Abstract:

Recent accounting scandals have led some to argue that US reporting is fundamentally flawed and that other systems might be preferable. However, the arguments are often based on anecdotes and conjecture. In this paper, my goal is to bring insights from empirical research to bear on the issue of the relative effectiveness of US reporting. I argue that research evidence on cross country differences in accounting suggests that US reporting compares well with other countries’ and that evidence on cross listing indicates that US accounting has a level of credibility not enjoyed by most other systems. Further, there is relatively little systematic evidence of deterioration in US accounting over time. Subject to the natural caveats with empirical research, the evidence suggests that US accounting has performed relatively well historically. While there are important lessons to be learned from experience with recent scandals, I argue that the empirical evidence supports the conclusion that changes should be incremental rather than wholesale. Further, the ongoing response to the scandals may actually strengthen the US system relative to other countries.

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Introduction

Recent accounting scandals have led some to argue that US reporting is fundamentally flawed and that other systems might be preferable. However, much of this discussion ignores the substantial body of empirical research that could provide insight on the relative effectiveness of the US financial reporting system. My goal in this paper is to bring the evidence from empirical research to bear on understanding the current state of international accounting development and its prospects for the future. In particular, I focus on the evidence related to the quality of accounting data produced under the US accounting system relative to that produced under other systems.1

My general conclusion is that, based on the weight of the extant empirical evidence, the US system has produced accounting data that compare favorably with those produced under other systems, and that the resulting transparency and credibility of capital markets has been at least on a par with the system of any other country. Related research on cross listing suggests that investors view the decision by non-US firms to list on US exchanges and, hence, subject themselves to US accounting and regulation as enhancing their credibility. While Enron raises questions about specific aspects of the US financial reporting system, I argue that there is little reason to believe any other accounting system would have been more effective in dealing with the issues and that, in fact, the ongoing response both in terms of legislative changes and penalties for those involved has the potential to actually enhance the long-term credibility of the US system.

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1 My goal is not to provide a comprehensive survey of the literature but to highlight a few representative recent papers that illustrate the basic results and provide discussion and references to the broader literature.
Research Literature

My focus is on large-sample empirical research using archival accounting and stock price data. As with any research approach, this one has strengths and weaknesses. An advantage of this approach is that it evaluates data that were actually reported by firms rather than speculating about the data that a given accounting system might report. For example, it is tempting to argue that a principles-based system that requires conformance with a “true and fair view” would result in better accounting than a detailed rules-based system because the principles-based system would constrain firms from engineering around bright-line rules. However, the extent to which such a standard actually constrains behavior (especially without considering the associated auditing and enforcement standards) is an empirical question. In addition, this approach permits inference based on a large sample of firms rather than relying on individual examples. While one can certainly find cases in which the US system has performed poorly, it is more difficult to argue that other systems are better or that the US system has deteriorated if one cannot find empirical evidence in large sample tests.

In terms of limitation, this approach is descriptive rather than normative. As a result, the goal is to describe differences across countries rather than to infer which is “best,” since that would require an explicit cataloging of winners and losers across systems and a weighting of their importance. Second, the data are historical, and much of the analysis pre-dates the Enron failure. However, as argued later, more recent papers include recent data and some studies have explicitly examined whether there has been a deterioration of quality over time. Third, by its very nature, this approach is limited to systems that have been implemented and for which data are available. Several papers in this conference suggest alternative accounting approaches that may be superior but have not yet been implemented in any country, and therefore cannot be examined empirically. Finally, this approach cannot separate the effects of accounting standards from other features of the reporting system, such as enforcement and attestation. However, it seems more useful to evaluate the system as a whole rather than to focus on one aspect like accounting standards in isolation.
I consider several primary streams of research: comparisons across countries; cross listing; and comparisons over time. Comparisons across countries provide direct insight into the effects of differences in reporting systems. Cross listing research, while indirect, provides evidence on how investors and non-US firms view the credibility of the US system. Finally, time series comparisons suggest whether the quality of reporting has deteriorated over time.

**Comparative Studies**

Most studies rely on categorizations of accounting systems, and then on comparisons within and between accounting systems. The most typical dichotomy is between the common law and code law countries, with some studies considering Asia separately because of additional cultural differences. While the categorization is crude (and there is an extensive literature considering other potential characterizations) the categories are at least useful for structuring thinking about potential differences.

