, or whether it is a guidance, revision, update or pre-announcement containing adjustments to information which will be reported in the mandatory report. The latter does not add more information, it simply brings forward estimates of future information, thus providing the same information but adjusted and updated more frequently. Miller and Piotrosky (2000) refer to this issue asserting that aggregate measures of such studies fall short of enabling an understanding of the firms’ motivation and the market reaction to voluntary disclosure. Content analysis, often performed in studies with smaller samples, may provide the solution.

(3) The Transparency Gap (pre FD Regulation)

The FD regulation, enacted in October 2000, constitutes a turning point in VED research. Prior to FD, the complete extent of VED had never been fully transparent to research. Researchers trying to assess VED frequency had often proxied analysts forecast revisions to represent VED. Yet, such revisions may or may not have resulted from firm VEDs. In addition, analyst revisions have not always
been publicly available. Now FD makes VED not only transparent to all investors, which is its intent, but also to research.

For example, Heflin, Subramaniam and Zhang (2001) record a significant increase in VED activity after FD regulation, mostly driven by the companies who were already disclosing prior to FD. They relate this evidence, indirectly, to firms substituting public disclosure for private analysts’ communication prior to FD.

(4) The Strategy Gap
Due to (1) above, studies of companies and their stocks based on the frequency of their disclosure often do not distinguish between situations and circumstances as opposed to strategy and policy as drivers of VED behaviour.

Heflin, Subramaniam and Zhang (2003) investigate VED frequency after FD regulation. They use the First-Call database for this purpose, and count every earnings related disclosure in between two mandatory earnings releases. Using a sample of 1600 companies, they find that only 40 per cent of them issued VED during the test quarter. Yet the disclosing companies show a frequency higher than two VED per quarter. Their study does not differentiate between guidance, updates and warnings, and does not look at whether circumstances or strategy is behind the high frequency VED for the disclosing companies.

The combination of these four shortcomings in VED research, and its time-related attributes, have caused major difficulties in accurately defining and counting VED, in understanding what disclosures are really voluntary (resulting from firms’ strategy as opposed to disclosures of a more mandatory nature driven by events), and, finally, in identifying disclosure strategic profiles and behaviour. As a result, research has so far not advanced any alternative strategy to replace the two prevailing ones which are the non-disclosing and the event-driven VED strategy.

5. PERIOD-DRIVEN VED
This section introduces the period-driven VED strategy, looking at its possible causes and consequences, providing examples of firms practicing it, and examining its current status and trend.

Confirming VED
In dealing with time related aspects of VED, most of the literature refers to disclosure resulting from performance deviations, management interests or other events. In contrast, Clement, Frankel and Miller (1998) studied the effect of confirming management earnings forecasts. They find evidence of a reduction in analysts’ forecast dispersion and, most importantly, a significantly positive market price reaction. This demonstrates that even disclosure of no deviation from current formal expectations has information content and is important and relevant for the market. Anecdotal evidence suggests that even announcing the date of the next regular earnings release during the period leading to it, which
implies that there will be no surprise pre-announcement, may have a significantly positive market price reaction.

**Period-driven VED Strategy**

For firms that commit to announce such ‘non-events’, frequency, regularity, timeliness and scheduling of VED events can be structured in a coherent strategy. Lev (1992) reviews the rarity of VED and presents the need for a disclosure strategy. He sees disclosure as an activity that provides benefits and incurs costs, and thus requires planning and a strategy, which, as he states, is as important as other corporate activities such as investment, production and marketing. He sees such a strategy as an “even flow of credible information, as opposed to infrequent releases of highly surprising news”. He adds that the impact of VED will depend on the credibility of management, which “requires a commitment to ongoing communication with outsiders, rather than haphazard disclosure under duress…..a long term, consistent disclosure strategy, where bad (i.e., below expectations) as well as good news are disclosed.” In following Lev, an “ongoing” “even flow” of credible management information can only be achieved if such information is disclosed in regular periodic intervals, independent from the flow and the direction of events. It has to be Period-driven rather than event-driven.

It is therefore important to investigate whether a strategy of period-driven VED can be identified, qualified and distinguished from other VED profiles, and to study if this model brings significant advantages over the more traditional and prevailing event-driven VED.

