American Accounting Association National CIFiR Tracking Team

Response to the Progress Report of the SEC Advisory Committee on Improvements to Financial Reporting (Release No. 33-8896; File No. 265-24)

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I. Introduction

The American Accounting Association (AAA) promotes worldwide excellence in accounting education, research, and practice. Founded in 1916 as the American Association of University Instructors in Accounting, the association adopted its present name in 1936. The Association is a voluntary organization of persons interested in accounting education and research with about 8,000 members from all over the world.

Given the importance of the issues addressed by the SEC Advisory Committee on Improvements to Financial Reporting (CIFiR), the president of the AAA, Professor Gary Previts, commissioned a National CIFiR Tracking Team to provide relevant academic research findings as counsel to CIFiR in its deliberations and recommendations. The Tracking Team identified seven significant research topics relevant to the CIFiR Progress Report dated February 14, 2008, and invited distinguished researchers for each of these topics to provide a summary of the relevant research.

This document contains the seven research summaries preceded by a response letter authored by the National Tracking Team, which summarizes the implications of existing research for specific Developed Proposals and Conceptual Approaches put forth in the CIFiR Progress Report. It is important to note that the research summaries focus on major topics identified by the Tracking Team for which there is significant research. However, the Tracking Team's response is not intended to address all of the many topics contained

in the CIFiR Progress Report. As such, individual members and other committees of the AAA have also provided separate comments on their own to CIFiR.

In all, our objective is for the AAA to be an active partner in addressing significant policy issues affecting the accounting profession. We invite CIFiR to contact members of the Tracking Team or the authors of the research summaries for further information or questions. This comment was developed by the AAA CIFiR Tracking Team and does not represent an official position of the American Accounting Association.

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II. Response to the Advisory Committee on Improvements to Financial Reporting

The Progress Report of the Advisory Committee on Improvements to Financial Reporting offers a number of Developed Proposals and Conceptual Approaches. Following is a discussion of the implications of academic research for some of these proposals and approaches.

Developed Proposal 1.1: GAAP should be based on business activities, rather than industries. New projects should include the elimination of existing industry-specific guidance, unless, in rare circumstances, retaining industry guidance can be justified based on cost-benefit considerations.

The Committee lists exceptions to general principles as a pressing form of avoidable substantive complexity in financial reporting. Developed Proposal 1.1 is intended to mitigate this source of complexity. However, research suggests that additional rules, like exceptions to general principles, may increase or decrease task complexity, depending on the circumstances. Prior psychology-based research suggests that "task complexity" is highly context and person dependent, such that an accurate characterization of task

complexity in any setting requires explicit definition of (1) the specific task and, (2) the knowledge and capabilities of the people performing the task. The groups of constituents identified in the Progress Report (i.e., investors, preparers, auditors, analysts and regulators) will be affected by exceptions to general principles in different ways. Developing a comprehensive task-complexity-capturing measurement system is important for systematically identifying the causes of complexity in applied settings and for providing appropriate remedies. (See "Academic Research Summary: Complexity and Its Effect on the Preparation, Audit, and Use of Financial Information.")

In the discussion following Developed Proposal 1.1 the Committee states "However, we acknowledge that industry-specific guidance has merit when cost-benefit considerations indicate that the enhanced information investors would receive under generalized GAAP is not justified by the direct costs to preparers and the indirect costs of investors to account for activities in that manner." (pg. 20)

Research that examines the costs and benefits of disclosure suggests that industry-specific practices might reduce estimation risk or information asymmetry, mitigate litigation risk, and/or improve management decision making. It is not clear whether the "enhanced information investors would receive" envisioned by the Committee encompasses these benefits. Moreover, the Committee's consideration of disclosure costs excludes significant *indirect* costs of disclosure to preparers, such as proprietary costs. Finally, many disclosure costs and benefits are not subject to meaningful quantification, rendering a practical assessment of whether the benefits exceed costs exceeding difficult. We encourage the Committee to take a broader perspective regarding the costs and benefits of disclosure, and consider the implications of this broader perspective for its recommendation to eliminate industry-specific practices. (See "Academic Research Summary: Disclosure Costs and Benefits.")

