

*Accounting Informs Investors and Earnings Management is Rife:  
Two Questionable Beliefs*

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4 February, 2013

**Acknowledgement**

This short essay is based on a presentation at the panel discussion on “The Most Incorrect Beliefs in Accounting” at the American Accounting Association Meetings in 2012. The very helpful comments of Sudipta Basu are much appreciated, as is financial support from the University of Chicago, Booth School of Business.

## **Abstract**

This short essay is based on a presentation at the panel discussion on “The Most Incorrect Beliefs in Accounting” at the American Accounting Association Meetings in 2012. It addresses the inordinate amount of attention given in the literature to accounting’s role in providing new information for equity investors, and to allegedly rampant “earnings management.”

The tasks panel members were assigned were: (1) outline one or two of the most incorrect beliefs in accounting; (2) indicate who holds these beliefs; (3) indicate why we consider them “most wrong”; (4) describe what the right beliefs would be; (5) explain why they haven't been corrected; (6) indicate how things would improve after beliefs are corrected; and (7) indicate the payoffs to identifying and correcting wrong beliefs. For what they are worth, I'll provide some opinions on the first, third and fifth of these tasks. Out of ignorance, I'll pass on the others.

### **CORRECT AND INCORRECT BELIEFS**

At the outset it worth recalling that, in an important sense, all beliefs are incorrect. As Thomas Kuhn famously reminded us, all theories have anomalies, or inconsistencies that defy attempts to resolve. As a result, the beliefs that today are widely considered correct, or in some sense more correct than others, inevitably will change with the passage of time. Paradigm changes result in people thinking about the world in a completely different manner than previously, so today's correct beliefs can be tomorrow's castaways. In other words, no body of received knowledge is perfect, there is no such thing as an absolutely correct theory, and all beliefs are in some sense incomplete. That said, there do seem to be some things that are unusually amiss in the currently popular ways of thinking. To paraphrase George Orwell, all beliefs are incorrect, but some are more incorrect than others.

### **TWO CANDIDATES FOR THE MOST INCORRECT BELIEF**

Several outstanding candidates for this prestigious award come to mind. I debated at length with myself the relative merits of two in particular. Until the last moment, I had planned to nominate only the belief that the primary economic role of accounting is to provide investors with brand new

information. I call it the “informativeness fallacy,” the belief that the social value of accounting arises largely from its relation with revisions in equity prices, as evident for example in regressions of stock returns on earnings. It is closely related to the “fair value fallacy,” the belief that the social value of accounting is increasing in how accurately the financial statements incorporate the fair values of individual assets and liabilities.<sup>1</sup> I finally decided to accept the invitation to address two issues, and selected the apparently widespread belief among accounting researchers that “earnings management” is rife. That is to say, I also chose to fulminate against the earnings management literature, a body of literature that in my view is scandalous in more sense than one.

### **INFORMING EQUITY INVESTORS AND THE SOCIAL VALUE OF ACCOUNTING**

There are good reasons to expect that the primary economic role of accounting would not be to provide investors with brand new information. There are many competing information sources available to investors. As Ball and Shivakumar (2008, pp. 979-980) observe, the reason that accounting reports survive in competition with the myriad other sources of information is unlikely to be that the financial statements contain relatively large quantities of new information:

By its nature, accounting earnings is low frequency (quarterly), not discretionary (announced every quarter, independent of whether there is substantial new information to report), and primarily backward-looking. Other information, and hence revision in share price, is comparatively high frequency, frequently discretionary (released only when there is substantial information to report), and both forward-looking and backward-looking.

