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The relative informativeness of GAAP and *pro forma* earnings announcements in France

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This paper addresses the main problem raised by *pro forma* (or “street”) earnings. The aim is to help investors find their focus as they rely on *pro forma* earnings figures to make decisions on investing in French publicly-traded securities. We study 116 *pro forma* earnings announcements made over the period 1996 - 2006 to investigate why French traded corporations use *pro forma* reporting in their annual earnings announcement press releases. Interestingly, the study finds that managers use *pro forma* earnings numbers strategically to report better corporate performance than numbers based on GAAP earnings metrics. In 79% of the cases we identified, *pro forma* numbers are higher than GAAP numbers, suggesting that managers have significant motives for reporting a profit that would be higher than under GAAP-based numbers and higher than in analysts’ forecasts. Furthermore, about 82% of *pro forma* announcements should have disclosed bad news that would have been revealed by releasing GAAP earnings. Finally, we show that *pro forma* numbers are much more informative than GAAP earnings.

Key words: *Pro forma* reporting, street earnings, non-GAAP earnings, abnormal stock returns, analysts’ forecasts, discretionary earnings, informative content.

INTRODUCTION

In recent years, corporate earnings statements have provided the financial community with obscure and discretionary definitions of earnings metrics called *pro forma* earnings or *street* earnings, collectively referred to as ‘non-GAAP (for ‘non-generally accepted accounting principles’) earnings. Indeed, managements are increasingly turning to reports of a distinctive measure of corporate profitability made up of such ad-hoc metrics, which are un-audited financial measures that do not comply with domestic or international GAAP but which capital market regulators (including the American SEC and the French AMF) claim are accepted definitions for financial reporting purposes. *Pro forma* earnings refer to non-GAAP figures as “street earnings,” “core earnings,” “adjusted earnings,” “recurring earnings,” or “ongoing earnings” [1]. All these alternative *ad hoc* earnings

definitions systematically exclude nonrecurring, extraordinary, non-cash items and other expenses such as goodwill amortization or tax expenses [2]. Critics assume

discretionary releasing of ad hoc earnings undefined by any financial reporting standards or regulations. For instance, the proof of this phenomenon is that all of the basic EPS forecasted by any brokers included in the Factset/JCF consensus are based upon the criterion of EPS before goodwill amortization. Furthermore, the “convergence consensus” issued afterwards cancels out the impact of some accounting methods at the time the earnings are calculated, as financial analysts need to use their own calculus to revise their forecasts. The I/B/E/S database also provides users with ‘adjusted’ forecasts.

2. For instance, Vivendi Universal has been announcing its annual earnings on a *pro forma* basis for a few years. The corporation then reconciles its *pro forma* and GAAP earnings in their financial statements. Its *pro forma* earnings measures, called ‘adjusted net income, group share’, are systematically higher than earnings computed under GAAP (i.e., ‘net income, group share’). The most astonishing point is the type of items excluded. The reconciliation statement included in the annual report conspicuously excluded important operational and economic expenses such as ‘non-recurring expenses’, ‘gains/losses on disposals’, ‘financial provisions’ and even ‘goodwill amortization and income tax’.

1. ‘Street’ earnings, ‘*pro forma*’ earnings or ‘non-GAAP’ earnings measures share a great deal of overlap. All three terms are used at different points to qualify the phenomena of heterodox announcements resulting from

that *pro forma* numbers are 'fantasy' ad hoc figures, self-serving to managers and misleading to financial investors. Consequently, *pro forma* figures may trigger unorthodox investor decisions, as they can skew users' perceptions of a firm's current financial status. However, while the GAAP earnings system is deemed good, it also carries a number of disadvantages in that it includes extraordinary, nonrecurring items that are transitory in nature - a feature that hampers assessments of future earnings.

This article investigates the effectiveness of *pro forma* (that is, 'street') earnings released by French listed companies compared with earnings calculated by applying local GAAP standards [3]. Alternatively, the question of whether or not companies report non-GAAP numbers in order to sway investors' perceptions has prompted investigations from both regulatory bodies and researchers, notably to determine whether publicly-held companies may be using *pro forma* numbers to mislead investors. The main issue is that *pro forma* earnings prevent a useful comparison of profits on a fiscal year-by-year basis (Grant and Parker, 2001), and instead aim to beat market expectations, above all when earnings levels are low (Doyle and Soliman, 2002; Lougee and Marquardt, 2004). If managements are voluntarily announcing *pro forma* results, then it is imperative to prevent investors from suffering or share prices from being driven up. Conversely, if *pro forma* disclosure is not being used extensively or to misinform, then there is little justification for further regulation. Obviously, earnings disclosures participate in enhancing the function of capital markets. Efficient markets are built on earnings statements that are informative, that is, both relevant and credible. Furthermore, earnings must be financially standardized in order for investors to trust in the comparability of information across industries and fiscal-years, and in the financial condition and results of operations of the issuer under GAAP. Market authorities therefore require listed organizations to reconcile *pro forma* earnings numbers with operating and net income figures calculated in application of GAAP, and to provide these GAAP figures for auditing by statutory auditors.

Responding to these assertions, this article contributes to recent literature documenting the increasing differences between GAAP-defined earnings and strategically-defined 'alternative' profits numbers by examining the French context. Our empirical results provide several interesting insights. First, we show that *pro forma* earnings report significantly higher abnormal equity returns than earnings prepared in accordance with French GAAP, thus documenting how investors overreact to *pro forma* announcements. Furthermore, we find that *pro forma* earnings announcements enable French corporations to opportunistically inflate positive *pro forma*

forecast error and downplay negative reported *pro forma* forecast error. This results in (1) cosmetically enhancing the economic performance of the firm. Indeed, over 82% of the *pro forma* reports would have reported negative news if they had regularly released their GAAP earnings (*versus* 45.97% of GAAP reporters)[4]. We provide strong evidence that *pro forma* reporting enables firms to exceed analysts' forecasts, while GAAP-based earning metrics do not permit to meet these expectations. Consistent with findings by Entwistle et al. (2005), 79% of *pro forma* statements report a *pro forma* income superior to GAAP-based income (2) enabling them to report surprise positive earnings instead of releasing bad news. In addition, we find that *pro forma* users report a GAAP-based loss more frequently than GAAP reporters (10.6% vs. 9.3%). (3) In contrast, on a *pro forma* basis, earnings announcements reduce the percentage of losses to only 5.4%. This prompts the conclusion that firms use 'street' earnings announcements to transform GAAP losses into *pro forma* profits. Finally, *pro forma* announcements generate higher abnormal daily returns than GAAP earnings announcements. Also, when regressing CAR (centered on a three-day-window) on forecast error in GAAP and *pro forma* earnings (that is, earnings surprises), empirical results suggest that *pro forma* figures are more informative and more relevant than GAAP earnings because they reveal a positive association between cumulative abnormal returns and both pro-GAAP and non-GAAP earnings forecast error. These findings provide strong evidence that investors assign more value to *pro forma* numbers for security pricing.

The article is organized as follows. The first section documents previous research in this area and introduces French regulations on corporate *pro forma* announcements. The second section examines the hypotheses, sample design, and data. The third section presents the empirical results. The article ends with concluding remarks.