Finally, numerous benefits and costs derive from accounting choice. Limiting accounting choice, by eliminating industry-specific practices, could reduce the net benefits derived from accounting choice, thereby resulting in costs to the users of financial reports. We discuss this issue more fully in our response to Developed Proposal 1.2. (See "Academic Research Summary: Accounting Choice.")

Developed Proposal 1.2: GAAP should be based on a presumption that formally promulgated alternative accounting policies should not exist. New projects should not provide additional optionality, unless in rare circumstances, it can be justified. New projects should include the elimination of existing alternatives, unless, in rare circumstances, the optionality can be justified.

Developed Proposal 1.2 is also intended to mitigate complexity arising from exceptions to general principles. As discussed in our response to Developed Proposal 1.1, research suggests that additional rules, like exceptions to general principles, may increase or decrease task complexity, depending on the circumstances. Developing a comprehensive task-complexity-capturing measurement system is important for systematically identifying the causes of complexity in applied settings, and for providing appropriate remedies. (See "Academic Research Summary: Complexity and Its Effect on the Preparation, Audit, and Use of Financial Information.")

An extensive literature in academic research examines the causes and consequences of accounting discretion. This research suggests that accounting choice yields the following benefits: (1) reduces information asymmetry by allowing managers to communicate their private information about the firm, (2) allows for the writing of economically efficient, accounting—based contracts, (3) yields more informative financial data by allowing managers to represent faithfully the economic substance of the transaction or business, and, (4) mitigates managers' use of costly real economic actions to achieve goals otherwise achieved through accounting choice (e.g. transaction structuring). The research also identifies the following costs: (1) provides opportunistic managers with more ways to achieve their goals, and (2) potentially increases the complexity of financial reporting. Due to the difficulty of meaningfully quantifying the costs and benefits of accounting discretion, there is little or no research quantifying the trade-offs between these costs and benefits.

Substantial empirical and analytical accounting research supports the importance of incentives in determining the nature and content of financial reporting. These incentives take many forms and managers can take many different types of actions to achieve their reporting goals from employing discretion in accounting policy choice, or accounting

estimate choice, or transaction structuring. Thus, the elimination of accounting alternatives is unlikely to mitigate the costs of managerial opportunism and complexity. Furthermore, there is no direct academic research support for the claim that managers who allegedly make opportunistic accounting choices (e.g., to increase their compensation) achieve their goals. Similarly, there is no consistent evidence that accounting choices have share price or firm valuation implications. There is, however, more evidence supporting the benefits of accounting choice. Thus, the elimination of accounting choice may well reduce net benefits, thereby resulting in costs to the users of financial reports. Moreover, meaningful elimination of accounting choice would entail a rules-based approach to accounting standard setting that is in direct opposition to the concepts-based approach currently favored. (See "Academic Research Summary: Accounting Choice.")

Conceptual Approach 1.A: Considering the expanded use of proportionate recognition, additional disclosure, and rules of thumb or presumptions in place of the current use of bright lines.

The Committee lists bright lines as a pressing form of avoidable substantive complexity in financial reporting. Conceptual Approach 1.A is intended to mitigate this source of complexity. However, as noted previously in our response, research suggests that task complexity is person and context dependent. Developing a comprehensive task-complexity-capturing measurement system is important for systematically identifying the causes of complexity in applied settings and for providing appropriate remedies. (See "Academic Research Summary: Complexity and Its Effect on the Preparation, Audit, and Use of Financial Information.")

Conceptual Approach 1.B: Considering a recommendation related to the education of students, as well as to the continuing education of investors, preparers, and auditors, that would encourage an understanding of the economic substance and business purposes of transactions, in contrast to mechanical compliance with the rules.

The committee states, "Undergraduate and graduate education in accounting have traditionally emphasized the mechanics of double entry bookkeeping, which favors the use of detailed rules rather than the full understanding of relevant principles."