**Period-driven VED, Comparative Profile**

Since this paper’s main objective is to study strategic profiles of VED, it must follow a strategic approach all the way, starting with the definitions. Based on the definitions discussed in section 3 above, Voluntary Earnings Disclosure (VED) is defined as a voluntary earnings estimate of a specified period, publicly disclosed prior to the official reporting of that period. VED may be prospective in nature (guidance, forecast, outlook, revision or update), or not (pre-announcement). VED is considered as such even when combined with a quarterly or annual official announcement/report and may contain several signals relating to various periods. Yet, it must be public in compliance with the ‘Fair-Disclosure’ regulation as of October 2000. Timely disclosure of exceptional material events is not considered VED, as this is mandatory rather than voluntary².

A period-driven VED profile is defined as one of a firm that provides at least one VED between every two consecutive quarterly reporting dates. The disclosure driver for such firms is a threshold period (as defined by the firm, but shorter than a quarter), which has elapsed since the firm’s latest disclosure. This category includes firms that provide regular guidance, updates or pre-announcements as separate information signals (allowing a threshold period from the latest report). For these firms, VED is embedded in their strategy and is part of on-going regular business, rather

---

² Although from a practical perspective this may not be distinguishable from other VED (see 4 (1)), it will be considered mandatory disclosure for the purpose of this strategic level theoretical discussion.
than an exceptional ad-hoc event. Underlying this strategy is the assumption that every threshold period provides new information, which is sufficiently material to justify VED. Even if this new information is essentially confirmatory, it represents new information worthy of VED. This again contrasts with the event-driven VED approach, which subjects new information to judgement and interpretation by firm’s management, based on the underlying assumption that “regular” business results do not provide new information sufficiently material to justify VED. The three VED profiles, non-VED, event-driven and period-driven, also differ in their assumptions about market participants’ information requirements. The non-VED firms simply follow the rules. They assume that mandatory annual and quarterly reporting and timely exceptional disclosure of material events, required by SEC rules, satisfy market participants’ firm-sourced information requirements. Event-driven VED firms assume that by adding original guidance and/or ad-hoc exceptional disclosure of material events they satisfy market participants’ firm-sourced information requirements. Period-driven VED firms do not believe that this is sufficient. They assume that non-firm-sources do not (efficiently) satisfy market participants’ information requirements, and thus they proceed to provide it themselves, on a frequent and regular periodic basis, publicly available to the market.

In practice, period-driven VED firms often provide guidance every quarter, which may be combined with the earnings release of the previous quarter, and a mid-quarter or intra-quarter business update. This means that they provide at least eight VEDs during the course of the year. Most such updates are scheduled in advance and issued in a timely manner during the quarter, although certain firms issue it as a regular pre-announcement. The regular and pre-scheduled nature of period-driven VED practically eliminates two important shortcomings of event-driven VED: the possibility for management to bias timing and frequency of VEDs subject to the good or bad content of the news disclosed; the influence of managers’ own interests such as stock options, or company interests such as security issuance, on disclosure availability and its timing.