Consistent with this thesis, there is abundant evidence that accounting reports in fact do not to provide a relatively large proportion of the new information used by the equity market. One of the two principal conclusions drawn by Ball and Brown (1968, p. 176) was that “the annual income report does not rate highly as a timely medium.” Similar evidence is clear from a variety of studies published since (Lev, 1989). Ball and Shivakumar (2008, p. 976) conclude that quarterly earnings

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<sup>1</sup> This issue is debated in Barth, Beaver and Landsman, (2001) and Holthausen and Watts (2001).

announcements are associated with 1% - 2% of the total annual amount of information incorporated in stock prices and with approximately 0.25% of a year's abnormal trading volume

The fact that financial reporting does not provide a substantial amount of new information does not in any sense imply that it adds little to economic welfare, because financial reporting fulfills other economic functions. One such function is *confirmation*: the role of audited financial reporting in confirming, and hence, disciplining the more timely private information disclosures of managers (Gigler and Hemmer, 1998; Ball, 2001; Ball and Shivakumar, 2008; Ball, Jayaraman and Shivakumar, 2012). The confirmation hypothesis holds that managers can better commit to being truthful in their disclosure of forward-looking private information when they arrange for it to subsequently be confirmed by reporting the actual outcome more accurately and freer of their manipulation. Under this hypothesis, independently audited financial reporting enhances the credibility of managers' disclosures of private information, one implication being financial reporting and disclosure are complements.

The preceding discussion addresses the relation between financial reporting and all the available information in the equity market alone, focusing on what might be called the low share of the market for new information that one expects and observes financial reports garnering. It ignores other important uses of financial reporting in contracting (Jensen and Meckling, 1976; Watts, 1977; Watts and Zimmerman, 1986), including debt, compensation, supply and other contracts. Adding them to the equation reinforces the conclusion that the social value of accounting earnings does not reside in its relation with short term stock returns, because many of these contracts are settled only annually and in that context timeliness is an entirely different issue.

One cannot conclude from the evidence of low returns-earnings associations that financial reporting adds little to economic welfare, or that the system needs fixing, as Lev (1989) implies.

Such a conclusion would ignore other important and credible roles, including uses of accounting information in confirming and playing a complementary role to more timely information, and in contracting. As noted in Ball (2001, p. 136), “The low surprise content of earnings reports in U.S. stock markets—documented by Ball and Brown and many studies since—thus is consistent with the United States being almost universally viewed as possessing a high-quality system of public financial reporting and disclosure.”

In sum, both theory and evidence lead to the conclusion that the social value of accounting does not arise largely from its relation with revisions in equity prices, as evident for example in regressions of stock returns on earnings. In my view this is a minor part of the social value of accounting: a metaphorical “tip of the iceberg.”

Nevertheless, the belief that the social value of accounting arises largely from its relation with short term stock returns appears to be widespread. It also has long legs. One reason for its longevity is the comparatively low cost of accessing reliable stock price data, which has been the case since the Center for Research in Security Prices (CRSP) was established at the University of Chicago and completed the first machine-readable price file in 1964. Fortunately, databases that shed light on a wide range of uses of financial reporting now are becoming available, and the literature is broadening.

Another reason for this belief being so persistent is that, despite the clear conclusion in Ball and Brown (1968, p. 176) that earnings information is not timely, the subsequent literature employed short-window event studies to suggest the opposite.<sup>2</sup> These studies certainly demonstrate some surprise content of earnings when released, but their use of a short-window benchmark tends to exaggerate its relative magnitude (Ball and Shivakumar, 2008).

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<sup>2</sup> Bamber, Christensen and Gaver (2000, p. 111) carefully document how the literature misinterpreted Beaver’s (1968) results on short-window effects.

An intriguing reason for persistent belief that financial reporting provides substantial new information to the share market is that this belief appears to have become a major premise underlying sundry accounting rules issued by the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB), and underlying regulation of accounting by the Securities and Exchange Commission (SEC). This appears to be particularly the case with their “fair value” rules, Scholars have bemoaned for decades the seemingly low impact of research on standard setting, but one wonders whether the problem runs more in the other direction.