We both agree and disagree with elements of the Committee's statement. Many, if not most, of the academic community have made great strides over the last two decades to divorce themselves from what the Committee refers to as the "traditional emphasis on the mechanics of double entry bookkeeping...(and) detailed rules..." Most academics believe that an educational approach focused on the memorization of rules and exceptions, and/or the use of technology to "research" rules and exceptions, is inconsistent with the mission of higher education. Consequently, all leading accounting education programs, as well as a vast majority of all programs, currently emphasize the teaching of concepts over rules.

Nonetheless, a conceptual framework that is inadequate for the times hampers these efforts. Ideally, faculty should be able to explain to students how to analyze the economic substance of a business event consistent with the basic definitions of an asset, liability, revenue, or expense, and then proceed to rationally determine the proper handling of the item. Educators as well as practicing professionals critically need an international effort resulting in a well-documented and clearly explained guiding conceptual framework. Accounting educators are well positioned and prepared to help in this undertaking. (See "Academic Research Summary: Educational Implications of the Report of the SEC Advisory Committee on Improvements to Financial Reporting.")

Conceptual Approaches 1.C and 1.D: Considering a recommendation that the FASB develop a decision framework to provide a systematic approach for consistently determining the most appropriate measurement attribute for similar activities or assets/liabilities (e.g. fair value measurement) based on consideration of the tradeoff between relevance and reliability. Considering whether the SEC should request the FASB be judicious about issuing new standards that require the expanded use of fair value.

The Committee lists the mixed attribute model as a pressing form of avoidable substantive complexity in financial reporting. Conceptual Approaches 1.C and 1.D are intended to mitigate this source of complexity. However, as noted previously in our response, research suggests that task complexity is person and context dependent. Developing a comprehensive task-complexity-capturing measurement system is important for systematically identifying the causes of complexity in applied settings and for providing appropriate remedies. (See "Academic Research Summary: Complexity and Its Effect on the Preparation, Audit, and Use of Financial Information.")

An extensive academic literature addresses the relevance and reliability of fair value measurements in a number of contexts. The Financial Accounting Standards Committee of the American Accounting Association addressed the implications of this literature for standard setting in response letters previously submitted to the FASB. In the interest of brevity, we do not explicitly reiterate the implications of this literature here. Nonetheless, we refer committee members interested in this issue to the "Response to the FASB's Exposure Draft on Fair Value Measurements" published in the September 2005 issue of *Accounting Horizons*.

Conceptual Approach 1.G: Considering a call for the development of a disclosure framework.

An extensive academic literature establishes the nature and importance of the costs and benefits of disclosure. While we recognize that regulators would ultimately be responsible for the specifics of a disclosure framework, we recommend that the Committee highlight the important role disclosure costs and benefits must play in any conceptually based framework. (See "Academic Research Summary: Disclosure Costs and Benefits.")

Developed Proposal 2.1: Add investors to the FAF, and give more representation on both the FASB and the FASB staff to experienced investors.

In its discussion of "Investor Representation" the Committee states, "The current standards-setting process attempts to balance the views of different stakeholders. However the financial reporting system would best be served by recognizing that the perspectives of investors should be pre-eminent when competing interests cannot be aligned, because all shareholders benefit from a system that allocates capital more efficiently." (pg. 34).

We are concerned this presumption fails to consider adequately the costs of disclosure (such as proprietary costs and increased litigation costs). For example, full disclosure of all information might result in the efficient allocation of capital. However, such a practice exposes the firm (and shareholders) to significant direct and indirect costs of disclosure (e.g. proprietary and litigation costs). Since investors and other users of financial statements (e.g. analysts) without an ownership position in the firm are free riders (i.e. garnering the benefits of disclosure without bearing the costs), overweighting the views of such constituents could yield suboptimal outcomes. (See "Academic Research Summary: Disclosure Costs and Benefits.")

Economic incentives tend to motivate managers to overweight the costs of disclosure, and free-rider problems tend to motivate investors and other users of financial information to overweight the benefits. In contrast, academics do not face such economic incentives. In light of this, we are concerned that the Committee calls for an increase in investor participation in the standard setting process, while marginalizing the academic community's participation. This concern is also addressed in separate response letters to the CIFiR submitted by the Financial Accounting Standards Committee of the American Accounting Association, and the Financial Reporting Policy Committee of the Financial Accounting Section of the American Accounting Association.

