



AMERICAN ACCOUNTING ASSOCIATION

5717 Bessie Drive • Sarasota, FL 34233-2399 • Phone: (941) 921-7747 • Fax (941) 923-4093
Email: Office@aaahq.org • <http://AAAhq.org>

Financial Accounting and Reporting Section of the American Accounting Association

Financial Reporting Policy Committee

File Reference No. 1820-100

Response to the Exposure Draft on Revenue Recognition (Topic 605)¹

Daniel Bens; Mark T. Bradshaw (Chair); Carolyn Callahan; Elizabeth Gordon; Bob Laux; Sarah McVay; Gregory Miller; Ray Pfeiffer (Principal Co-author); Marlene Plumlee; Catherine Shakespeare; Phillip Stocken (Principal Co-author); Wayne Thomas (Principal Co-author); Franco Wong

INTRODUCTION

The Financial Reporting Policy Committee (“Committee”) of the Financial Accounting and Reporting Section of the American Accounting Association (“AAA”) is charged with responding to discussion papers and exposure drafts related to financial accounting and reporting issues.² In this document, the Committee is responding to the Exposure Draft (“ED”) on *Revenue from Contracts with Customers* issued jointly by the Financial Accounting Standards Board and the International Accounting Standards Board (“Boards”).

Given that there are more than 100 revenue recognition policies spread across different pronouncements (e.g., APB Opinions, FASB Statements, AICPA SOPs, EITFs, SEC SABs,

¹ This comment letter was developed by the members of the Financial Reporting Policy Committee of the Financial Accounting and Reporting Section of the American Accounting Association and does not represent an official position of the American Accounting Association.

² The Committee is independent of the Financial Accounting Standards Committee (FASC) of the American Accounting Association.

etc.), the Committee understands the Boards' desire to provide a single model for revenue recognition. In addition, we recognize that the joint proposal allows further convergence of U.S. and international accounting standards. Below we highlight primary reactions to the Boards' Exposure Draft on revenue recognition.

OVERALL EVALUATION

In general, the Committee believes that the ED offers guidance that allows entities to report useful information about the amount, timing, and uncertainty of revenue and cash flows from its contracts with customers. We feel that the proposed standard will eliminate some inconsistencies in revenue recognition policies and provide clear conceptual guidance as new types of business models arise. In light of the long and continuing stream of research in accounting that addresses revenue recognition and the related disclosure of a firm's activities, we would like to highlight insights that the extant literature offers with respect to three key issues addressed in the ED: representational faithfulness, estimation and measurement, and disclosure.

First, we consider the extent to which the ED is likely to influence the perceived usefulness of information about revenue in industries that currently use specialized revenue recognition practices. While we understand the perspective that existing GAAP contain too many industry specific revenue recognition rules, we believe that the academic literature provides support for the value to stakeholders of specialized accounting practices. Thus, there may be costs to uniformity that might exceed the expected benefits for stakeholders in such industries.

Second, we discuss the issues surrounding the measurement and estimation of revenue. We recognize that the proposed standard will increase the use of estimates in the recognition of

revenue. This is consistent with the Boards' decisions in other areas to rely more on estimates (e.g., fair value). We view the heightened use of estimates as potentially enhancing the usefulness of firm disclosure. In the absence of additional disclosure, however, we remain concerned about the potential loss of information relative to that which entities currently report.

Third, we outline the expected consequence for capital market participants of expanding the disclosure of entities' revenue generating activities and contracts with customers. While we support the requirement that entities provide information to help users better understand their revenues and cash flows, we are concerned about the incentives of entities to self-servingly provide the information outlined in the ED. To improve the probability that information in disclosure is comparable and consistent, we suggest the Boards offer more comprehensive illustrations of compliance with the requirements of the ED.

The remainder of this letter proceeds as follows: The next section discusses the representational faithfulness with which entities recognize revenue if the ED has the unintended consequence that it causes entities to determine revenue in a fashion that corresponds poorly with their underlying economic circumstances. Thereafter, the remaining two sections answer the ED's questions concerning revenue measurement and the disclosure of entities' revenue generating activities by highlighting the insights raised in the extant academic research that addresses these issues.

REPRESENTATIONAL FAITHFULNESS

Academic work in the area of 'positive accounting theory' offers insight into the practice of accounting using theories and evidence from the economics literature (see Watts and Zimmerman 1986). From this perspective, one purpose of financial reporting is to produce

reports of performance and financial position that can be used in contracts and other relationships between the firm and its stakeholders. For example, accounting numbers are often used explicitly in compensation and debt contracts for purposes of reducing agency conflicts by providing incentives to managers of reporting entities.