BACKGROUND

Previous research

In recent years, there has been a wide-reaching debate over whether the intention of managements reporting *pro forma* numbers is to better inform investors or, conversely, to mislead them. These two competitive alternative assumptions are summed up in the *opportunism vs. signaling* hypothesis. Indeed, most empirical investigations have emphasized the manipulative component of *pro forma* reporting, considering that enables corporate managements to play number games in order to prevent investors from fully measuring the firm's performance. On the other hand, *pro forma* reporting is also seen as flagging the need to make financial numbers more relevant (Dumontier, 2003). Empirical studies testing for assumptions of misleadingness or informativeness in *pro forma* disclosure, presentation and classification of financial accounting

3. In terms of establishing consolidated statements, GAAP refer to accounting systems resulting from regulation #CRC 99-02 enacted by the French Accounting Regulator.

4. GAAP reporters refer to other companies belonging to the SBF 250 index, once *pro forma* adopters are excluded, as a fair benchmark of GAAP reporters.

information have reported mixed evidence. Lougee and Marquardt (2004), Bowen et al. (2005) and Frankel et al. (2008) find evidence of *pro forma* reporting decisions being strategically rather than opportunistically motivated.

Even though the adoption of Sarbanes-Oxley led the SEC to enact specific rules on *pro forma* earnings, managers apparently still enjoy considerable flexibility in presenting *pro forma* results (Entwistle et al., 2004, 2005). For instance, Entwistle, et al. (2004) documents that 77% of all US S&P 500 companies report *pro forma* earnings. In addition, empirical investigations suggest that when *pro forma* earnings are disclosed, they are more likely to be of greater relevance than GAAP earnings numbers because they are more informative. Managers mostly argue that in doing this, they are providing market participants with value-relevant information rather than intentionally trying to manipulate the perceptions of financial statement users. Empirical surveys generally document that *pro forma* earnings are more “permanent” than GAAP earnings, since they are more closely related to stock price and more predictive of future earnings. Nonetheless, the expenses/gains excluded from GAAP earnings are not positively associated with future stock returns. Another motive for disclosing *pro forma* earnings is to provide more profitable performance figures or to artificially create a perception that the company has “met or exceeded” GAAP-based earnings forecasts. Thus, there is evidence that managers exclude small amounts of “non-recurring”/“non-cash” expenses in order to beat earnings analysts’ predictions. Conversely, researchers have found that sophisticated investors (that is, analysts) were not disturbed by *pro forma* earnings [5]. Bradshaw (2003) and Bhattacharya et al. (2003a) identified earnings announcements in press releases and showed that *pro forma* earnings had a higher informative content than accounting earnings. They observed that companies reporting *pro forma* metrics generally belong to the high-tech sector and announce accounting losses more often.

Furthermore, these *pro forma* earnings are much more informative than operational profits computed in application of local GAAP. Investors consider “street” earnings a more accurate estimate of true firm performance than earnings calculated in compliance with accounting standards. Given that about 70% of the time, *pro forma* EPS exceed GAAP-reported EPS, the authors concluded that managers strategically highlighted their preferred earnings figures by reporting them first in press releases (87% of 1,149 quarterly *pro forma* press releases). Brow and Sivakumar (2003) and Bradshaw and Sloan (2002) reported similar findings.

Nevertheless, in these circumstances, investors find *pro forma* announcements less informative than accounting announcements, notably when disclosed *pro forma* earnings are above market expectations while GAAP earnings fall below (Ciccone, 2002). However, investors and financial analysts seem more skeptical of *pro forma* announcements that aim to confuse investors’ understanding, especially when *pro forma* profits cover up a net loss. Accordingly, a review of 185 quarterly earnings announcements by James et al. (2003) shows that any *pro forma* earnings reported were almost always (88% of the time) higher than GAAP earnings numbers. The net effect of *pro forma* reporting for the 58 companies that made *pro forma* announcements was to increase net earnings by \$11.4 billion over GAAP earnings. Furthermore, companies reporting a GAAP loss were more likely to state *pro forma* earnings amounts than companies posting a GAAP profit (40% vs. 27%). There seems to be support for the contention that GAAP losses are often recast as *pro forma* profits [6]. Pro

forma indicators are useful for investors in that they are aware of expenses (or gains) excluded from *pro forma* earnings (Lougee and Marquardt, 2004; Doyle et al., 2003), and markets appear to interpret the release of these profit numbers as bad news.

Johnson and Schwartz (2005) reported that although many companies switched their accounting losses to *pro forma* profits, investors were not subsequently misled by *pro forma* announcements, particularly when a description of expenses or applied principles was excluded. In contrast, Frederickson and Miller (2004) and Bhattacharya et al. (2007) assumed that *pro forma* disclosures affect individual (read: ‘less informed’) investors more than the better-informed institutions or financial analysts. Individual investors overreact to *pro forma* earnings that are generally more favorable than accounting earnings, while sophisticated investors’ responses are based more on other information sources available (Andersson and Hellman, 2007). Firms may alter naïve investors’ perceptions in disclosing *pro forma* profits while reporting a net GAAP loss (Elliott, 2006). *Pro forma* announcements mainly seem to involve young companies from high-tech industries that are less profitable. Thus, *pro forma* disclosures are more important for firms for which high debt-to-equity ratios, price-earnings, and book-to-market ratios are important (Bhattacharya et al. 2004). Overall, the frequency of *pro forma* disclosure increases as stock prices decline.

AMF regulations

Accounting regulators, capital market authorities and other critics usually assume that *pro forma* numbers are “fantasy” figures - self-serving to managers and misleading to financial investors (e.g., Derby, 2001; Dreman, 2001; Elstein, 2001; Standard and Poor’s, 2002; Federal Reserve Bank of Cleveland, 2003). In the French context, the *Autorité des Marchés Financiers* (AMF)[7] (formerly the COB - *Commission des Opérations de Bourse*) has to ensure that investors are able to clearly understand how ‘street’ financial numbers differ from income numbers prepared in accordance with GAAP prior to investing in stocks. The AMF has subsequently been adamant that *pro forma* earnings must be systematically reconciled to GAAP metrics in press releases, as presenting *pro forma* earnings without any precise adjustments “would make the presentation of the material non-GAAP measure misleading”. Surprisingly, French companies had been reporting *pro forma* earnings in their press releases for years, prompting the AMF to endorse guidelines on which firms are no longer allowed to disclose *pro forma* metrics without presenting a reconciliation statement though a press release occurring one day after the *pro forma* earnings announcements. Despite this guidance, *pro forma* financial information was reported with increasing frequency over the late 1990s. As a result, in June 2002 and September 2005[8], the AMF issued two formal warnings to public companies on the use of non-GAAP reporting. While few restrictions were placed on reporting *pro forma* information, the AMF expressed concern that such information could mislead investors because it departs from well-established French GAAP, making it harder to make comparisons across reporting periods and with other companies. The AMF asserted that this situation stemmed from the 2005 switch to IFRS, which is not well standardized in terms of performance results presentation. Consequently, the AMF announced that

terrorist attacks, thereby giving them less incentive to use pro forma reporting to excuse net losses”.

7. The COB (*Commission des Opérations de Bourse*) became the AMF (*Autorité des Marchés Financiers*) after merging with the CMF (*Conseil des Marchés Financiers*).

⁸ AMF Press release dated September 20, 2005 entitled “Financial reporting of listed firms: the case of earnings announcements” following on from the June 24, 2002 release entitled and “Warning on non-GAAP reporting”.

5. This is why most brokers included in consensus adopt different ways of measuring forecasted earnings and provide adjusted aggregated earnings after the announcements, by providing their own reported numbers in application of their specific calculations. They re-calculate their forecasts taking into account the EPS announced.