Developed Proposal 2.3: The SEC should encourage the FASB to further improve its standard setting process and timeliness by among other things, enhancing its cost-benefit analyses.

While we understand the Committee's desire for greater quantification of the costs and benefits of disclosure, most significant costs and benefits of disclosure, as well as disclosure quality or quantity, are inherently unobservable and are not subject to meaningful quantification. Thus, while it is possible to put forth a qualitative assessment that an increase in disclosure quality has a given directional effect on a given disclosure

cost or benefit, it is not possible to quantify the magnitude of the relation in a meaningful manner. Finally, the Committee appears to assume that the disclosure costs and benefits that comprise the relevant set are known and subject to common agreement among constituencies. This does not accord with the fact that existing theoretical and empirical research, as well as surveys of practitioners, point to the existence of significant debate regarding the nature of the costs and benefits of disclosure. (See Academic Research Summary: Disclosure Costs and Benefits.")

Developed Proposal 3.1: The Committee recommends that the FASB or the SEC, issue guidance reinforcing the concept that the materiality of an error be evaluated based upon the perspective of a reasonable investor in the context of the total mix of information available. Moreover, while qualitative factors may lead to a conclusion that a quantitatively small error is material, qualitative factors also may lead to a conclusion that a quantitatively large error is not material.

The amount of academic research into restatements has been minimal until recently because of data collection difficulties. Those studies that have been undertaken show investors react more negatively to announcements of quantitatively larger negative restatements of net income, but beginning in 2001, overall market reactions are greatly reduced. A significant decline in the average income effects of restatements between 1999 and 2003, documented in existing research, might explain this finding. However, no studies focus sufficiently deeply on this period to allay other possible explanations. For example, the economic conditions associated with the deflation of the technology bubble might also play a role.

Prior research finds that qualitative factors affect investors' materiality assessments. For example, restatements involving fraud are associated with returns that are more negative and with more litigation. Thus, intent to deceive is an important factor in the mix of information. In addition, research suggests that the type of account restated matters to investors. For example, research finds that restatements of revenue are more salient to financial statement users than restatements of other accounts. There is also some evidence that restatements of on-going operating expense accounts are associated with

negative market reactions and litigation. In contrast, there is no evidence that the restatement of non-operating expenses or one-time or special items, or the reclassification of financial statement items, elicit a discernable negative market reaction. Thus, research suggests that qualitative factors may lead to a conclusion that a quantitatively small error is material. There is too little empirical research available to draw reliable conclusions about whether a quantitatively large error could be immaterial for qualitative reasons. (See "Academic Research Summary: Restatement Materiality Considerations.")

Developed Proposal 3.2: The Committee recommends that prior period financial statements should only be restated for errors that are material to those prior periods. Moreover, a material error that has no relevance to a current investor's assessment of the annual financial statements would not require restatement of prior period financial statements, but if the error remains uncorrected in the current period, it should be corrected in the current period. Restatements of interim periods do not necessarily need to result in a restatement of an annual period.

Existing research does not directly assess how current investors react to older misstatements. However, research suggests that restatements involving longer periods have a less negative market reaction. In later years, this finding is explained in part by lease restatements, and restatements by accelerated filers adopting SOX 404 ICFR standards. Both of these types of restatements involve long-standing errors, and result in less negative market reactions. Nonetheless, other factors might also play a role. For example, perhaps errors that persist without detection for longer periods tend to be smaller in any one period, which manifests in a less negative market reaction. It might also be that the reversing nature of accrual accounting causes errors to reverse over longer periods, such that investors ultimately react to a smaller net effect. (See "Academic Research Summary: Restatement Materiality Considerations.")

Developed Proposal 3.3: The Committee recommends that regulators issue guidance on applying materiality to errors in prior interim periods and the correction of such errors.

Limited academic research investigates issues related to the restatement of interim versus annual financial statements. However, the research that has been undertaken suggests that the market reaction does not differ for restatements involving interim-only financial statements compared to annual statements. (See "Academic Research Summary: Restatement Materiality Considerations.")