To the extent that financial reporting has historically served this purpose in the economy, one can argue that the constellation of existing accounting methods used by firms represent an equilibrium outcome that is cost/benefit maximizing for the firms' stakeholders (Watts 1974, 1977; Watts and Zimmerman 1990).³

In the particular instance of revenue recognition practices, the December 2008 Discussion Paper noted in the section titled "Problems in U.S. GAAP" that U.S. GAAP contained more than 100 standards addressing revenue recognition issues. While the Discussion Paper frames this as a problem with U.S. GAAP, the diversity of revenue recognition practices may instead reflect the natural development in various industries of practices that serve the needs of stakeholders well despite their lack of uniformity of approach.

This point of view is reflected in some of the comment letters written by representatives of stakeholders of construction companies, such as letter number 20 to the ED by Michael Greer, Vice-President of Surety and Fidelity of Penn National Insurance. In his letter, he claims that if the companies for whom Penn National Insurance provides surety bonds were to prepare their financial statements under the provisions of the exposure draft, he would demand that in addition those companies prepare a separate set of statements prepared under the percentage of completion method. Further, he argues: "There needs to be recognition that there are major

³ This point was made together with some useful examples and observations in comment letter number 135 to the Discussion Paper, "Preliminary Views on Revenue Recognition in Contracts with Customers" issued by the FASB and the IASB (reference number 1660-100) — authored by the AAA Financial Accounting Standards Committee 2008-2009.

differences from one industry to the next. It does not make sense for every industry to have to be the same.”

Over many years, specific revenue recognition approaches have developed quite differently in many different industries. The construction industry and the percentage of completion method are the most frequently cited industry-specific practices that will be significantly affected by the ED. However, the software, telecommunications, agriculture, mining, forestry, and other industries also have specialized revenue recognition approaches. A similar question applies to these industries and their transactions and contracts: are the benefits to moving to a unified revenue recognition approach sufficient to overcome the costs to stakeholders of abandoning accounting conventions that appear to have served the needs of stakeholders in those firms?

Hail, Leuz, and Wysocki (2010) analyze the prospects for comparable financial reports from uniform standards across countries. In their work, they highlight the importance of the role of managers’ reporting incentives, arguing that because of the discretion afforded managers within accounting rules, manager incentives to report neutrally, or to meet investors’ expectations for growth or smoothness of earnings, for example, are important determinants of firms’ financial reporting choices. They note that given this fact, accounting standards have a limited role in determining the comparability of financial reports. Herrmann, Inoue, and Thomas (1996) provide empirical evidence on this point. In their study of the comparability of Japanese company financial statements, they find greater comparability between pairs of Japanese companies when one uses Japanese GAAP and the other uses U.S. GAAP than between Japanese and U.S. companies when both use U.S. GAAP. In other words, country of origin provides

reporting incentives that appear to trump accounting standards as a means of determining financial reporting outcomes.

By extension, this suggests that if the ED compels firms to depart from extant revenue recognition practices that were perceived by stakeholders to be optimal and if managements' reporting incentives and investor demands for information do not change as a result of the ED, then firms will likely undertake other actions (transaction structuring, voluntary disclosure of pro forma revenues under extant rules, etc.) to try to meet their objectives.

The academic literature provides evidence of such economic consequences of changes in accounting standards in several contexts. For example, Imhoff and Thomas (1988) document a shift by companies from capital to operating leases in the wake of the adoption of Statement of Financial Accounting Standards No. 13. Hall and Murphy (2003), Murphy (2003), and Carter and Lynch (2003) illustrate the role that accounting treatment of stock options played in entities' use of stock options for employee compensation—in particular, the 1998 accounting change governing repricing of options. Mittelstaedt, Nichols, and Regier (1995) find evidence consistent with entities reducing retiree health care plan benefits in the wake of the adoption of Statement of Financial Accounting Standards No. 106. Of course, it is important to note that reasonable people can debate whether such economic consequences reflected economically rational or merely cosmetic decisions by the management of firms. The tendency to restructure transactions to achieve financial reporting objectives has many recent examples, such as banks restructuring of commercial paper in response to FIN46R, which triggered additional regulation by the FASB (see Bens and Monahan 2008). Thus, to the extent that the ED induces entities to undertake actions to circumvent or compensate for the effects of new revenue recognition guidance, this response, on balance, could be costly to entities and their stakeholders.