6. “This may be due to the fact that in November and December 2001, 41% of companies with a GAAP loss attributed it to the effects of the September 11

non-GAAP results will be deemed misleading unless the basis of presentation is fully disclosed. The French authority required companies to pay attention to the nature of items omitted from a *pro forma* presentation. While *pro forma* information may be literally correct, *pro forma* disclosure may be misleading if recurring items are omitted without providing explanations of the nature and size of the omissions. Finally, the AMF required that any public press release of non-GAAP financial information should also disclose how it deviates from GAAP, and the amounts involved. The AMF is tasked with implementing these requirements, and if any non-GAAP financial measures not directly reconciled to the most comparable GAAP metrics are published, the AMF immediately requires the company to report the information reconciled to the most comparable GAAP earnings measure[9].

The AMF, in accordance with the International Organization of Securities Commissions (IOSCO)[10], thus enacted corporate disclosure regulations. Accordingly, the AMF requires firms to immediately provide a press release that: (1) does not include any investor-misleading information that does not reconcile to the GAAP earnings, and (2) makes explicit the complete reconciliation between *pro forma* numbers and GAAP metrics if a GAAP-reported figure has been published (recently or in the fiscal year prior to comparison). Other regulatory bodies, including the IOSCO, have required companies to disclose their earnings prepared in accordance with GAAP to ensure that information is comparable across industries.

In comparison, section 401 of the Sarbanes-Oxley Act (SOX) amends the Securities Exchange Act of 1934 by specifying the principle underlying *pro forma* financial information disclosures. It stipulates that “*pro forma* financial information included in any periodic or other report filed with the Commission pursuant to the securities laws, or in any public disclosure or press or other release, shall be presented in a manner that:

- (1) Does not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the *pro forma* financial information, in light of the circumstances under which it is presented, not misleading; and
- (2) Reconciles it with the financial condition and results of operations of the issuer under generally accepted accounting principles.”

Hypotheses formulated and description of the variables

We sought to investigate research hypotheses in which equity investors were assumed likely to be the main targets of managers' strategic announcements attempting to influence their perceptions of firm performance. We therefore addressed the following questions:

1. How do *pro forma* earnings differ from GAAP numbers?
2. How different are GAAP and *pro forma* earnings in terms of their informativeness to market participants?

We test in this paper whether *pro forma* disclosures are more

⁹ Accordingly, the AMF considers that these nonstandardized and nonaudited definitions of earnings stand in contrast with the historical and traditional conception of *pro forma* earnings that represented earnings under the assumption that two firms had been merged in prior years.

10. IOSCO (2004), “Mise en garde sur les indicateurs de résultats non conformes aux principes comptables généralement admis (GAAP)”, press release, 3 p.

AMF (2004), press release on earnings communication as of June 26th, 2004 related to the presentation of the 2006 AMF annual report, 4 p.

AMF (2005), “Communication des émetteurs sur leurs résultats”, September 20th, 2005, 2 p.

informative than GAAP numbers in the French context. If *pro forma* information is really misleading or more useful and informative to investors than GAAP earnings are (Bhattacharya et al., 2003), then *pro forma* earnings surprise would be significantly associated with abnormal stock returns around the announcement date. Thus, we argue:

H1a: *Ceteris paribus*, positive (negative) GAAP forecast errors are associated with positive (negative) abnormal stock returns.

Under market efficiency, investors are supposed to incorporate misleading information into their response and react in the opposite direction of the manipulation. Then, under the opportunism/inefficiency hypothesis, we would expect CAR to be negatively related to *pro forma* forecast error. However, under the signaling/efficiency hypothesis, we would expect a positive association between CAR and *pro forma* forecast error.

H1b: Under the opportunism hypothesis, *ceteris paribus*, positive (negative) *pro forma* forecast errors are associated with negative (positive) cumulative abnormal stock returns;

H1c: Under the signaling hypothesis, *ceteris paribus*, positive (negative) *pro forma* forecast errors are associated with positive (negative) cumulative abnormal stock returns.

When the press release containing GAAP and *pro forma* reconciliation is disclosed, at days t+1 or t+2 the market participants would be expected to react to both GAAP and *pro forma* earnings surprises[11]. Prior literature suggests *pro forma* results can provide higher-quality earnings measures than GAAP. Brown and Sivakumar (2003) acknowledge that if markets are not efficient, then investors would erroneously focus on lower-quality earnings numbers. Bradshaw and Sloan (2002a) provide evidence that *pro forma* measures have become the primary determinant of security prices compared to GAAP and are perceived by market participants as more value-relevant. While their findings suggest investors may see ‘street numbers’ as a better indication of long-run recurring performance, Bhattacharya et al. (2003) report similar findings indicating that investors see *pro forma* earnings as more informative than GAAP earnings.

If non-GAAP earnings are more relevant than GAAP measures, then *pro forma* earnings surprises would be more closely correlated with abnormal security returns than GAAP earnings surprises. We test whether coefficients of *pro forma* earnings surprises are significantly higher than the coefficient of GAAP earnings surprises, and we test whether the R-squared of apparent earnings surprise, that is, its capacity to explain abnormal equity returns surrounding the announcement, is significantly better than the R-squared of GAAP earnings surprises. Then, if *pro forma* reporting aims at either misleading investors (opportunism hypothesis) or signaling private information about future prospects and future performance [Dumontier, 2003; Lougee and Marquardt (2004), Bowen et al. (2005) and Frankel et al. (2008)],. If markets are efficient, then investors would react in the opposite direction of the *pro forma*

11. Indeed, we had factor in two French calendar events directly related to financial reporting. [1] Firstly, at the date of the annual earnings announcements on day t, firms disclose their *pro forma* earnings metrics without providing any reconciliation statement. [2] Secondly, the new press release detailing adjustments of excluded items follows on, providing earnings computed under GAAP requirements. Where this press release could not be found in any databases, it is assumed the adjustments occurred on day t+1 and t+2 at the latest. Investors only find out ‘street’ measures, after which they are able to identify GAAP and/or *pro forma* surprises. On the other hand, we may have considered the full set of financial statements published in the B.A.L.O. (*Bulletin des Annonces Légales et Obligatoires*, an Appendix of the French Official Journal) as the date financial reports are released, providing users with GAAP and non-GAAP adjustments.

forecast error. Alternatively, if they react in the same direction, they may see street earnings as being a signal. If markets are not efficient, then positive coefficients of $FE_{PROFORMA}$ may suggest that investors erroneously focus on lower quality earnings numbers, and have been misled.

Under the opportunism/inefficiency hypothesis or under the signaling/efficiency hypothesis, depending on literature findings, we expect a higher coefficient of *pro forma* forecast error than GAAP forecast error.

Then: 2: *Ceteris paribus*, when regressing CAR on forecast errors, the coefficient of *pro forma* earnings surprises is higher than the coefficient of GAAP-reported earnings surprises.

Independent variables

Institutional ownership

Institutional owners are often characterized as sophisticated investors who have advantages over individual investors in acquiring and processing value-relevant information (e.g., Lev, 1988; Shiller and Pound, 1989; Hand, 1990; Jiambalvo et al., 2002). Hence, institutions can potentially monitor abuse of accounting discretion by managers. Under the opportunism hypothesis, we expect manipulations of earnings to be negatively associated with the INSTIT variable, measured from the FactSet LionShares database as the proportion of a firm's shares held by top-10 institutional investors.