Developed Proposal 3.4: The Committee recommends that regulators adopt judgment frameworks for accounting and auditing judgments. The proposed framework for accounting judgments would apply to the choice and application of accounting principles, as well as the estimates and evaluation of evidence related to the application of an accounting principle.

Decision makers rarely make important judgments in a setting devoid of economic motivations and incentives. Research in psychology finds that decision makers use ambiguity in facts to justify a desired conclusion. This suggests that when preparers and auditors face judgments where there is a range of acceptable conclusions their judgments tend to be biased in favor of their economic self-interest. These economic forces will continue to exist even in the presence of a well-designed judgment framework. The proposed professional judgment framework neglects this critical dimension.

Many elements of the proposed framework correspond to elements found in the auditing standards currently promulgated by the PCAOB, but several decision elements in the auditing standards are not considered directly by the Committee. In the audit context, risks, such as the inherent risk that a particular account might be misstated or the risk of failing to detect errors that exist in financial statements, along with the materiality of financial statement items, determine the amount of effort an auditor directs toward particular audit areas. Concepts similar to risk and materiality might prove useful in guiding preparers in their professional judgments. It might be constructive for the Committee to consider the current audit standards as a model framework for the judgments made by preparers.

Research shows that experience does not directly lead to expertise, and that effective learning requires feedback specific to the performance of the task, not simply observing outcomes. Therefore, while preparers have experience with selecting and applying accounting standards, those experiences may not generalize across standards. These limitations, which are inherent in individuals, are unlikely to be mitigated by the mere availability of a decision framework. Numerous detailed examples that carry authoritative weight and accompany the issuance of new accounting standards might provide preparers with the experiences and feedback necessary to facilitate learning and the development of expertise in the context of a given standard. Nonetheless, regulators might be reluctant to provide such examples for fear that they will become *de facto* standards, which would diverge from the principles-based approach advocated by regulators. (See "Academic Research Summary: Professional Judgment Framework.")

Developed Proposal 4.1: The Committee recommends that the SEC mandate the filing of XBRL-tagged financial statements subject to the successful testing of the XBRL U.S. GAAP Taxonomy, the capacity of reporting companies to file XBRL-tagged financial statements on the SEC's EDGAR system, and the ability of the EDGAR system to provide an accurately rendered version of all such tagged information. The SEC should phase-in XBRL-tagged financial statements beginning with the 500 largest domestic public reporting companies.

While it is generally well understood that XBRL will facilitate financial data retrieval for most investors, existing research identifies areas to manage carefully in the transition process. Research also shows that most data users, including investors, extract more information when they work for themselves in formatting and reconciling data rather than having it done for them. However, users tend to blend audited and unaudited information, when the two are linked via the internet. Thus, user expectations related to assurance may run counter to the proposal to furnish them without assurance.

Education issues may also pose problems. Survey evidence indicates that the majority of CEO's and CFO's feel unprepared to adopt XBRL in the near term. Moreover, anecdotal evidence indicates that accounting academics lack familiarity with XBRL, and few

include any type of coverage in their classes. Finally, research indicates that users are unlikely to use the technology without sufficient awareness and education. (See "Academic Research Summary: Transition, Education, and Assurance Issues Related to XBRL.")

III. Academic Research Summary: Disclosure Costs and Benefits

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Disclosure Benefits

i. Reduced Cost of Capital

According to a sizeable body of theoretical finance and accounting research, investors require a return premium for estimation risk when they face uncertainty about an entity's future cash flows. If so, disclosure can reduce cost of equity capital by mitigating investors' uncertainty. On the other hand, some studies dispute this conclusion arguing that estimation risk is diversifiable through a portfolio of investments and is not priced.

A large body of empirical research investigates the association between disclosure and cost of equity capital. The evidence, accumulated across many studies using alternative measures, samples, and research designs, lends considerable support to the hypothesis that greater disclosure and higher quality financial reporting (e.g. higher accruals quality) reduces the cost of equity capital. In addition, a more limited body of research documents a negative association between disclosure and the cost of debt capital. Nonetheless, a handful of studies find a positive association between certain types of disclosure – generally disclosures that are timelier in nature – and cost of equity capital. Thus, although the weight of the evidence favors a negative association between disclosure and cost of capital, academic research continues to debate this link.