RESPONSE TO ENUMERATED QUESTIONS

Revenue Measurement and Estimation

This section focuses specifically on the measurement attributes of the proposed standard. In its list of questions for respondents, the ED identifies four questions under the “Measurement of Revenues” heading (Questions 4-7). In addition, this section also addresses Question 15 related to recognition of revenue for warranties. To the extent applicable, we address these questions based on the academic research available.

Question 4: The Boards propose that if the amount of consideration is variable, an entity should recognize revenue from satisfying a performance obligation only if the transaction price can be reasonably estimated. Paragraph 38 proposes criteria that an entity should meet to be able to reasonably estimate the transaction price. Do you agree that an entity should recognize revenue on the basis of an estimated transaction price? If so, do you agree with the proposed criteria in paragraph 38? If not, what approach do you suggest for recognizing revenue when the transaction price is variable and why?

We agree with the principle that revenue can be recognized based on the estimated transaction price and with the criteria listed in paragraph 38. Financial statements are filled with estimation and we see the use of estimates in the proposed standard consistent with the use of estimates in many other contexts. One way that the academic literature seeks to understand the impact of estimates on the usefulness of accounting information is to assess the ability of current estimates to help predict future performance. In fact, this is the stated objective of the new standards to “report useful information to users of its financial statements about the amount, timing, and uncertainty of revenue and cash flows arising from a contract with a customer.” Prior research demonstrates the usefulness of estimates by examining the ability of accrual-based

earnings (i.e., estimate-based earnings) versus cash flows (non-estimate-based earnings) to predict future performance. The extant literature related to the ability of current amounts to predict future performance is far too extensive to list here. Broadly, the literature concludes that earnings are superior predictors of future performance (Lorek and Willinger 1996; Barth, Cram and Nelson 2001; Kim and Kross 2005). Research also demonstrates that accruals help explain equity values (Dechow 1994; Barth, Beaver, Hand and Landsman 2005). Thus, the academic literature supports the usefulness of estimates for recognizing revenues.

However, as a point of caution, we note that while estimation often provides useful information for predicting future performance, it is clear throughout the literature that estimation allows managerial manipulation of reported performance. This manipulation might reduce the usefulness of estimates, sometimes to the extent that they hamper the predictability of future performance. Some accruals are not greatly affected by managerial estimates (e.g., accounts payable). Other accruals are highly subject to managerial discretion. Lev, Li, and Sougiannis (2009) disaggregate earnings into cash and two accrual components: working capital accruals and other accrual estimates. The two accrual components are intended to disaggregate total accruals into those that provide different degrees of managerial discretion, with the other accruals component providing more discretion. Lev, *et al.* (2009) do not find evidence that other accruals improve the prediction of future cash flows or future earnings. Their conclusion is that their “findings cast sufficient doubt on the usefulness of accounting estimates to focus researchers and regulators’ attention on the ways to improve their reliability.” Because the proposed standard *increases* the degree of estimation in recognizing revenue, we can see many ways that manipulative reporting behavior will increase.

As one example of increased estimation in recognized revenue, consider the impact of bonus incentives on the contract price. Under current practice, a bonus offered for, say, timely completion of the contract typically would not be recognized as revenue until the project is substantially complete. The proposed standard would require companies to accelerate recognition of revenue by including a probability-weighted amount of the bonus in the transaction price to be allocated across performance obligations. This estimation procedure allows earlier recognition of revenue (or more aggressive accounting). Improper financial reporting leading to accounting restatements are most often associated with aggressive revenue recognition practices (Feroz, Park and Pastena 1991; Dechow, Sloan, and Sweeney 1996; Dechow and Schrand 2004; Palmrose and Scholz 2004). Zhang (2005) investigates firms' flexibility in adopting SOP 91-1 and finds that early revenue recognition makes reported revenue less reliable and less predictable. Similarly, Forester (2008) shows that more aggressive revenue recognition prior to SAB 101 relates to greater earnings management and less informative earnings. Because of the uncertainty surrounding estimated amounts (both intentional and unintentional errors), we suggest that the Boards consider carefully that as estimation increases, additional disclosures are needed.

***Question 5:** Paragraph 43 proposes that the transaction price should reflect the customer's credit risk if its effects on the transaction price can be reasonably estimated. Do you agree that the customer's credit risk should affect how much revenue an entity recognizes when it satisfies a performance obligation rather than whether the entity recognizes revenue? If not, why?*

We agree that a customer's credit risk should be reflected in the company's current performance. However, we do not necessarily agree that credit risk should be identified through a reduction in the recognized revenue, as opposed to being reported as a separate operating cost.