The following table 2 describes and compares the three VED profiles in relation with the above and other aspects.
<table>
<thead>
<tr>
<th>VED Profile Attribute</th>
<th>Non-VED</th>
<th>Event-driven VED</th>
<th>Period-driven VED</th>
</tr>
</thead>
</table>
| 1 VED definition      | - Voluntary Earnings Disclosure (VED) is defined as voluntary earnings estimate of a specified period, publicly disclosed prior to the official reporting of that period  
- VED may be prospective in nature (guidance, forecast, outlook, revision or update), or not (pre-announcement)  
- VED is considered as such even when combined with a quarterly or annual official announcement/report  
- VED may contain several signals relating to various periods  
- VED must be public in compliance with ‘Fair-disclosure’ regulation as of October 2000.  
- Is NOT considered VED timely disclosure of exceptional material events, which are mandatory rather than voluntary |
| 2 Profile classification and definition | Firm does not provide VED | Firm provides at least one VED during the entire study period, but does not qualify as period driven VED profile | Firm provides at least one VED between every two consecutive quarterly reporting dates |
| 3 Disclosure driver | A material event has occurred affecting future earnings, which requires disclosure | A material event has occurred (possibly) affecting expected and/or future earnings | A threshold period (as defined by the firm but shorter than a quarter) has elapsed since the latest firm disclosure |
| 4 Included in the category | Firms that warn or announce surprises from time to time. This is considered mandatory disclosure  
- Firms that provide guidance but only update it when event(s) lead to change  
- Firms that provide periodic update or pre-announcement as a separate information signal (allowing a threshold period from the latest report) | Firms that provide regular guidance, update or pre-announcement as a separate information signal (allowing a threshold period from the latest report) |
<table>
<thead>
<tr>
<th>VED Profile Attribute</th>
<th>Non-VED</th>
<th>Event-driven VED</th>
<th>Period-driven VED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>updates, but irregularly report</td>
<td>▪ Firms that provide updates, but irregularly report</td>
</tr>
<tr>
<td>5 Excluded from the category</td>
<td>Firms that provide guidance</td>
<td>Firms that only warn or announce surprises from time to time. This is considered timely mandatory disclosure</td>
<td>▪ Firms that provide guidance every quarter but at the same time as the last quarter report. This is not based on a new period information.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Exceptional ad-hoc events</td>
<td>▪ On going regular business</td>
</tr>
<tr>
<td>6 VED context</td>
<td></td>
<td>▪ Responding to a given situation</td>
<td>▪ Embedded in firm’s strategy</td>
</tr>
<tr>
<td>7 Underlying assumptions about new information generation</td>
<td>▪ “Regular” business results do not provide new information sufficiently material to justify VED</td>
<td>▪ Every threshold period provides new information</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Subject to judgement and interpretation</td>
<td>▪ This new information is sufficiently material to justify VED</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Even if this new information is essentially confirmatory, it represents new information worthy of VED</td>
<td></td>
</tr>
<tr>
<td>VED Profile Attribute</td>
<td>Non-VED</td>
<td>Event-driven VED</td>
<td>Period-driven VED</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------</td>
<td>-----------------</td>
<td>------------------</td>
</tr>
</tbody>
</table>
| **8** Underlying assumptions about market participants’ information requirement | Mandatory annual and quarterly reporting, and timely exceptional disclosure of material events required by SEC rules, satisfy market participants’ firm-sourced information requirements | Mandatory annual and quarterly reporting, original guidance and ad-hoc exceptional disclosure of material events satisfy market participants’ firm-sourced information requirements | • Mandatory annual and quarterly reporting, and ad-hoc exceptional disclosure of material events do not satisfy market participants’ firm-sourced information requirements  
• Non-firm-sources do not (efficiently) satisfy market participants’ information requirements |
| **9** VED frequency  
Period between 2 consecutive information events (including quarterly report) | No VED, only quarterly reports | Undefined  
3 months, except if material surprises, or firm’s interest | Every threshold period  
Less than 3 months |
<p>| <strong>10</strong> VED frequency in practice | | From 1 – if the firm only provides yearly guidance, and has no exceptional events, to 8 per annum if the firm provides and revises guidance, and incurs and discloses surprises | At least 1 per quarter, 4 per annum (In addition to the mandatory quarterly reports) plus 1 annual or 4 quarterly guidance |</p>
<table>
<thead>
<tr>
<th>VED Profile Attribute</th>
<th>Non-VED</th>
<th>Event-driven VED</th>
<th>Period-driven VED</th>
</tr>
</thead>
<tbody>
<tr>
<td>VED timeliness</td>
<td></td>
<td>If and as soon as the exceptional new information is generated</td>
<td>End of threshold period, but at least once during every quarter</td>
</tr>
<tr>
<td>VED regularity</td>
<td></td>
<td>Low. Irregular and unpredictable (Guidance may be regular)</td>
<td>High. Is done at regular times during the year and the quarter</td>
</tr>
<tr>
<td>VED announcement scheduling</td>
<td></td>
<td>Unknown, often a surprise</td>
<td>Planned and published in advance</td>
</tr>
<tr>
<td>VED Information content</td>
<td></td>
<td>Almost always high</td>
<td>Usually lower</td>
</tr>
<tr>
<td>Information asymmetry between VEDs</td>
<td></td>
<td>Comparatively higher prior to mandatory reports</td>
<td>Comparatively lower following VED</td>
</tr>
<tr>
<td>Frequency and timing biased subject to good/bad news</td>
<td></td>
<td>Literature documents significant bias</td>
<td>No possible bias</td>
</tr>
<tr>
<td>Frequency and timing influenced by firm or managers’ interests</td>
<td></td>
<td>Literature documents influence of:</td>
<td>No possible influence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Managers’ shares and options</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Equity issuance</td>
<td></td>
</tr>
<tr>
<td>VED Profile</td>
<td>Non-VED</td>
<td>Event-driven VED</td>
<td>Period-driven VED</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>-----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Attribute</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 18 | Who uses this approach and why? | • May want to bias and influence VED  
• May still want to control VED  
• Do not want to be constrained  
• No one in industry does it differently | • Do not want to bias VED  
• Want to provide open, timely, transparent, equal VED in line with FD  
• Low visibility business  
• Others in industry do it  
• Market leaders |
| 19 | What might they want to gain? | • Keep asymmetry high  
• Keep control of information  
• Prevent information transfer to competitors | • Reduce asymmetry  
• Prevent insider improper trading  
• Prevent/reduce litigation  
• Reduce market suspicion/scepticism  
• Reduce earnings and price shocks  
• Reduce volatility |
<table>
<thead>
<tr>
<th>VED Profile</th>
<th>Non-VED</th>
<th>Event-driven VED</th>
<th>Period-driven VED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Practice</td>
<td>Issue only mandatory reports, and timely required reporting of extraordinary events. No guidance.</td>
<td>Guide once a year and perhaps on quarterly reporting date. Announce surprise or revise guidance on exceptional basis</td>
<td>Guide once a year and usually update or confirm guidance on quarterly reporting dates. Update, revise or confirm outlook in a separate public news event during every quarter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduce adverse selection factor</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lower cost of capital</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Revise guidance rather than surprise</td>
<td></td>
</tr>
</tbody>
</table>
Possible Causes and Motivations for Period-driven VED