However, according to Bowen et al. (2008), another body of literature has argued that institutional investors are "transient owners" who are overly focused on short-term earnings and thus pressure managers to deliver consistently higher earnings, even if it entails abuse of accounting discretion (Porter, 1992; Bushee, 1998; Graham et al., 2005). From this perspective, we expect to find a negative association between cumulative abnormal returns and INSTIT.

Audit quality

Prior research (Craswell et al., 1995) argues that audit quality increases with auditor's market share, and that discretionary accruals are lower for firms audited by a Big 4 firm. To construct a proxy for auditor reputation, we use a dummy variable AUDIT, equals to 1 if audited by a BIG4, zero otherwise. We expect the sign of the coefficient to be negative.

Growth opportunities

Skinner and Sloan (2002) observe that the market severely penalizes growth firms for negative earnings surprises. Therefore, growth firms have relatively strong incentives to meet earnings benchmarks, perhaps to avoid increases in the cost of capital or to maintain access to capital. Furthermore, growth firms have an incentive to smooth earnings via accruals, since earnings volatility increases perceived firm risk (Beaver et al., 1970) which, in turn, adversely affects the cost of the capital needed to fund new projects (Minton and Schrand, 1999). Thus, growth firms have relatively strong incentives to announce *pro forma* earnings metrics to meet earnings benchmarks. We proxy for growth opportunities with the market-to-book ratio (MBR), and expect a negative association between CAR and MBR.

Size

Watts and Zimmerman (1990) argue that larger firms face more political costs and hence have incentives to exercise accounting

discretion to reduce unwanted political visibility. We use the natural logarithm of net sales (LnSALES) to proxy for size, and expect a positive association between accounting discretion and LnSALES.

Analyst coverage

To reflect the research findings of Healy and Palepu (2001), Dyck et al. (2006) and Yu (2008), we include in our model the regressor of analyst coverage captured by the number of analysts participating in the consensus forecast. Each of the studies cited above found that financial analysts following a firm affect the earnings management behavior of a firm through their role as external monitors, with a firm's accounting discretion behavior becoming increasingly curtailed as a function of the number of analysts following it increases.

Litigation costs

Skinner (1994) argued that the threat of lawsuits arising from large negative earnings surprises gives managers strong motives for pre-announcing information to reduce litigation costs. Consistently with this assumption, Kaznik and Lev (1995) had used this variable to capture litigation risk. They found that TECH firms are more likely to warn investors of an earnings surprise, thus adding support to the argument that litigation risk provides incentives for early disclosures. The variable is also similar to the classification used in Francis et al. (1994) to identify firms facing high litigation risk. If TECH effectively captures litigation risk and firms perceive *pro forma* reporting to reduce potential litigation costs, CAR should be negatively associated with TECH. Hence, we used the two following TECH measures to capture litigation costs:

TECH = 1 if the firm belongs to ICB sectors (Industry Classification Benchmark codes) classified as Pharmaceutical (ICB sector code 4577), Computer Services (9533), Electronic Equipment (2737), Telecommunications Equipment (9578), Software (9537), Aerospace (2713), Computer hardware (9572), Biotechnology (4573), Internet (9535) or Defense (2717); 0 otherwise

Sample design and data

We collected press releases on annual earnings from companies traded on NYSE-Euronext Paris over the period 1996 - 2006. Our initial sample was composed of 119 *pro forma* press releases. Our final sample consists of 116 *pro forma* announcements after dropping three observations whose forecasted earnings were missing. Whereas a large number of press releases issued in the US mention *pro forma* earnings measures, there is less evidence of its use in France. Press releases were extracted using the Factiva database that details any press releases covering any field of interest over the past 25 years relating to financial reporting. Firms used different nomenclature to disclose *pro forma* data that my methodology restrictively defined. *Pro forma* indicators are any indicators not covered under the French GAAP definition of earnings. We decided to search for *pro forma* earnings by using keywords found in the title or the content of the press release. We used keywords to highlight the nature of *pro forma* figures by looking up "net profit before goodwill amortization," "adjusted net profit," "net income excluding extraordinary expenses", "*pro forma* income", "*pro forma* EPS", "EPS before amortization" or "EPS excluding." Many press releases indicate that the firm has arrived at *pro forma* earnings by making multiple adjustments from GAAP. The most popular adjustment consists of announcing a net income before extraordinary items or before goodwill amortization, or announcing ordinary earnings, recurring earnings, or *pro forma*

income. There is considerable interest in how financial analysts and broker tracking services such as FactSet, First Call, I/B/E/S or Zack have become increasingly reliant on adjusted definitions of GAAP earnings measures (Bradshaw and Sloan, 2002; Gu and Chen, 2004). The evidence suggests that press releases often report net profit on a gross basis rather than on a per share basis, yet at the same time, earnings per share (EPS) are also disclosed on a *pro forma* basis [12]. Each press release was fully analyzed to make sure that no GAAP-based earnings were specified. Unless the press release specified that earnings were prepared in accordance with French GAAP, it was considered as a *pro forma* press release. Except where several press releases were identified from different press agencies, data homogeneity was insured by cross-checking that different press releases gave the same information. Consequently, to consider an announcement a *pro forma* earnings announcement, two criteria had to be met. First, the press release had to provide a non-GAAP measure of annual earnings, either on a gross or a per share basis. Second, this alternative measure had to be associated with annual announcements rather than quarterly or semi-annual announcements. In most cases, the firm expressed the non-GAAP metric as unique performance measure, making no mention of any GAAP earnings or references to GAAP adjustments. In a handful of cases, a firm published both accounting and street earnings. The *pro forma* press releases were further analyzed to assess the number, nature, and income effect (both direction and magnitude) of the adjustment(s) to GAAP earnings used in determining the firm's *pro forma* measure.

Factiva contains any press releases provided by information agencies like Reuters, Bloomberg or domestic economic and financial press from French newspapers. Then, for a few firms, another press release reporting the GAAP earnings (that is, the regulatory press release) was supposed to be published one day later, that is, at day $t+1$, in another source.

Therefore, it is assumed that the reconciliation of *pro forma* and GAAP earnings appears one day after the *pro forma* release. *Pro forma* earnings are those mentioned in the press releases, corresponding to the official date of annual announcements taken from Factiva, after first controlling for coherence with the dates indicated in the FactSet Research System database. Forecasted GAAP earnings consist of median Basic EPS before extraordinary items, as gauged by financial analysts based on the latest estimates provided by brokers within the forty-five days immediately preceding earnings announcements. The forecasted 'Adjusted Net Income' is the proxy collected from FactSet Estimates that captures the forecasted *pro forma* earnings figure. This item refers to recurrent earnings that do not comply with GAAP accounting earnings definitions because it excludes non-recurring items, exceptional items and other specific expenses. Given that the item is not standardized, each company's managers use their discretion in disclosing 'Adjusted Net Income'. In other words, it is the most reliable and accurate proxy for expected *pro forma* earnings.

EMPIRICAL RESULTS

Descriptive statistics on *pro forma* earnings metrics

Table 1 presents the initial sample of 116 *pro forma* press releases that report *pro forma* earnings to communicate their annual financial performance. Panel A tabulates the most commonly reported *pro forma* measure (around 39% of the sample): "Net profit before goodwill amortization."