The proposed standard seems to differ from current practice when the full amount of revenue is recognized and a corresponding provision for possible bad debts is recorded as an expense. Our reason for concern lies in the potential loss of information to financial statements users that would arise in the absence of adequate disclosure of the underlying estimates. Reporting the net amount of revenue based on probability-weighted collectability fails to consider that investors and creditors derive information about the firm's business strategy and credit control policies by observing total revenues and the corresponding estimated bad debt expense. Furthermore, research provides large sample evidence that managers sometimes overstate their provisions for bad debts in the current period to create "cookie jar" reserves for future periods (Jackson and Liu 2010). This same type of reserve accounting can occur under the proposed standard with deferred revenue, but it will likely be more difficult to detect by recording the net amount of revenue.

Question 6: Paragraphs 44 and 45 propose that an entity should adjust the amount of promised consideration to reflect the time value of money if the contract includes a material financing component (whether explicit or implicit). Do you agree? If not, why?

We agree that the value of future cash inflows from the customer should be discounted in determining the transaction price to allocate. Using concepts derived from the dividend discount model (Williams 1938), academics in accounting and finance have long agreed that an asset's (or project's) value equals the discounted future cash flows derived from that asset (or project). We further agree that the discount rate should be the appropriate rate of a financing arrangement between the firm and the customer (and not the risk-free rate or contract rate). We view the decision to recognize the consideration based on discounted cash flows to be consistent with many other changes in accounting standards intended to reflect underlying fair values.

Question 7: *Paragraph 50 proposes that an entity should allocate the transaction price to all separate performance obligations in a contract in proportion to the standalone selling price (estimated if necessary) of the good or service underlying each of those performance obligations. Do you agree? If not, when and why would that approach not be appropriate, and how should the transaction price be allocated in such cases?*

We agree. However, we have some concern with the Boards' decision to exclude a hierarchy for determining the standalone selling prices. In many instances, standalone selling prices are directly observable because a market will exist for separate goods. In this case, standalone selling prices are verifiable and subject to little managerial discretion. In the case where standalone selling prices are estimated by management, substantial discretion is likely to be required, and investors and creditors should be made aware that allocated amounts are difficult to verify. Song, Thomas, and Yi (2010) examine Level 1, Level 2, and Level 3 reporting of fair values as required under SFAS 157. These levels prioritize the source of information used in fair value measurements, with Level 1 being the most verifiable (observed prices) and Level 3 being the least verifiable (management-generated estimates). They find that investors place more reliance on reported Level 1 fair values and less on Level 3. Furthermore, a firm's corporate governance mechanisms strongly impact the reliance investors place on Level 3 fair values. As governance mechanisms weaken, investors place less reliance on Level 3 management-generated estimates. We believe these same distinctions would be important for measurements used to allocate the transaction price across performance obligations. The Boards may wish to reconsider their decision not to include a hierarchy and the disclosure thereof.

Question 15: *The Boards propose that an entity should distinguish between the following types of product warranties: (a) a warranty that provides a customer with coverage for latent defects in the product. This does not give rise to a performance obligation but requires an evaluation of*

whether the entity has satisfied its performance obligation to transfer the product specified in the contract. (b) a warranty that provides a customer with coverage for faults that arise after the product is transferred to the customer. This gives rise to a performance obligation in addition to the performance obligation to transfer the product specified in the contract. Do you agree with the proposed distinction between the types of product warranties? Do you agree with the proposed accounting for each type of product warranty? If not, how do you think an entity should account for product warranties and why?

We agree that warranties that provide a customer with coverage for faults that arise after the product is transferred to the customer give rise to a performance obligation in addition to the performance obligation to transfer the product specified in the contract. Revenues from these warranties should be deferred. However, we have some concerns about the accounting for warranties related to latent defects. Under the proposed standard, these warranties are considered part of the contract price. As a result, the portion of the contract price assigned to the warranty would result in deferred revenue throughout the warranty period. This could be an important departure from current practice which requires accrual of estimated warranty costs. Cohen, Darrough, Huang, and Zach (2010) find that estimated warranty cost information contains important information about firms' future performance. To the extent that estimated warranty costs are no longer separately recognized and instead deferred revenue is reported, information may be lost. In addition, Cohen, *et al.* (2010) show that managers take advantage of the estimate-nature of warranties and use them as a tool to manage earnings. However, the stock market recognizes this behavior and appropriately adjusts equity prices. Because this same underlying estimation exists under the proposed standard (although with implementation applied to deferred revenue), we believe that the possibility of earnings management remains but that it may be more difficult for investors to detect this behavior when estimated warranty costs are not separately reported.