Because financial accounting is intended primarily to convey information to the providers of capital, development of accounting systems is a function of the primary sources of capital. In this view, common law economies (with the US being a primary example) are distinguished by their historic reliance on diffuse equity ownership as a source of capital, facilitating separation of ownership and control. That system places greater information demands on companies for two reasons. First, individual investors are too small to be able to justify direct communication and customized information. Similarly, investors are typically diversified so even if they could communicate directly, it would be costly for them to deal with individual firms. As a result, financial accounting has developed as a primary communication mechanism to provide relatively standardized, comparable data across firms. Given the importance of individual investors to the capital markets, substantial resources have been devoted to developing the accounting system and associated infrastructure. In the US, probably more than any other country, substantial
resources are expended on developing comprehensive accounting standards, auditing financial statements, enforcing regulation through the SEC and litigating violations.

On the other hand, the code law countries have not traditionally relied as heavily on diffuse equity ownership. Rather, ownership often includes large blockholders (sometimes other corporations or families), bank financing and in some cases greater governmental involvement. In addition, the stakeholder model is broader and includes groups such as labor unions. As a consequence, communication with diffuse equity owners and minority investor protection has not received as much emphasis. Fewer resources tend to be devoted to accounting, resulting in less comprehensive accounting standards, fewer auditors, less enforcement and less potential for shareholder litigation. In addition, financial and tax reporting have traditionally been more closely aligned because financial reporting is not deemed sufficiently important to justify the cost of maintaining separate records.

The overall conclusion from the comparative research is that common law countries in general, and the US in particular, produce accounting data that rank high in terms of quality and usefulness for valuation relative to other countries. This conclusion is based on research using several approaches. First, some researchers have examined the correlation between accounting information and stock price, based on the notion that, if accounting data are highly correlated with share prices and movements in share prices, then the data better capture economic reality. For example, Ball, Kothari and Robin (2000) examine the relation between annual earnings and returns for samples of firms from common law countries (US, UK, Canada and Australia) and code law countries (France, Germany and Japan) to test the timeliness of reported earnings. Overall, they find that common law countries tend to report accounting data that are more highly correlated with returns, suggesting that their earnings are a timelier source of information. Further, among the common law countries, the US and Canada rank at the top.

Ball et al. (2000) also investigate the source of the added timeliness by comparing the relation between accounting information and stock price for good and bad news. They argue that managers have natural incentives to disclose good news voluntarily, but that differences in accounting requirements, litigation exposure and enforcement affect managers’ willingness to disclose bad news. In particular, their results indicate that the primary difference between common and code law countries is in the timely recognition of bad news, with losses recognized in a more timely manner in common law countries. Again, the US ranks near the top of the common law countries in terms of early recognition of bad news, probably reflecting the effects of litigation exposure and accounting standards on issues like asset impairment that encourage timely loss recognition.

Their results on cash flows are also interesting. While it may seem tempting to argue that cash flows are more informative than earnings because of the management discretion inherent in accruals, their paper also analyzes the issue of the informativeness of operating cash flows across countries. The basic result is that, across all countries, accounting earnings are significantly more informative to valuation than cash flows. More importantly, the informativeness added by accruals is generally greater in common law countries than in other countries. Again, the US ranks near the top suggesting that, despite concerns about the discretion inherent in accruals, managers generally make assumptions that enhance the informativeness of the resulting accounting data.

The basic message from the Ball et al. (2000) paper is echoed in Leuz, Nanda and Wysocki (2003) using a different approach. Leuz et al. (2003) focus more directly on differences in the extent of earnings management across countries. The tendency of managers to use their discretion to manage earnings to, for example, smooth earnings is a concern everywhere including the US. For example, former Securities and Exchange Commission chairman, Arthur Levitt, noted the use of “cookie jar reserves” to smooth

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earnings by shifting income from good years to bad years, thereby reducing the informativeness of earnings.