Dignan (2001) quotes some of the reasons pushing companies, and in particular technology companies, towards more frequent and regular guidance updates, in the form of mid-quarter VED. The major reason mentioned is Fair Disclosure regulation with the resulting practice of holding public conference calls replacing or complementing private analyst discussions held previously. Several companies also mention this reason on their websites. Other reasons are the difficulty of predicting business prospects longer than a few weeks at a time, and the need to prevent analysts' speculation about the business in the short term. Holding regular updates also replaces decisions required on whether to make special announcements in instances in which the company foresees even a small miss to its previous guidance. A planned scheduled update is usually not seen by the markets as badly as an unplanned surprise announcement. According to Dignan, the main opposition to mid-quarter updates comes from analysts who see it as “short-term talk that may not add up to much in the long run”. Other possible motivations for period-driven VED: a true intention to provide investors with open, timely, transparent, equal VED; the intention to avoid judgement and bias in the timing of issuing VED and in its interpretation by the market; following other firms in the sector who apply this strategy.

Potential Consequences and Advantages of Period-driven VED

Empirical testing will be required to study the possible reaction and behaviour of stocks related to period-driven VED. A theoretical approach, building on the results of studies on high frequency of VED, points to several possible directions:

1. Every credible disclosure issued a certain time period following the previous one is likely to be based on the most up-to-date information, thus on the information accumulated during this lapsed period. Earnings estimates disclosed in mid-quarter, or other times between two formal earnings announcements, are likely to include new information unknown to the public, and have information content. News with information content is likely to generate significant price movements (abnormal returns) and volume trade (Kim and Verrecchia, 1991).
   
   *Period-driven VED is likely to result in abnormal price and volume trade upon disclosure.*

2. Information content disclosed by management to the public will reduce the information gap between the two, in the period following the VED.

   *Period-driven VED is likely to lower information asymmetry following it.*

3. Information asymmetry provides opportunities for inside holders of the higher information level to engage in improper trades, resulting in abnormal returns. Reduced information asymmetry reduces such opportunities.

   *Period-driven VED is likely to reduce improper insider trading.*

4. VED impacts litigation against the company in two ways: It reduces litigation and its potential negative outcome since the company discloses timely information of material influence to investors. It potentially increases litigation relative to misleading and unrealised forecasts. For firms providing a period-driven VED strategy, both are likely to be reduced as they provide more frequent and more updated information.