In light of the large sample evidence that investors find information about estimated warranty costs to be useful, we believe that entities should continue to provide information about their warranty costs. Further, given the vagueness of the examples in the ED illustrating implementation of the proposed accounting for product warranties, we feel that the implementation guidance should be expanded.

Disclosure

To help users better understand an entity's revenue generating activities, the ED requires the entity to disclose information about its contracts with its customers and significant judgments exercised accounting for these contracts (paragraph 69). The Boards wish to assess whether complying with the ED is likely to provide useful information about the amount, timing, and uncertainty of revenue and cash flows from an entity's contracts with its customers. They pose three questions under the "Disclosure" heading (Questions 10-12). This section addresses these questions and highlights the relevant academic research.

***Question 10:** The objective of the Boards' proposed disclosure requirements is to help users of financial statements understand the amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Do you think the proposed disclosure requirements will meet that objective? If not, why?*

A key feature of the requirements outlined in the exposure draft relative to the extant disclosure requirements is that entities will be required to provide more extensive disclosure on their contracts with customers. The entity is required to disaggregate revenue in a manner that reflects its exposure to economic risk factors, reconcile changes in contract balances, and provide information about its performance obligations and obligations that are onerous (paragraphs 73-

80). For matters that require the entity to exercise judgment, the entity is required to disclose the timing of the satisfaction of performance obligations and the manner in which it determined the transaction price and allocated it to its performance obligations (paragraphs 81-83).

We believe the focus on customer contracts and the disclosure of these contracts will provide more useful information. The academic literature finds strong support for the expanded disclosure of firm revenue generating activities. For instance, Davis (2002) finds that revenue announcements are an important source of information to investors and provide information incremental to that contained in earnings announcements. Similarly, Lipe (1986) and Trueman, *et al.* (2000) find that the decomposition of net income into its components is significantly associated with stock prices. Moreover, Trueman, *et al.* (2000) note that measures of firms' economic activity provide useful information to investors over and above net income. In a related fashion, Bushee, *et al.* (2003) establish that open conference calls, which give users an opportunity to gather information about a firm's activities that augments that in the financial statements are useful to investors, and in particular, small investors.

Although capital market participants are expected to find information about contracts with customers to be useful, the requirements outlined in the ED call for the provision of information that some firms will consider to be proprietary. There is evidence suggesting that firms are strategic in the information they choose to reveal, and auditors' tolerance of firm misreporting is a function of engagement risk to which they are exposed (e.g., Hackenbrack and Nelson 1996).

To reduce information overload, entities are likely to summarize the information they provide. Importantly, in the absence of detailed implementation guidance in IG92 of the ED, it seems likely that firms might reveal information in a self-serving fashion, thereby reducing its

usefulness. Thus, we propose the Boards extend the guidance in the *Implementation Guidance and Illustration* Section.

Further, we suggest that entities should be required to outline the criteria used for disclosing information about contracts with customers. This argument is grounded in the findings of Trotman and Zimmer (1986). They provide evidence that users of financial statements do not consider the presence of alternative methods to be problematic provided firms fully disclose their recognition procedures so that users can adjust the financial statements to the extent they see fit. Accordingly, we expect that disclosing these criteria would allow users to assess the consistency of entities' disclosure over time and facilitate the comparison among entities.

Question 11: *The Boards propose that an entity should disclose the amount of its remaining performance obligations and the expected timing of their satisfaction for contracts with an original duration expected to exceed one year. Do you agree with that proposed disclosure requirement? If not, what, if any, information do you think an entity should disclose about its remaining performance obligations?*

To inform capital market participants about entities' performance obligations and the expected timing of their satisfaction, the ED expands the information entities are required to provide in various ways. Most importantly, the ED requires a reconciliation of opening and closing contract asset and liability balances to the amounts presented in the statement of financial position (paragraphs 75 and 76). It also requires an entity to outline its performance obligations (paragraph 77) and to indicate the periods in which these obligations are expected to be satisfied and hence the period over which the transaction amount is expected to be allocated (paragraph 78).