In light of this, it should not be surprising to learn that managers remain skeptical of the proposition that a reduced cost of capital is a benefit of greater disclosure. In a 2005 survey of CFO's, Graham et al. find that 80% of CFO's agree that greater disclosure reduces information risk, but only 39% agree that this translates into a lower cost of equity capital. A survey of UK financial executives also finds that less than half of the executives surveyed believe greater disclosure reduces their cost of equity capital,

¹ Estimation risk is also referred to as "information risk".

although a majority agreed that greater disclosure does have a beneficial effect on the cost of debt. This latter finding may reflect the fact that the effect of greater disclosure on cost of debt capital is more readily observable by individual managers than the effect of greater disclosure on the cost of equity capital.

ii. Improved Market Liquidity

Disclosure's positive effect on market liquidity is another benefit supported by theoretical research. Less informed investors are concerned about trading against better-informed counterparts. Consequently, less informed investors price protect against potential losses (which increases transactions costs) or reduce the number of shares they are willing to trade. Both of these effects reduce market liquidity, i.e. the ability of investors to quickly trade shares at low cost and with little price impact.

The results of empirical research generally support the hypothesis that greater disclosure is associated with improved market liquidity. For example, research documents that more-forthcoming firms have lower bid-ask spreads and greater trading volume than less-forthcoming firms. Consistent with these findings, a survey of CFOs found that 44% of those surveyed agree greater disclosure increases the liquidity of their stock; substantially more than the 17% of CFOs who disagree with this statement.

iii. Reduced Litigation Costs

Securities lawsuits are costly to firms. Lawsuits divert management attention away from productive efforts and subject the firm to substantial out of pocket litigation costs and losses. Academic research finds that disclosure helps mitigate litigation costs by reducing the probability of a lawsuit, or increasing the probability of dismissal. Specifically, research finds that investors are less likely to sue firms suffering large unexpected earnings declines if the firm preempts the bad news earnings announcement by issuing an earnings warning. Moreover, firms facing higher litigation risk are more likely to disclose bad earnings news early. Consistent with this finding, Graham et al. find that 77% of the CFO's they surveyed claim to reveal bad news faster to mitigate the possibility of a lawsuit arising from failure to disclose in a timely fashion.

iv. Improved Management Decision Making

Theoretical research suggests that transparent disclosures increase firm value by improving managers' decisions or by reducing the managers' consumption of perquisites. Little empirical research into this question has been undertaken.

v. Competitive Advantage

Theoretical research shows that existing firms may use disclosure to deter entry into the market by competitors, or to share information about market demand to prevent over production. Little empirical research into this question has been undertaken.

Disclosure Costs

i. Proprietary Costs (i.e. Competitive Disadvantage)

Theoretical and empirical research examines the proprietary cost hypothesis. This hypothesis states that managers' concerns over competitive harm affect their decisions about public disclosure. Most of the empirical research in this area focuses on firms' disclosures of sales, profits, and assets by industry segment. Traditionally, managers have strongly opposed certain aspects of industry segment reporting, citing proprietary costs as their primary reason. The overriding finding in this literature is consistent with the proprietary cost hypothesis. That is, managers have a tendency to withhold or mask disclosures with high proprietary costs. This finding is consistent with survey evidence that finds 59% of CFO's believe that the disclosure of sensitive information exposes their firm to proprietary costs, significantly greater than the 25% of respondents that disagree with this proposition.

ii. Increased Litigation Costs

Preemptive disclosure of bad news can reduce litigation costs by reducing the probability of a lawsuit, but there is also the concern that certain types of disclosure might increase firms' exposure to lawsuits. This is particularly true of forward-looking information. In a 2005 survey of CFO's, Graham et al. find that 46% of CFOs believe that disclosure of forward-looking information exposes their firm to litigation risk. This is significantly greater than the 26% of respondents that disagree with this proposition. Consistent with this, empirical research finds that voluntary disclosure of forward-looking information is more prevalent in less-litigious environments. Moreover, within the US, voluntary

disclosure of forward-looking information increased following the enactment of the safeharbor provisions of the Private Securities Litigation Reform Act of 1995.

iii. Direct Costs

Direct costs include preparation, certification, and dissemination costs. These costs can be substantial and due to economies of scale can vary with firm size. Very little research focuses on the direct costs of disclosure, however.