12. Indeed, the dilutive problem is due to the number of outstanding shares integrated into the calculation of the reported EPS denominator. The number in the denominator could differ while analysts are forecasting the EPS measure.

This terminology adopts several variants, as in 6.9% of cases, the firm gave net income excluding goodwill amortization, while one press release specified the net profit excluding goodwill amortization. Further-more, in 3.4% of cases, firms excluded extraordinary items, thus improving their result significantly by reporting a *pro forma* number inflated by around 16.25, 19.89, and 12.9% respectively, compared with classically-calculated GAAP income. These results indicate expenses excluded from the calculation of GAAP earnings that represent significant amounts, expressed in relative value. Further-more, the "net earnings excluding non-recurring/unusual expenses" item is also often employed (7.8% of the sample) to disclose annual economic performance to the market. In only two cases (1.7% of the whole *pro forma* disclosures population), firms explicitly used "pro forma" terminology. Panel B in Table 1 illustrates that, on average, *pro forma* earnings amounted to about €689 thousand while GAAP earnings are worth about €612 thousand. Additionally, median *pro forma* numbers are above median GAAP numbers. The figures for total weighted mean (median) adjustments between GAAP and non-GAAP earnings reported in Panel C of Table 1 highlight that excluded items represent about 14.53% (18.59%) of the gross value of net income prepared in accordance with French accounting principles. Consequently, *pro forma* earnings are aimed at inflating reported numbers, making *pro forma* an income-increasing method.

Pro forma reporting widely remains an attempt to disclose biased information in order to influence investors' beliefs. Harvey Pitt, former SEC chairman, had declared that behind *pro forma*, reporting is often "a legitimate desire by companies to demystify mandated financial statements disclosures." *Pro forma* earnings reports are not audited by anyone prior to their release, so there is no assurance on the reasonableness of the items the reporting management chooses to exclude. As a result, there is no consistency in the calculation of *pro forma* earnings, and neither regulatory guidance nor standard definitions. The specific expenses or gains excluded from the calculation of *pro forma* EPS (that is, net income) vary from company to company, often within the same industry, making it very difficult to run reliable comparisons between two companies. More disturbing is the fact that items excluded from *pro forma* earnings sometimes vary from one period to the next, based upon what the company's management chooses to emphasize. In the U.S. most *pro forma* press releases appeared after the Enron collapse, which in itself documents how the financial community no longer trusts financial reporting. Indeed, one analyst argued that "the reported classical (GAAP) profits figure is now considered an accounting fiction", because it often includes nonrecurring items and unspecified accrual accounting distortions. We observed that *pro forma* releases were on the increase from 1996 – 2001 and declined thereafter. It thus becomes clear that, except for 2001 where 34 *pro forma* announcements were

Table 1. Characteristics of *pro forma* earnings in Reuters press releases disclosed by French listed-companies from January 1997 to July 2006.

	Firms number*	(%**)
Panel A. Description of <i>pro forma</i> earnings (% of the sample): comments appearing in the press releases (Reuters)		
Net profit, group share* in a separate press release, where the firm mentions that its earnings are before goodwill amortization	8	6.9
Net profit excluding extraordinary items	19	16.4
"Pro forma" earnings	2	1.7
Ordinary earnings, group share	5	4.3
Net profit, group share excluding "purchase/acquisition costs"	2	1.7
Operational profit, group share	16	13.8
Net earnings before recurring/unusual items	9	7.8
Adjusted net profit	10	8.6
Net profit before goodwill amortization	33	28.4
Net profit before goodwill amortization and extraordinary expenses	4	3.4
Net profit before disposals gains/losses (PMV)	3	2.6
Net profit before restructuring costs	1	0.09
Net earnings with specific GAAP (including changes in accounting procedure/specific consolidation method within a subsidiary)	4	3.4
Total of observations	116	
Panel B. Annual <i>pro forma</i> and GAAP earnings as reported by sample firms (in thousands of €)		
	Mean	Median
<i>Pro forma</i> earnings figures	689.240	205.600
GAAP earnings figures	612.053	193.394
Panel C. GAAP items excluded from <i>pro forma</i> earnings (% of GAAP net income)		
	Mean	Median
Net profit, group share* in a separate press release, where the firm mentions that its earnings are before goodwill amortization	16.25	17.00
Net profit excluding extraordinary items	-27.06	5.89
"Pro forma" earnings	35.28	NA
Ordinary earnings, group share	0.33	-0.20
Net profit, group share excluding "purchase/acquisition costs"	3.5	NA
Operational profit, group share	5.79	5.89
Net earnings before recurring/unusual items	23.06	10.08
Adjusted net profit	-9.62	-5.32
Net profit before goodwill amortization	19.89	14.45
Net profit before goodwill amortization and extraordinary expenses	12.90	10.53
Net profit before disposals gains/losses (PMV)	14.34	8.56
Net profit before restructuring costs	7.67	7.67
Net earnings with specific GAAP (including changes in accounting procedure/specific consolidation method within a subsidiary)	-41.19	NA
Total <i>pro forma</i> adjustments of sample firms (weighted)	14.83	18.59

* Some observations aggregate different items ranging from "*pro forma* earnings before recurring expenses and goodwill amortization" or "ordinary earnings reported on a *pro forma* basis" to "*pro forma* earnings before extraordinary components.

** Percentages are computed on number of items based on 116 observations.

identified, the numbers of *pro forma* announcements are limited annually. These phenomena are recurring, since the 116 "heterodox" announcements recorded over ten

fiscal-years concerning only 66 firms. Over the period studied, non-GAAP earnings measures were released six times by both Zodiac and L'Oreal, five times by Total and

Sanofi, and four times by Carrefour. Most firms announced a non-GAAP earnings measure once or twice at some point in the study period, documenting that *pro forma* reporting practices are not widely used by all French SBF 250 firms but, rather, are used recurrently by certain firms.

Firms' incentives to disclose *pro forma* earnings measures

Comparisons of GAAP and *pro forma* earnings forecast errors

Table 2 presents a comparison of earnings forecast errors reported either according to GAAP measures or on a *pro forma* basis. The descriptive statistics point out many interesting trends in terms of managerial behavior and the incentives for revealing non-GAAP earnings. In all cases, the only expectation arising from analysts is the accounting [GAAP] net income forecasted. When firms announce a *pro forma* earnings measure generating apparently good news, the mean *pro forma* forecast error amounts to +20.39%, whereas the GAAP number that should have been disclosed would have led to a negative GAAP forecast error of just -9.04%.

The motives for disclosing valuable positive *pro forma* earnings leads to reporting an inflated earnings surprise that improves on earnings that had been eroded due to the announcement of GAAP figures. There evidence strongly suggests that the reason managers choose to disclose negative *pro forma* earnings is that they are looking to reduce the extent of the negative *real* surprise that would have provoked a slide in stock price. Panel B shows that *pro forma* adopters report a mean negative *pro forma* surprise of -3.67% when their GAAP forecast errors should have been estimated at -29.5%. These statistics show that managers try to enhance a firm's financial performance by issuing *pro forma* numbers instead of disclosing GAAP earnings. In addition, the sub-sample of firms that announced legal GAAP (Panel C) earnings had an average positive (negative) forecast error of about +15.67% (-22.08%).