   *Period-driven VED is likely to reduce litigation cost.*
Occasionally, managers engage in VED to further their own stock option related interests, in preparation for security issuance, or with "hyping" intentions. Managers also time their VED depending on whether they have good or bad news. Such possibilities increase the level of suspicion and scepticism among market participants. If VED is published at frequent regularly scheduled occasions, opportunities to time and bias VED are greatly reduced, reducing with it market scepticism about VED.

*Period-driven VED is likely to reduce VED time-related manipulation and market scepticism in this regard.*

Mid-period VED is based upon, and delivers to the market, part of the information content of the formal quarterly announcement. The quarterly announcement content is thus split, with each of its elements likely to carry lower information content than the whole. Stock price shocks, which result from information shocks, are potentially less frequent and less severe.

*Period-driven VED is likely to reduce the frequency and severity of stock price shocks.*

Financial analysts base their forecasts on company information. Period-driven VED may provide them earlier and better estimates on which to base their forecasts. Their forecasts, following period-driven VED, are likely to be adjusted closer to the actual earnings and thus be more accurate and show lower dispersion.

*Period-driven VED is likely to render analysts’ forecast more accurate and less dispersed, following VED publication.*

Higher analysts’ accuracy, lower information asymmetry and lower price shocks are likely to reduce volatility.

Investors value stocks based on information from firms and from analysts. In the absence of information from firms, investors assume the worst and reflect their beliefs in reducing the stock valuation and price. More and earlier information from firms, and more accurate analysts’ forecasts, may reduce stock misvaluations.

*Period-driven VED is likely to reduce stock misvaluations.*

Reduced undervaluation, lower information asymmetry and lower volatility are likely to reduce the firm’s cost of capital.

*Period-driven VED may lead to lower firm’s cost of capital.*

### Firms possibly practicing period-driven VED

A preliminary search was conducted to identify examples of firms practicing period-driven VED. Using internet search-machines, the following terms were inserted: “mid quarter”, “mid Q”, mid-Q”, “intra quarter”, “quarter update”. Screening the results one-by-one, and visiting the identified companies’ websites have resulted in the following list of firms potentially practicing period-driven VED (Table 3). In several cases, it is specified on their investor-relations policy or presentation. The number of companies on this list, including well-known names, indicates that period-driven VED as defined here is an emerging practice in the market. Further formal research, as discussed below, is warranted.

---

3 There will be no difference for firms who simply replaced previous analyst discussions with public disclosure of the same timing and frequency.
Table 3. US listed Companies providing mid-quarter review