In my assessment, the longevity of this belief also is due in no small measure to the comparative difficulty in creating research designs that identify other contributions of accounting to social welfare. Stock price responses to earnings announcements are easy to demonstrate, but other roles of financial reporting are difficult to identify empirically. For example, the role of accounting in controlling fraud (e.g., in routinely counting firms’ assets to discourage and detect expropriation) is difficult to demonstrate in a within-regime study, particularly in a high quality regime where it is taken for granted. Similarly, financial reporting in a market economy plays an important role in alerting firms (including potential entrants) to what works and what does not.<sup>3</sup> To take another example, is not easy to measure the role of audited financial reporting in confirming, and hence disciplining, private information disclosures by managers. This role implies that the contribution of audited financial reporting to social welfare cannot be evaluated in terms of its informativeness on a stand-alone basis, which is comparatively easy to estimate in a returns-earnings design, but is a much more complex function of its effect on other information sources and hence the total information environment. Decision-makers of all types receive a portfolio of signals, so the marginal

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<sup>3</sup> Fama (1970) famously observed that stock prices in an efficient market provide accurate signals for resource allocation. This begs the question of how stock prices are formed. Over the long term, and assuming “clean surplus” accounting, earnings provide the only source of changes in value. This proposition is abundantly clear in the case of private firms, but even for listed firms accounting earnings provide the most primitive signals for resource allocation.

contribution of any one signal depends on its effect on the total supply of information. No wonder simple returns-earnings research designs have proliferated.

### **THE INCORRECT BELIEF THAT CURRENTLY WORRIES ME THE MOST**

There also appears to be a widely held belief among accounting researchers that “earnings management” is rife. A powerful cocktail of authors’ strong priors, strong ethical and moral views, limited knowledge of the determinants of accruals in the absence of manipulation, and willingness to ignore correlated omitted variables in order to report a result, seems to have fostered a research culture that tolerates grossly inadequate research designs and publishes blatantly false positives. In my opinion it does, anyway. *Of course* earnings management goes on. Agency costs are positive. People have been tried and convicted. I personally have testified in several high profile cases and some of the malfeasance that took place in them was disgusting. But whether the typical research paper in this dismally unscientific literature has come even remotely close to reliably documenting “earnings management” is another matter entirely.

Surely one must be skeptical of published research containing statistics that imply things such as:

- the majority of the variation in accruals is due to manipulation in the form of “discretionary” accruals (some estimates are as high as 80%),<sup>4</sup> when accruals are most of what accountants do (cash is comparatively easy to count) but allegedly most of the action is “discretionary”;
- manipulation occurs for every firm in every quarter (no observation sits exactly on the regression line);

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<sup>4</sup> Gerakos (2012, fn. 5)

- manipulation routinely occurs in enormous amounts (the enormous dollar magnitudes of allegedly “discretionary” accruals are disguised in the literature by expressing them as a proportion of total assets, but they are enormous nevertheless);
- the accruals in question generally refer to “working capital,” which embraces accounts such as inventories, receivables and payables that, in contrast to long-horizon accruals such as goodwill impairment charges and contingent loss provisioning, are comparatively easy to audit (for example, “discretionary” over-statement of inventory requires misrepresenting either the quantity on hand or its cost);
- manipulation of this manner and magnitude takes place in a way that academic researchers can identify but without it being detected by parties with substantially greater information and greater incentives to do so (internal auditors, external auditors, whistleblowers, boards, analysts, short sellers, trial lawyers, press, regulators).

How many researchers have sent a list of their most extreme “discretionary” accrual behavior to the firms’ auditors, to the press, to analysts, to boards or to regulators? If a researcher has reliable evidence of financial statement manipulation, is there not a moral obligation to inform the parties affected by it as well as those responsible for acting on it? Wouldn’t the researcher also gain much fame for uncovering egregious financial reporting behavior, as occurred in the 2005 options backdating scandal?<sup>5</sup> To me, the near total absence of such behavior is a litmus test of whether researchers really believe the numbers they report.

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<sup>5</sup> Lie (2005) documented an unusually large number of stock option grants to executives after declines and right before increases in their stock prices. He conjectured that at least part of this was due to retrospective backdating to the dates of low prices. *The Wall Street Journal* then investigated and publicized several companies. Lattman (2010) reports that the S.E.C. investigated over 100, resulting in 12 criminal sentences, one fugitive, many dismissals and about 150 financial restatements. Lie was awarded the American Accounting Association’s Notable Contribution to Accounting Literature Award in 2007. The award was notable also for the speed with which it was granted and for the fact that it is rarely granted to papers published in a journal not purely devoted to accounting.