Leuz et al. (2003) compare the tendency to manage earnings across thirty-one countries using a variety of measures of earnings management and discretion. Supporting the Ball et al (2000) conclusions, Leuz et al. (2003) find that, despite (or perhaps because of) SEC concerns about earnings management, US firms consistently rank near the bottom (least earnings management) across a range of measures. It is instructive to consider the specific measures they use. First, they examine the variability of operating income relative to the variability of cash flows. The reasoning behind this measure is that, if managers use discretionary accruals to smooth variability in reported income, then operating income will be smoother than cash flows. Closely related, they consider the correlation between changes in accruals and changes in cash flows, arguing that if managers use their discretion to manage earnings they will use positive accruals to offset poor cash flow results. Third, they examine the magnitude of overall accruals by comparing the absolute value of accruals to cash from operations. The advantage of this measure is that it does not rely on predictions about the likely direction of discretionary accruals but, rather, measures the overall quantity. Finally, they consider the frequency of small profits relative to small losses. The notion here is that, in cases in which “unmanaged” earnings would have resulted in a small loss, firms engaging in earnings management will use their discretion to find a way to report a small profit.

For each measure considered, Leuz et al. (2003) find that the US ranks near the bottom in terms of earnings management. Further, they create an aggregate measure of earnings quality by combining the scores on their four earnings management measures. On that basis, the results are particularly striking; of 31 countries for which data are available, the US has less evidence of earnings management than any other country. That is not to say there is no evidence of earnings management in the US, but that the evidence is less pronounced in the US than in any other major economy.
Overall, the results from these papers and others in the comparative literature suggest that the US generally ranks high relative to other countries based on empirical measures of accounting quality.

**Cross Listing**

Although indirect, related research comes from the literature on the benefits of cross listing. Cross listing on US exchanges is interesting because it entails added regulatory requirements in terms of filings with the SEC and reconciliation of net income and shareholders’ equity to US GAAP. While added requirements might be expected to reduce the attraction of US listing, since other markets typically do not impose such strict requirements, the US has been successful in attracting listings.

Coffee (2000) surveys the cross listing literature and argues that the evidence is most consistent with the notion that cross listing serves a bonding role, constraining firms to more transparent reporting.\(^4\) As evidence, he cites Miller (1999) who finds that firms that cross listed on US markets experienced an increase in share price around the listing announcement.\(^5\) Even more striking is the finding that the reaction is stronger the more fully a firm commits to the US regulatory structure. For example, firms that listed on the NYSE or NASDAQ (and hence were required to file with the SEC and reconcile net income and shareholders’ equity to US GAAP) enjoyed a larger stock price response than those that opted to trade on the over-the-counter market, which until recently did not require reconciliation to US GAAP. Firms with private placements under Rule 144A and trading on PORTAL (which have the fewest regulatory requirements) did not experience positive returns. As a consequence, it appears that investors give greater credibility to firms that choose to list on the US market.

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Consistent with that conclusion, Lang, Raedy and Yetman (2003) examine the types of firms that are attracted to US listing. Their evidence indicates that firms choosing to list on US exchanges tend to be those with the most transparent reporting even in their home markets, suggesting that the US listing requirements may serve to screen out firms that are less willing to be forthcoming with the market. That conclusion does not hold for firms that cross list on non-US exchanges or on the US over-the-counter market where the regulatory environment is less demanding. Further, their results suggest two related explanations for the findings. First, firms that self select into cross listing tend to be those that have a history of transparency and therefore view the requirements associated with US listing as less onerous. Second, firms improve the quality of even their home financial statements following cross listing.

Taken with the results in the previous section on the association between accounting information and stock prices, these results suggest that investors and managers view the US as a particularly demanding regulatory environment in which to list. Further, the results suggest that they benefit from the increased transparency.

**Comparisons over Time**

Of course, the preceding literature is based on data over long sample periods. It is possible that US financial reporting was once effective, but has deteriorated over time. While that possibility cannot be dismissed entirely, it seems unlikely for several reasons. First, the literature comparing evidence of earnings quality over time is mixed at best. Papers like Landsman and Maydew (2003), for example, examine the stock market reaction to earnings announcements over the last thirty years for evidence that earnings

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have become less informative or timely. They find little general evidence of deterioration in the informativeness of earnings announcements over time. If anything, their evidence indicates that the stock market reaction to earnings announcements has increased over time, suggesting that accounting earnings remain a timely and useful source of information.