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Name</th>
<th>Market Capitalisation Million USD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ADBE</td>
<td>ADOBE SYS</td>
<td>9,457</td>
</tr>
<tr>
<td>2 ALTR</td>
<td>ALTERA CORP</td>
<td>7,998</td>
</tr>
<tr>
<td>3 AMD</td>
<td>ADV MICRO DEVICE</td>
<td>3,883</td>
</tr>
<tr>
<td>4 ANAD</td>
<td>ANADIGICS INC</td>
<td>315</td>
</tr>
<tr>
<td>5 AVP</td>
<td>AVON PRODS INC</td>
<td>13,234</td>
</tr>
<tr>
<td>6 BRTIO</td>
<td>BRIO SOFTWARE</td>
<td>65</td>
</tr>
<tr>
<td>7 CAMD</td>
<td>CAL MICRO DEVIC</td>
<td>64</td>
</tr>
<tr>
<td>8 CHRT</td>
<td>CHARTERED SEMI</td>
<td>3,537</td>
</tr>
<tr>
<td>9 CMTO</td>
<td>COM21 INC</td>
<td>25</td>
</tr>
<tr>
<td>10 COSN</td>
<td>COSINE COMMS</td>
<td>69</td>
</tr>
<tr>
<td>11 CPS</td>
<td>CHOICEPOINT</td>
<td>3,533</td>
</tr>
<tr>
<td>12 CRYP</td>
<td>CRYPTOLOGIC INC</td>
<td>174</td>
</tr>
<tr>
<td>13 CYMI</td>
<td>CYMER INC</td>
<td>1,597</td>
</tr>
<tr>
<td>14 EAGL</td>
<td>EGL INC</td>
<td>818</td>
</tr>
<tr>
<td>15 EXBT</td>
<td>EXABYTE CORP</td>
<td>25</td>
</tr>
<tr>
<td>16 FLEX</td>
<td>FLEXTRONICS</td>
<td>7,189</td>
</tr>
<tr>
<td>17 FMKL</td>
<td>FREEMARKETS INC</td>
<td>834</td>
</tr>
<tr>
<td>18 FVCX</td>
<td>FIRST VIRTUAL</td>
<td>23</td>
</tr>
<tr>
<td>19 HNCS</td>
<td>HNC SOFTWARE</td>
<td>684</td>
</tr>
<tr>
<td>20 IDT</td>
<td>IDT CORP</td>
<td>1,487</td>
</tr>
<tr>
<td>21 IDTI</td>
<td>INTEGRATED DEV</td>
<td>2,993</td>
</tr>
<tr>
<td>22 IMDC</td>
<td>INAMED CORP</td>
<td>746</td>
</tr>
<tr>
<td>23 INFT</td>
<td>INFORTE CORP</td>
<td>139</td>
</tr>
<tr>
<td>24 INTC</td>
<td>INTEL CORP</td>
<td>194,500</td>
</tr>
<tr>
<td>25 KMB</td>
<td>KIMBERLY-CLARK</td>
<td>33,285</td>
</tr>
<tr>
<td>26 LSTR</td>
<td>LANDSTAR SYS</td>
<td>800</td>
</tr>
<tr>
<td>27 MCD</td>
<td>MCDONALDS CORP</td>
<td>36,197</td>
</tr>
<tr>
<td>28 MDT</td>
<td>MEDTRONIC INC</td>
<td>53,589</td>
</tr>
<tr>
<td>29 MLTX</td>
<td>MULTEX.COM INC</td>
<td>148</td>
</tr>
<tr>
<td>30 MTIX</td>
<td>MICRO THERAPEUT</td>
<td>117</td>
</tr>
<tr>
<td>31 MVSN</td>
<td>MACROVISION</td>
<td>1,176</td>
</tr>
<tr>
<td>32 NOK</td>
<td>NOKIA CORP</td>
<td>76,734</td>
</tr>
<tr>
<td>33 NTIAQ</td>
<td>NETIA HLDSGS</td>
<td>20</td>
</tr>
<tr>
<td>34 NVLS</td>
<td>NOVELLUS SYS</td>
<td>7,028</td>
</tr>
<tr>
<td>35 ODP</td>
<td>OFFICE DEPOT</td>
<td>5,918</td>
</tr>
<tr>
<td>36 OEI</td>
<td>OCEAN ENERGY</td>
<td>3,729</td>
</tr>
<tr>
<td>37 R</td>
<td>RYDER SYSTEM INC</td>
<td>1,746</td>
</tr>
<tr>
<td>38 RMBS</td>
<td>RAMBUS INC</td>
<td>682</td>
</tr>
<tr>
<td>39 ROH</td>
<td>ROHM &amp; HAAS CO</td>
<td>8,097</td>
</tr>
<tr>
<td>40 RSTN</td>
<td>RIVERSTONE NTWK</td>
<td>551</td>
</tr>
<tr>
<td>41 SGI</td>
<td>SILICON GRAPHICS</td>
<td>573</td>
</tr>
<tr>
<td>42 SIPX</td>
<td>SIPEX CORP</td>
<td>237</td>
</tr>
<tr>
<td>43 SNTO</td>
<td>SENTO CORP</td>
<td>8</td>
</tr>
<tr>
<td>44 SUNW</td>
<td>SUN MICROSYSS</td>
<td>26,796</td>
</tr>
<tr>
<td>45 TMTA</td>
<td>TRANSMETA CORP</td>
<td>290</td>
</tr>
<tr>
<td>46 TQNT</td>
<td>TRIQUINT SEMI</td>
<td>1,328</td>
</tr>
<tr>
<td>47 UMC</td>
<td>UNITED MICROELEC</td>
<td>27,448</td>
</tr>
<tr>
<td>48 VIS</td>
<td>VSI HLDSGS</td>
<td>3</td>
</tr>
<tr>
<td>49 XLNX</td>
<td>XILINX INC</td>
<td>12,894</td>
</tr>
</tbody>
</table>

* As of April 30, 2002
Current status and future trend and research of period-driven VED

While practitioners are gradually embracing this emerging trend, though still in low numbers, research has not yet dealt with it. Its main manifestation takes the form of mid-quarter review (also termed mid-quarter updates, intra-quarter review, business updates etc.).