One aspect of this literature that I personally find particularly galling is the frequency with which a paper's results can be explained equally well by what I refer to as a plausible *economic* null hypothesis. By that I mean the following. The generic structure of an "earnings management" story involves some sort of agency theory. The cost to managers (as agents) of manipulating reported numbers in their self interest is lower than the cost to shareholders (as principals) to detect and correct for the manipulation, and these relative costs together determine the equilibrium amount of "cooking the books." The economic null hypothesis therefore is the absence of agency costs, in which case manipulation is perfectly detected and managers obviously would have nothing to gain by it. In study after study, an explanation of the results that does not involve manipulation is at least equally plausible.

Why does this occur? One reason is our limited knowledge of the determinants of accounting accruals under the null hypothesis. What would accruals look like for firm  $i$  in period  $t$  absent any manipulation? A major limitation is that the standard models of "non-discretionary" working capital accruals are deterministic, whereas a major reason firms hold working capital is stochastic supply and demand (Gerakos and Kovrijnykh, 2010; Gerakos, 2012). This consequential mis-measurement by a deterministic model of what is "non-discretionary," and by inference what is "discretionary," is illustrated by the following example. Suppose a negative shock to sales occurs within one restocking cycle of the report date (say, in mid-December for a December 31 firm that takes 30 days to rebalance its inventory levels). Assume no accounting manipulation occurs. Under the work-horse Jones model, working capital in the absence of manipulation is proportional to sales, and hence a negative shock to sales would engender a proportional "non-discretionary" decrease in inventory. The actual effect on inventory in the absence of manipulation is *positive*: the firm has an unexpected amount of unsold inventory at year-end. Thus, behavior that in fact is not manipulative is classified as

an income-increasing “discretionary” accrual, even though no discretion has been exercised. Worse, the allegedly income-increasing “discretionary” accrual takes place in a year in which, other things equal, earnings (a) has fallen and (b) would have fallen by more if accountants had not *correctly* increased closing inventory. In other words, innocent behavior looks like “income smoothing” (Healy and Wahlen, 1999; Dechow and Skinner, 2000) or manipulating reported earnings to meet analyst expectations.

Another reason for the prevalence of this incorrect belief in the literature is purely terminological. In the inventory example above, what in fact is a cash flow decreasing event (the unexpected increase in inventory) is referred to in the literature as an income increasing accrual. This terminology implicitly assumes that cash flow, not earnings, is the primitive variable (Dechow, 1994), and hence over-identifies accounting “discretion.”

A final – and, in my view, appalling – reason for this belief to persist is that it is easy to generate a set of empirical results that are consistent with one’s stories about manipulation (as distinct from being caused by manipulation). In the inventory example above, all one requires is a story in which the “explanatory” variable is correlated with the variance of shocks to production or to demand, and hence with shocks to closing inventory. Put another way, it is easy to generate a correlated omitted variables problem.

Yet the belief that an extraordinary proportion of accounting accruals are “managed” or “discretionary” is particularly troublesome, because it implies that most of what accountants do in practice – and of what we teach in accounting classes – consists of opportunities to manipulate. How do people who believe this literature teach their accounting classes to novice students? Do they start with: “Listen up, class. Most of what I’m going to teach you this semester is how to cook the books. You will learn how to manipulate reported numbers to meet your objectives or those of managers

generally. Some of what you will learn about reporting to users is not discretionary, but most is.” If I thought that, I’d quit.

The good news is that I sense an increasing intolerance of referees and editors for shoddy work in this area, which in turn encourages better research designs. With luck, what might emerge is a better understanding of the properties of “non-discretionary” accruals, by which I mean the accruals one would expect to observe under the null hypothesis of zero agency costs. Aren’t they the accruals that we teach that firms *should* do?

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