As shown in Panel D, *pro forma* announcers use ad hoc numbers to exceed median analyst forecasts by announcing good news of about +5.7% whereas their GAAP forecast error would, on average, have been negative (-13.00%)[13]. These results are consistent with Johnson and Schwartz (2005) who found that GAAP-reported earnings surprises (averaging out at +6.32%)

13. To enhance these results, an analysis of both *pro forma* and GAAP forecast error distributions of ad hoc reporters (not tabulated here) showed, first, that their GAAP earnings errors are left-tailed (negatively) distributed while their *pro forma* earnings errors are right-tailed (positively) distributed. Thus, most firms use *pro forma* earnings metrics to exceed median brokers' predictions and release good news so as to avoid triggering the price slide that would occur if they reported the bad news resulting from announcing GAAP earnings that fall below the analysts' forecasts.

are lower than *pro forma*-reported surprises (that is, +16.11%). Consistent with findings by Entwistle et al. (2005), our results show that 79% of companies reporting *pro forma* earnings had results superior to GAAP-based earnings. The descriptive statistics show that, on average, FEPROFORMA (0.091) is higher than FEAGAAP (0.0097); (Table 4: matrix correlation in notes/appendix)

Are *pro forma* earnings used to beat markets' expectations or report a profit?

We also focus on the frequency with which these two types of earnings calculations i) report a profit/loss or ii) meet analysts' expectations. Figure 1 shows that GAAP announcers meet analysts' expectations in 54% of identified cases, while *pro forma* adopters exceed analysts' predictions about 84% of the time when they use a *pro forma* definition of earnings but only 21% of the time if they use a GAAP definition. These observations show that firms tend to adopt a non-GAAP definition in their reported earnings mainly to meet median analysts' earnings forecasts, whereas their results defined in compliance with GAAP would not allow them to exceed the forecasts.

Figure 2 also shows that over 82% of *pro forma* announcers should have announced bad news if they had released GAAP-based earnings figures (compared with 46% of GAAP reporters). Thus, our study provides strong evidence that *pro forma* reporting enables firms to exceeded analysts' forecasts, while GAAP-based earnings metrics do not allow firms to meet these forecasts. Companies whose accounting earnings announcements result in negative surprises tend to disclose *pro forma* earnings more often (82%). These findings demonstrate the discretionary willingness of managers to mislead investors using *pro forma* numbers. Furthermore, while only 18% of *pro forma* reporters succeed in beating market expectations of their earnings prepared in compliance with GAAP, this figure jumps to 79% in reporting *pro forma* earnings measures, a figure fairly similar to the 70% found by Bhattacharya et al. (2003).

Figure 3 illustrates that GAAP announcers report a profit in 90.7% of identified cases. *Pro forma* adopters report a *pro forma* profit about 94.6% of the time when they should have reported a profit only about 89.4% of the time if publishing their earnings in accordance with accounting principles. Our results therefore indicate that French companies can disclose street earnings in order to turn GAAP losses into *pro forma* profits. This evidence is consistent with the notion that managers are often under extreme pressure to report earnings that are equal to or above the median analysts' expectations (e.g. Burgstahler and Dichev, 1997; Skinner and Sloan, 2002). Therefore, *pro forma* earnings disclosures may often be motivated by managers' moves to meet targets and avoid reporting a loss. In addition, we found that *pro forma* announcers more frequently report a loss than GAAP

Table 2. *Pro forma* versus GAAP earnings per share (EPS) measure forecasts errors.

<i>Pro forma</i> and GAAP earnings measures forecast error (FE)				
	<i>Pro forma</i> FE		GAAP FE	
	Mean	Median	Mean	Median
Panel A. <i>Pro forma</i> earnings releases - Good news (N = 88)	0.1839	0.1160	-0.07	-0.0255
Panel B. <i>Pro forma</i> earnings releases - Bad news (N = 28)	-0.0367	-0.0245	-0.295	-0.1375
Panel C. GAAP Earnings releases only (N = 1456)	0.1567	0.0423	-0.2208	-0.0986
Panel D. <i>Pro forma</i> Earnings releases only (N = 113)	0.057	0.0218	-0.13	-0.4988

Pro forma FE = Reported *pro forma* earnings – Forecasted GAAP earnings.
 GAAP FE = Reported GAAP earnings - Forecasted GAAP earnings.

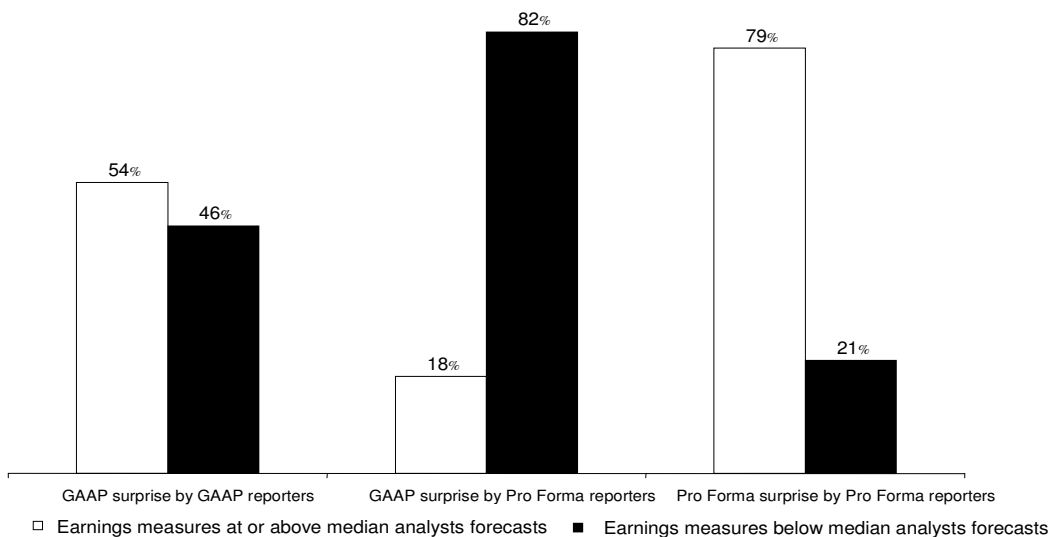


Figure 1. Earnings measures above versus below median analysts' forecasts.

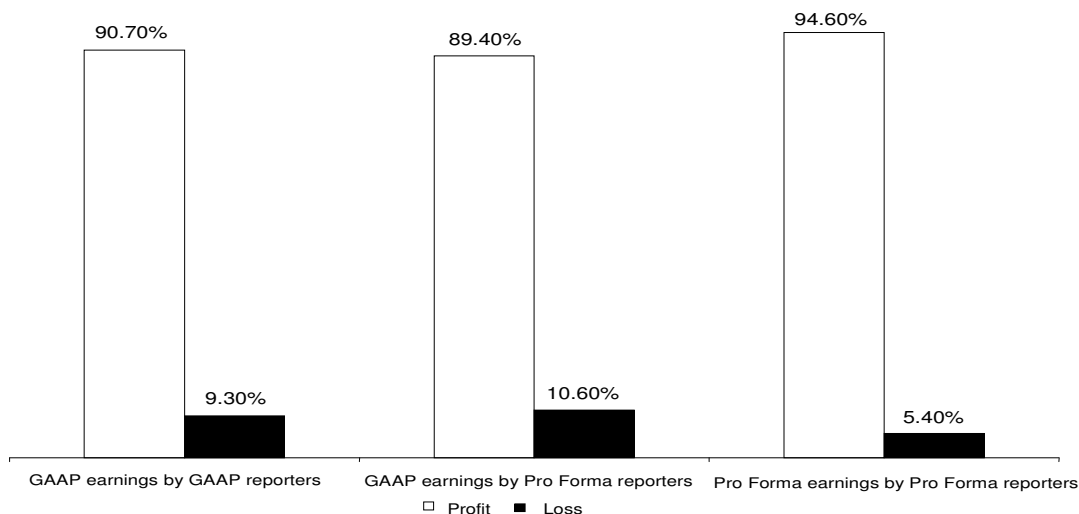


Figure 2. Percentages of profit versus loss.