Information about an entity's remaining obligations provides useful information about the entity's future cash flows. The extant academic literature supports providing information about

the firm's performance obligations. For instance, the requirement that entities offer a reconciliation of opening and closing contract asset and liability balances to the amounts presented in the statement of financial position (paragraphs 75 and 76) is somewhat analogous to the requirement that property casualty insurers disclose the development of the loss reserve, including the reconciliation of the loss reserve for the most recent two years. Anthony and Petroni (1997), among others, find large sample evidence that stock returns are associated with the current year's development information, suggesting that information about the development of the loss reserve is useful to investors. Thus, to the extent that capital market participant behavior in the insurance industry is similar to that in other industries, one can extrapolate that capital market participants would find the information about the development of an entity's contract assets and liabilities balances, and in particular the cash received, to be useful.

While the ED expands the disclosure about entities' obligations in a fashion that should enhance the usefulness of the financial statements, we are concerned about the possibility that entities might strategically suppress information that is proprietary or that might expose poor management decisions. Indeed, Beaver and McNichols (1998) provide large sample evidence suggesting management exercise discretion over reported loss reserves in a self-serving manner and investors attempt to identify this influence on the reported loss reserve and, at least partially, adjust the firm's value.

Thus, in the absence of detailed implementation guidance on how the reconciliation is to be disclosed in the *Implementation Guidance and Illustration* Section of the ED, it seems likely that firms, at times, might choose to reveal the information the ED requires in a misleading manner.

Likewise, the extant academic literature generally supports the requirement that entities outline their performance obligations (paragraph 77) and the periods in which they are expected to be satisfied (paragraph 78) as this disclosure provides information about future cash flows. In this regard, several empirical studies establish that capital market participants consider leading indicators when determining a firm's stock price. Chandra, *et al.* (1999) report significant stock price movements on the release dates of aggregate industry data for new orders and shipments (the industry book-to-bill ratio) by the Semiconductor Industry Association each month. See also Amir and Lev (1996) and Behn (1996). Rajgopal, *et al.* (2003) also examine whether capital market participants consider a firm's order backlog when determining its stock price. Although the stock market considers this leading indicator, they offer large sample evidence to show that capital market participants overweight the contribution of order backlog when predicting future earnings. Thus, they conclude that investors do not appear to fully appreciate that analyst forecasts of earnings already incorporate this order backlog information. These findings suggest that capital market efficiency might be improved if entities were to more comprehensively disclose their order backlog and offer other leading indicators of their anticipated level of activity.

In this light, the ED's disclosure requirements outlined in paragraphs 77 and 78 are expected to improve the quality of investor information and lead to greater resource allocation efficiency. Once again, however, in light of entities' incentives to self-servingly reveal this type of information, more comprehensive illustrations of compliance with paragraphs 77 and 78 of the ED in the *Implementation Guidance and Illustration* section would be useful.

Question 12: *Do you agree that an entity should disaggregate revenue into the categories that best depict how the amount, timing, and uncertainty of revenue and cash flows are affected by economic factors? If not, why?*

The large sample evidence in the academic literature supports the provision of disaggregated information about entities' revenues and cash flows. For instance, Greenstein and Sami (1994) show that the provision of segment information leads to a downward shift in bid-ask spreads, suggesting that this disclosure reduces the information asymmetry between capital market participants. Berger and Hann (2003) provide evidence that analyst forecast accuracy increases after the provisions of FAS 131 became effective. Likewise, Ettredge, *et al.* (2005) examine the effect of the segment disclosure requirements outlined in FAS 131 and offer significant evidence that segmental disclosure increases stock price informativeness. Baldwin (1984) and Ahadiat (1993) offer consistent evidence endorsing the usefulness of segmental disclosure in the U.S. environment; other studies offer similar evidence within the context of the United Kingdom and Australian environments. Against this background, we support the expanded disclosure of disaggregated revenue as outlined in paragraph 74 of the ED.

On the other hand, there is evidence establishing that entities strategically choose to reveal segment information (e.g., Aitken, *et al.* 1997, Botosan and Harris 2000). Indeed, within the context of the Japanese disclosure environment, Mande and Ortman (2002) show analysts are concerned that firms do not define segments meaningfully and consistently and are arbitrary in the allocation of common costs. Moreover, these authors provide evidence that analysts do not believe that the usefulness of segmental data improves when it is audited.

Thus, while we expect the forthright provision of disaggregated information about entities' revenues and cash flows to be useful to capital market participants, we are concerned about the lack of specificity in the ED. The terse example offered in paragraph IG92 does not

offer sufficient guidance to firms when deciding how to report the complexity of an industrially and geographical diverse enterprise. To meaningfully affect disclosure practices, we suggest that a more comprehensive fact pattern and illustrations of compliance with paragraph 74 of the ED in the *Implementation Guidance and Illustration* section would be useful.