In an international setting, Land and Lang (2002) compare earnings management across countries over time. In particular, they focus on the correlation between cash flows and accruals to examine cross-country differences in earnings management and whether earnings smoothing has become more prevalent. Their evidence suggests that the level of US earnings smoothing has remained approximately constant over time. While there is evidence of a reduction in earnings management in other countries, they find that earnings smoothing in the US remains modest relative to other countries, a finding consistent with the results in Leuz et al. (2003).

While the preceding provides little evidence of a systematic shift in the quality of US financial reporting over time, it is still possible that the deterioration has occurred so suddenly that it has gone undetected in tests that focus on longer time period. However, that possibility seems unlikely for several reasons. First, it is not clear that there have been major changes in US accounting in the last few years that would cause a sudden drop in the quality of reporting. Most explanations typically associated with the alleged drop in reporting quality are more likely to have developed gradually and should therefore be reflected in the studies which examine changes over time. For example, while it is true the volume and detail of accounting standards have increased, that has been more of a gradual trend and should be reflected over longer periods. Similarly,

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while it is alleged that auditors have become more reliant on non-audit revenues, that too has been a gradual trend so its effects should be reflected in the data. As a result, it is difficult to think of significant changes that would predict a dramatic shift in accounting quality.

Discussion

Given the preceding, a natural question is why, if financial reporting works well, do a disproportionate share of financial reporting disasters appear to occur in the US. I believe there are several answers. First, paradoxically, the US may attract the very types of firms that are more likely to fail. In particular, industries with high natural levels of risk and information asymmetry between managers and investors are more likely to be forced to seek out markets with the most credibility to raise capital. For example, it is striking that startup high technology firms typically choose the US markets to list. While it is not possible to be certain, one potential explanation is that those firms are attracted to the US markets because they are informationally better developed and investors are therefore likely to be most comfortable with their credibility. To the extent that the US market attracts riskier firms, there will naturally be more failures. However, that is not to say that the failures reflect a poor US reporting environment.

Also, a natural consequence of better monitoring is that violations are detected earlier. As a result, the preponderance of scandals in the US market may reflect the attention paid to attestation and compliance. For example, The Economist (February 8, 2003), quotes Liesel Knorr, Secretary-General of the German Accounting Standards Committee who discusses German accounting and says, “there is quite a bit of small-time cheating and there might be big cheating as well.” They go on to add, “because nobody checks, she


says, you cannot tell.” Closely related, the US lacks the kind of long-term relationship investing one sees in other countries. As a result, firms with large losses are allowed to fail and the financial reporting is designed to report the losses immediately rather than allowing them to be smoothed out over time. Even a disaster like Enron might have been averted (although at potentially very high cost) had relationship investors been present who were willing to continue to provide capital and had the financial reporting system allowed Enron to continue to hide its losses.

Conclusions

Clearly recent scandals raise important issues with respect to US financial reporting. My goal in this paper is simply to caution against overreaction. Based on the existing research evidence, it seems difficult to make a compelling case that US reporting is fundamentally flawed. Subject to its inherent limitations, the existing empirical research evidence suggests that the US financial reporting system has performed well relative to other systems. Further, despite claims to the contrary, there is not clear evidence that the quality of US financial reporting has declined significantly over time.

That having been said, recent scandals do clearly indicate important areas of potential improvement. For example, Enron highlights difficult issues related to special purpose entities and the potential for auditor conflicts of interest created by demand for non-auditing services. However, the general track record of US financial reporting suggests that a response that focuses on specific issues rather than fundamental changes may be merited. Overall, there is little evidence that any other existing system would give a better result.

How will the recent scandals affect the credibility of US reporting going forward? While it is too early to judge definitively, it is certainly possible that the scandals may have a positive long-term effect. In particular, the initial response to the issues raised by Enron
has been fairly dramatic. Certainly the collapse of Enron’s auditor, indictment of key 
executives and recent legislative action suggest that the issues have been taken quite 
seriously. Even though, as noted earlier, other countries face similar issues, the 
international response has been muted relative to the US. Assuming that the momentum 
continues, including significant penalties against individuals in the case, it seems 
plausible that the long-term credibility of the system may even be enhanced in the 
aftermath of Enron.

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