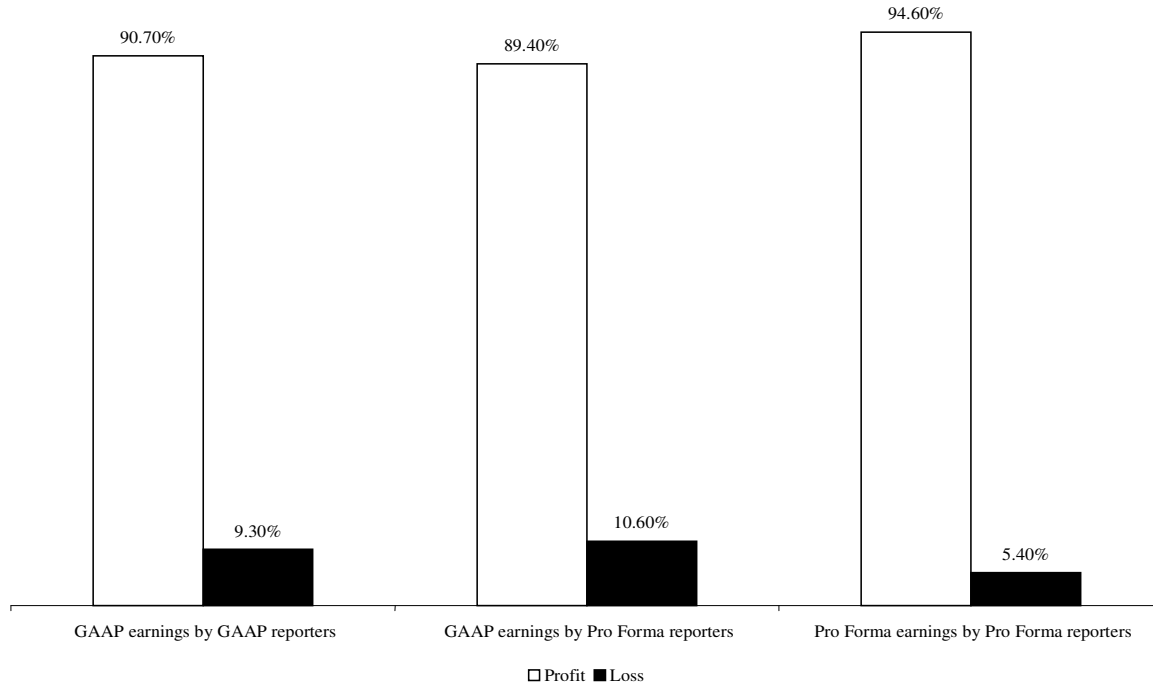


Figure 3. Percentages of profit versus loss.

reporters (10.6% vs 9.3%) when the announcement is based on earnings prepared in accordance with accounting principles. Furthermore, on a *pro forma* basis, announcers reduce the percentage of losses at only 5.4%. Hence, descriptive statistics show that French firms use “street” announcements to transform GAAP losses into non-GAAP profits. Our findings converge at and towards the conclusion that companies tend to use *pro forma* earnings to meet analysts’ expectations and downplay negative earnings news. This is consistent with the conclusions drawn by Bhattacharya et al. (2004).

Relative informativeness of *pro forma* and GAAP earnings metrics

We went on to examine whether *pro forma* earnings surprises were comparatively more informative than GAAP earnings numbers. To test this point, we regressed short-window abnormal returns separately, then together, on earnings surprise measures based on each of the two earnings metrics, that is, *pro forma* or GAAP earnings, denoted as $FE_{PROFORMA}$ and FE_{GAAP} , respectively. We ran an event study based on daily abnormal returns analysis using the market model in which we compute the model’s parameters over the pre-announcement period [-250;-11], 0 being the announcement date. The results (not tabulated here) show that, on average, announcing positive (negative) *pro forma* earnings generates a positive - and significant - abnormal return of around

+3.27% (-0.53%). In comparison, positive (negative) GAAP earnings announcements lead to a positive response of +1.20% (-0.71%), both of which are statistically different from zero. The difference in means is statistically significant, suggesting that *pro forma* earnings announcements induce higher returns movements. As outlined below, we tested the following three regression models:

$$CAR_{[0,2]} = \alpha_0 + \alpha_1 FE_{PROFORMA} + \alpha_2 ANALYSTS + \alpha_3 INSTIT + \alpha_4 BIG4 + \alpha_5 MBR + \alpha_6 TECH + e'' \tag{Equation 1}$$

$$CAR_{[0,2]} = \alpha_0 + \alpha_1 FE_{GAAP} + \alpha_2 ANALYSTS + \alpha_3 INSTIT + \alpha_4 BIG4 + \alpha_5 MBR + \alpha_6 TECH + e'' \tag{Equation 2}$$

$$CAR_{[0,2]} = \alpha_0 + \alpha_1 FE_{GAAP} + \alpha_2 FE_{PROFORMA} + \alpha_3 ANALYSTS + \alpha_4 INSTIT + \alpha_5 BIG4 + \alpha_6 MBR + \alpha_7 TECH + e'' \tag{Equation 3}$$

In which CAR is the cumulative abnormal returns over the two-day window centered on the *pro forma* earnings announcement date (0;+2), where 0 is the date of announcement, $FE_{PROFORMA}$ is the difference between the reported *pro forma* EPS and the forecasted EPS excluding extraordinary items resulting from the median analysts’ consensus, scaled by the closing stock price as

of December 31 of preceding year, and FE_{GAAP} is the final GAAP EPS reported by the firm minus the forecasted EPS excluding extraordinary items, scaled by the closing stock price as of December 31 of last year. Integrating the annual average number of shares outstanding taken from FactSet Excel Connect, we divided any *pro forma* income identified by the annually - weighted average number of shares outstanding, which gives any EPS disclosed on a *pro forma* basis.

Daily returns were calculated as the firm-specific daily return minus the expected daily return on that day as computed through the market model. The earnings response coefficient and the adjusted R^2 value, capturing the overall explanatory power of the earnings surprise measure, provide measures of the informativeness of the analyzed earnings metrics (e.g. Brown et al., 1987; Brown and Sivakumar, 2003). Similarly, we estimated the following models with standardized variables using variables for which the distribution of each is transformed so that the mean is zero and the standard deviation is one. Therefore, we directly compared the respective earnings response coefficients, that is, α_1 versus α_2 [15].

These models provide direct empirical evidence on whether *pro forma* figures are significantly more informative to information users than GAAP numbers. Table 3 shows that the $FE_{PROFORMA}$ (α_1) coefficient is greater than the FE_{GAAP} (α_2) coefficient [16]. Multivariate analysis allows us to directly compare the earnings response coefficient of $FE_{PROFORMA}$ (α_1) against the coefficient of FE_{GAAP} (α_2).