Further, we suggest that entities should be required to outline the criteria used for disaggregating revenues. Again this argument is grounded in the findings of Trotman and Zimmer (1986) who provide evidence that users do not consider the presence of alternative methods to be problematic provided firms fully disclose their procedures so that users can make adjustments to financial statements. We expect that the disclosing the criteria used to disaggregate revenues also would allow users to assess the consistency of an entities' disclosure over time and facilitate the comparison of economic activity among entities.

REFERENCES

- Ahadiat, N. 1993. Geographic Segment Disclosure and the Predictive Ability of the Earnings Data. *Journal of International Business Studies* 24 (2): 357-371.
- Aitken, M., C. Hooper, and J. Pickering. 1997. Determinants of voluntary disclosure of segment information: A re-examination of the role of diversification strategy. *Accounting and Finance* 7 (1): 89-109.
- Amir, E., and B. Lev. 1996. Value-relevance of nonfinancial information: The wireless communications industry. *Journal of Accounting and Economics* 22 (1-3): 3-30.
- Anthony, J. H., and K. R. Petroni. 1997. Accounting Estimation Disclosures and Firm Valuation in the Property-Casualty Insurance Industry. *Journal of Accounting, Auditing & Finance* 12 (3): 257-281.
- Baldwin, B. B. 1984. Segment Earnings Disclosure and the Ability of Security Analysts to Forecast Earnings Per Share. *The Accounting Review* 59 (3): 376-389.
- Barth, M., W. Beaver, J. M. Hand, and W. Landsman. 2005. Accruals, accounting -based valuation models, and the prediction of equity values. *Journal of Accounting, Auditing & Finance* 20: 311-345.

- Barth, M., D. Cram and K. Nelson. 2001. Accruals and the prediction of cash flows. *The Accounting Review* 76 (1): 27-58.
- Beaver, W. H., and M. F. McNichols 1998. The Characteristics and Valuation of Loss Reserves of Property Casualty Insurers. *Review of Accounting Studies* 3 (1-2): 73-95.
- Behn, B. K. 1996. Value implications of unfilled order backlogs. *Advances in Accounting* 14 (1): 61-84.
- Bens, D. A., and S. J. Monahan, 2008. Altering investment decisions to manage financial reporting outcomes: Asset-backed commercial paper conduits and FIN 46. *Journal of Accounting Research* 46: 1017-1055.
- Berger, P. G., and R. Hann. 2003. The Impact of SFAS No. 131 on Information and Monitoring. *Journal of Accounting Research* 41: 163–223.
- Botosan, C. A., and M. S. Harris. 2000. Motivations for a Change in Disclosure Frequency and Its Consequences: An Examination of Voluntary Quarterly Segment Disclosures. *Journal of Accounting Research* 38 (2): 329-353.
- Bushee, B. J., D. A. Matsumoto, G. S. Miller. 2003. Open versus closed conference calls: the determinants and effects of broadening access to disclosure. *Journal of Accounting and Economics* 34: 149–180.
- Carter, M. E., and L. J. Lynch. 2003. The consequences of the FASB's 1998 proposal on accounting for stock option repricing. *Journal of Accounting and Economics*. 35(1): 51-72.
- Chandra, U., A. Procassini, and G. Waymire. 1999. The Use of Trade Association Disclosures by Investors and Analysts: Evidence from the Semiconductor Industry. *Contemporary Accounting Research* 16 (4): 643-670.
- Cohen, D., M. Darrrough, R. Huang, and T. Zach. 2010. Warranty Reserve: Contingent Liability, Informational Signal, or Earnings Management Tool? *The Accounting Review* (Forthcoming).
- Davis, A. K. 2002. The Value Relevance of Revenue for Internet Firms: Does Reporting Grossed-up or Barter Revenue Make a Difference? *Journal of Accounting Research* 40 (2): 445–477.
- Dechow, P. 1994. Accounting earnings and cash flows as measures of firm performance. *Journal of Accounting and Economics* 18 (1): 3-42.
- Dechow, P., and C. Schrand. 2004. Earnings quality. *The Research Foundation of CFA Institute*. Charlottesville, Virginia.