The National Investor Relations Institute (NIRI) (2001), in its Corporate Disclosure Practices Survey 2001, reports that of those companies surveyed, who currently provide earnings guidance, 6% (27 out of 453 companies) “plan to routinely issue a mid-quarter review of guidance”. Of these companies, 69% plan to disseminate this review using a news release, and 27% (not mutually exclusive) plan to use a fully accessible conference call.

Dignan (2001) considers mid-quarter updates a new trend, which did not exist a few quarters earlier. He quotes C. Hill, director of research for First Call, saying, “There will be mid-quarter calls and even monthly calls, incremental guidance is the wave of the future”.

Several research paths might follow the above review: Can period-driven VED be qualified as a VED strategy? What are the possible ingredients of such strategy, in terms of planned activities, controllable at firm level? Does period-driven VED strategy, if qualified as such, provide clear measurable value or other benefits to firms applying it? What are the costs associated with such strategy and are they covered by the added value? These and other questions may indicate if period-driven VED is indeed a sustainable trend. If research is engaged in further investigation of this strategy, its motivations and consequences, and proves its advantages over alternative strategies, and if the SEC pursues its vision of “continuous disclosure” (see 3.4), the answer may well be positive.

In conclusion, the commitment to disclose also confirming VED on a regular basis reflects a strategy of providing VED every threshold period. It is defined, profiled and named period-driven VED. The list of possible causes and advantages of such strategy, together with examples of companies practicing it, indicate that it may become a sustainable trend.

6. CONCLUSION

Research in the area of corporate earnings disclosure is vast, reflecting the important impact it has on stock prices and behaviour. The voluntary aspects, open to varying practices, attract significant interest, both on their qualitative and on their quantitative attributes, including time-related attributes. The prediction of full disclosure, aimed at preventing the adverse selection cost, is contrasted by research of disclosure cost and thresholds limiting full disclosure. The regulatory environment, following a policy reversal, is largely accommodative towards voluntary disclosure. Yet, in practice, the majority of companies do not voluntarily disclose prospective earnings, and firms who do, do it mostly in reaction to earnings related events. Specific time-related VED research is mostly concentrated in the frequency of VED and its timeliness. It suggests that more frequent VED is correlated with
misvaluations, litigation risk, management interests, internal option holdings, institutional ownership, other information sources, past earnings volatility and more. Causes of VED are multiple. They include firms’ desire to minimise adverse selection cost, to align price and value, to correct analyst forecasts, to pre-empt downward revisions, to prevent rumours and manipulation. Causes limiting VED include management belief in market efficiency regardless of their disclosure, fear of litigation, prevention of information transfer to competition, concern about managers’ performance evaluation and the fact that the market does not penalise non-disclosure.

Research deals more with extraneous than with strategic causes and results of time-related VED attributes. This is due partly to varying definitions, the overlap between timely and voluntary disclosure and the lack of market transparency pre-FD regulation. This paper has tried to shed more light on the strategy behind time-related VED attributes. It has identified and described an emerging strategy of VED every threshold period between two mandatory earnings releases. This profile was named period-driven VED, it was compared with the prevailing event-driven VED and the non-VED profiles. Examples of firms practicing it were listed. Several potential advantages of Period-driven VED were suggested based on the literature reviewed. These include: Reduction of information asymmetry; reduction in improper insider trading; reduction in litigation cost; reduction in VED timing manipulation by firms; reduction in stock price shocks; improvement in analysts’ forecasts; reduction in stock price volatility and misvaluations; reduction of firms’ cost of capital. This lays the theoretical ground and argumentation for period-driven VED strategy, which must be followed by empirical research. If empirical studies result in proving and confirming certain of these potential advantages, period-driven VED strategy may gain support, attract followers and become a sustainable trend.
REFERENCES


*Journal of Accountancy*. 145, 1

Beaver, W.H., (1996). Directions in accounting research: NEAR and FAR. *Accounting Horizons*. 10, 2, pp. 113


http://www.zdnet.com/anchordesk/stories/story/0,10738,2811240,00.html [15.11.01]


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