These results indicate that *pro forma*-based earnings measures are significantly much more informative to investors than earnings prepared in compliance with GAAP. In univariate analysis, the coefficient of FE_{GAAP} (.04) is lower than the coefficient of $FE_{PROFORMA}$ (.52). The coefficient on the *pro forma* forecast error in equation 1 is not significant, while the coefficient on the GAAP forecast error in equation 2 is still significantly positive.

However, in equation 3, the coefficients on *pro forma* and GAAP forecast errors are significant at the 0.05 level and positive, at .69 and .044, respectively, suggesting

15. Indeed, in classical OLS estimation, examining the values of the estimates does not definitively conclude that the explanatory variable with the largest estimated coefficient has the greatest explanatory power for the response variable, since the magnitudes of the control variables are directly sensitive to the units used to assess the respective powers of the variables. However, standardizing the variables makes their scale irrelevant, and consequently places the explanatory variables on "equal footing" in terms of explanatory power. As a result, the response coefficient on standardized estimated earnings can be considered the number of standard error changes in the dependent variable resulting from a standard error change in the independent variable. Hence, coefficients measure the effects of each variable in standard deviation units as opposed to the gross initial units of the regressors employed within the classical OLS models. Therefore, OLS estimation using standardized variables is a better-adapted technique when the researcher aim' is to accurately determine the respective relative power of any control variables in explaining variations in the response variable (e.g. Wooldridge, 2000).

16. We winsorized each of the variables used in the regression models at the 5th and 95th percentiles to reduce the influence of outliers on the results.

street earnings are more value relevant than the GAAP performance measure. Our findings are consistent with previous studies suggesting *pro forma* results can provide higher-quality earnings measures than GAAP.

The findings reported by Brown and Sivakumar (2003) state that if markets are not efficient, then investors may erroneously focus on lower-quality earnings numbers. A study by Bradshaw and Sloan (2002a) on the magnitude of the difference between *pro forma* earnings reported by analysts' tracking services (that is, I/B/E/S) and GAAP earnings reported an increasing tendency to exclude significant and allegedly non-recurring expenses from *pro forma* measures. The authors provide evidence that *pro forma* measures have outstripped GAAP as the primary determinant of stock prices and are perceived by investors to be more value-relevant. While their findings suggest investors may perceive 'street earnings' as a better indication of long-run recurring performance, Bradshaw and Sloan (2002b) put forward an alternative theory that investors are getting "hoodwinked". Bhattacharya et al. (2003) also provide evidence that investors view *pro forma* earnings as more informative than GAAP earnings. However, results obtained by Philbrick and Ricks (1991) indicated that matching analysts' forecasts to actual earnings figures reported by the same tracking service provides a more accurate, that is, less 'noisy' measure of forecast error [18]. Thus, in equation 3, empirical results corroborate that *pro forma* earnings are more informative to market participants than GAAP measures. Coefficients on forecast errors are predicted to be positive, suggesting we focus on managerial opportunism. Despite the difficulties in discriminating between efficient contracting and opportunism, our results provide strong evidence that if markets are efficient, *pro forma* numbers are informative about future prospects (signaling hypothesis), whereas if markets are not efficient, *pro forma* numbers mislead investors. For control variables, only INSTIT and MBR are negative and statistically significant. The coefficient on ANALYSTS is not significant, except in equation 2 where, as expected, it turns out negative. Our results are robust, since there were no multicollinearity biases (Table 5: matrix correlation in notes/appendix).

The limits of this research stem from the difficulty in distinguishing between opportunism and efficiency, and from the sample size, which is smaller in this study than in empirical American studies. These limits may create a statistical bias in the robustness of results, especially since regression estimates are highly sensitive to sample size. However, in terms of data representation, we have taken into account nearly all of the *pro forma* announcements in France over the period under study.

18. Therefore, by design, FE_{GAAP} is less noisy than the 'street' forecast error ($FE_{PROFORMA}$) measure since the *pro forma* forecasts provided by FactSet JCF exclude goodwill amortization expenses while the regular criterion for earnings metrics supplied by Compustat may exclude or include extraordinary items in specific cases. Furthermore, EPS forecasted by financial analysts are generally based on the EPS excluding extraordinary items.

Table 5. Correlation matrix (common samples).

	ANALYSTS	BIG4	CAR[0;2]	FE _{GAAP}	INSTIT	MBR	FE _{PROFORMA}	TECH
ANALYSTS	1							
BIG4	0.4617	1.0000						
CAR[0;2]	-0.1434	0.0530	1.0000					
FE _{GAAP}	-0.1417	-0.2752	-0.0822	1.0000				
INSTIT	-0.2664	-0.1627	-0.3939	0.2137	1.0000			
MBR	0.0290	-0.1833	-0.2093	0.8249	-0.0152	1.0000		
FE _{PROFORMA}	-0.0842	-0.1781	0.1170	-0.1624	0.4867	-0.2651	1.0000	
TECH	-0.2238	0.2802	0.0763	-0.1945	-0.1361	0.0098	-0.0943	1.0000

SUMMARY AND CONCLUSION

Non-GAAP financial measures, frequently called “pro forma” numbers, are performance measures created and disclosed by managers that are not calculated in accordance with GAAP (Generally Accepted Accounting Principles). Bowen et al. (2005) found that managers emphasize the metric (GAAP or pro forma) that best portrays firm performance. Elliott’s (2006) experimental evidence reveals that when press releases give more prominence to non-GAAP measures than GAAP measures, nonprofessional investors become more reliant on non-GAAP values, which consequently affects their judgments and decisions. This financial reporting research stream emphasizes that *pro forma* disclosures ultimately misinform capital market participants by disclosing financial indicators that do not comply with generally accepted accounting principles, mainly for the purpose of cosmetically improving the financial results of the company and making the firm more financially attractive and profitable for investors.

This empirical study is the first to focus on *pro forma* reporting in the French context, and provides evidence that French companies use “street” earnings in their annual press releases. However, these practices are proportionally less common in France than in the U. S., where most of the S&P 500 companies disclose their earnings on a *pro forma* basis through their annual earnings announcements.

Consequently, this work reveals several relevant trends. (1) Discretionary *pro forma* earnings are more informative than GAAP earnings metrics because they more closely reflect abnormal daily returns. These findings show that alternative definitions of profits are more useful and relevant than results computed in accordance with accounting principles in terms of assessing future security values. Indeed, GAAP earnings encompass extraordinary items or “non-recurring” expenses that are irrelevant to forecasts on future earnings. Attempts to corroborate efficiency (signaling) or inefficiency (opportunism) gave mixed results. (2) Forecast errors are biased in favor of non-GAAP earnings. (3) Approximately 5.4% of *pro forma* adopters have reported a loss

expressed on a non-GAAP basis, whereas only 9.30% of GAAP earnings figures actually resulted in a loss. (4) Approximately 89.4% of *pro forma* earnings announcers met or exceeded median analysts’ forecasts, whereas only about 18% of them met or beat analysts’ forecasts based on GAAP income numbers. (5) Finally, analyzing the magnitude of biased and unbiased forecast errors, we demonstrate that *pro forma* reporting is principally aimed at improving apparent positive earnings surprises so as to report similar surprises to those posted by firms reporting standard GAAP results. Conversely, announcing a negative *pro forma* earnings surprise enables firms to reduce their apparent forecast errors significantly, so that their reported performance would be similar to that shown by GAAP earnings reporters. *Pro forma* measures make earnings announcements difficult to interpret, and research should be extended to focus on the possible existence of *pro forma* reporting in semi-annual financial statements as well.

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