- Dechow, P. M., R. G. Sloan, and A. Sweeney. 1996. Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research* 13: 1-36.
- Ettredge, M. L., S. Y. Kwon, D. B. Smith, and P.A. Zarowin. 2005. The Impact of SFAS No. 131 Business Segment Data on the Market's Ability to Anticipate Future Earnings. *The Accounting Review* 80 (3): 773-804.
- Feroz, E., K. Park, and V. Pastena. 1991. The financial and market effects of the SEC's accounting and auditing enforcement releases. *Journal of Accounting Research* 29 (Supplement): 107-142.
- Forester, C. L. 2008. "Does More Conservative Revenue Recognition Improve the Informativeness of Earnings?" Working paper, University of Minnesota.
- Greenstein, M. M., and H. Sami. 1994. The Impact of the SEC's Segment Disclosure Requirement on Bid-Ask Spreads. *The Accounting Review* 69 (1): 179-199.
- Hackenbrack, K., and M. W. Nelson. 1996. Auditors' Incentives and Their Application of Financial Accounting Standards. *The Accounting Review* 71 (1): 43-59.
- Hall, B.J., and K. J. Murphy. 2003. The trouble with stock options. *Journal of Economic Perspectives* 17(3): 49-70.
- Herrmann, D., T. Inoue, and W. Thomas. 1996. Are there benefits to restating Japanese financial statements according to U.S. GAAP? *Journal of Financial Statement Analysis* 2: 61-73.
- Imhoff, E. A., and J. K. Thomas. 1988. Economic consequences of accounting standards: The lease disclosure rule change. *Journal of Accounting & Economics* 10 (4): 277-310.
- Jackson, S. B., and X. Liu. 2010. The allowance for uncollectible accounts, conservatism, and earnings management. *Journal of Accounting Research* 48 (3): 565-601.
- Kim, M., and W. Kross. 2005. The ability of earnings to predict future operating cash flows has been increasing-not decreasing. *Journal of Accounting Research* 43: 751-780.
- Lev, B., S. Li, and T. Sougiannis. 2009. The usefulness of accounting estimates for predicting cash flows and earnings. Working paper at New York University and University of Illinois at Urbana-Champaign.
- Lipe, R. C. 1986. The Information Contained in the Components of Earnings. *Journal of Accounting Research* 24: 37- 64.
- Lorek, K. S., and G. L. Willinger. 1996. A multivariate time-series prediction model for cash-flows data. *The Accounting Review* 71: 81-101.

- Mande, V., and R. Ortman. 2002. Are recent segment disclosures of Japanese firms useful?: Views of Japanese financial analysts. *The International Journal of Accounting* 37 (1): 27-46.
- Mittelstaedt, H. F., W. D. Nichols, and P. R. Regier. 1995. SFAS No. 106 and benefit reductions in employer-sponsored retiree health care plans. *The Accounting Review* 70 (4): 535-556.
- Murphy, K. J. 2003. Stock-based pay in new economy firms." *Journal of Accounting and Economics*. 34 (1-3): 129-47.
- Palmrose, Z-V., and S. Scholz. 2004. The circumstances and legal consequences of non-GAAP reporting: Evidence from restatements. *Contemporary Accounting Research* 21 (1):139-190.
- Rajgopal, S., T. Shevlin and M. Venkatachalam. 2003. Does the Stock Market Fully Appreciate the Implications of Leading Indicators for Future Earnings? Evidence from Order Backlog. *Review of Accounting Studies* 8 (4): 461-492.
- Song, C. J., W. Thomas, and H. Yi. 2010. Value relevance of FAS No. 157 fair value hierarchy information and the impact of corporate governance mechanisms. *The Accounting Review* 85 (4): 1375-1410.
- Trotman, K. T., and I.R. Zimmer. 1986. Revenue Recognition in the Construction Industry: An Experimental Study. *Abacus* 22 (2): 136-147.
- Trueman, B, M., H. F. Wong and X.-J. Zhang. 2000. The Eyeballs Have It: Searching for the Value in Internet Stocks. *Journal of Accounting Research* 38: 137-162.
- Watts, R. L. 1977. Corporate financial statements, a product of the market and political processes. *Australian Journal of Management*. (April): 53-75.
- Watts, R. L., and J. L. Zimmerman. 1986. Positive Accounting Theory. Prentice-Hall.
- Watts, R. L., and J. L. Zimmerman. 1990. Positive Accounting Theory: A Ten Year Perspective. *The Accounting Review* 65 (1): 131-156.
- Williams, J. 1938. *The Theory of Investment Value*. Harvard University Press, Fraser Publishing.
- Zhang, Y. 2005. Revenue recognition timing and attributes of reported revenue: The case of software industry's adoption of SOP 91-1. *Journal of Accounting and Economics* 39: 435-561.