Measurability

Most of the concepts discussed above are inherently unobservable including the costs of equity or debt capital, market liquidity, litigation risk, competitive advantage or disadvantage, and disclosure quantity or quality. Accordingly, researchers employ proxies to capture variation across firms in these underlying constructs, allowing them to draw conclusions regarding the direction of the relation between disclosure and various cost/benefit attributes. Whether such proxies capture actual magnitudes is not knowable, however, and consequently, empirical research does not generally extend to the meaningful quantification of disclosure costs or benefits. Given the indirect and unobservable nature of most disclosure costs and benefits, regulators and practitioners also must contend with the impossibility of meaningful quantification.

Benefits to Society and the Free-Rider Problem

If disclosure reduces cost of equity capital or improves market liquidity, society as a whole, benefits because of the central role capital markets play in the efficient allocation of capital and the directing of firms' investment choices. At the same time, participants in the market who are not shareholders of the firm (e.g. potential investors, financial analysts, etc.) are free riders receiving benefits from firms' disclosures, but bearing none of the costs.

IV. Academic Research Summary: Complexity and Its Effect on the Preparation, Audit and Use of Financial Information

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The Introduction of the Progress Report of February 14th (p. 12) includes a broad working definition of complexity: "the state of being difficult to understand or apply". With respect to financial reporting, the Progress Report defines complexity as the difficulty for (1) investors to understand the economic substance of a transaction or event and the overall financial position and results of a company, (2) preparers to properly apply generally accepted accounting principles in the U.S. (GAAP) and communicate the economic substance of a transaction or event and the overall financial position and results of a company, and (3) other constituents to audit, analyze, and regulate the company's financial reporting. The Introduction of the Progress Report suggests that financialreporting-complexity-related comprehension difficulties experienced by these three broad constituent groups are largely caused by "avoidable" factors, like incomparable and inconsistent accounting reports, overly long, inconsistent, poorly written and voluminous accounting standards, audit and regulatory systems that deliver information that is not useful to investors, antiquated initial and continuing training of accountants, and the fact that accounting reports provide investors with too much information. Chapter 1 of the Progress Report identifies three sources of avoidable complexity as the most immediately important: exceptions to general principles, bright lines, and the mixed-attribute measurement model.

While I respectfully disagree with the Progress Report's use of the word, "complexity," in most of the listed contexts (the basis for this disagreement is discussed below), the Advisory Committee's activities apparently are motivated by some absolute level of dissatisfaction and frustration experienced by investors, preparers, auditors, analysts, and regulators. If this dissatisfaction and frustration is to be meaningfully addressed and reduced, then its sources require identification and measurement in a systematic and

scientifically informed fashion. Therefore, my comments discuss prior psychology research on the determinants of task complexity.²

When considering the assertions included in the Progress Report, an important question emerges: if all of the avoidable factors were avoided (i.e., repaired), would investors better understand reported economic substance; preparers better apply GAAP; and other constituents better audit, analyze, and regulate? Existing academic research that defines (and that explicitly controls for) the sources of task complexity provides some likely answers to these questions. First, prior psychology-based research suggests that complexity is not a universal construct that applies across settings and individuals; instead, most basic work in applied settings is concerned with a notion of "task complexity" that is highly context and person dependent (e.g., Suedefeld and Hagen, 1966; Wood, 1986; Campbell, 1988).

Explicit consideration of the roles of person and context dependency suggests that the groups of constituents identified in the Progress Report (i.e., investors, preparers, auditors, analysts and regulators) will be affected by the structure of financial reporting (e.g., exceptions to general principles, bright lines, and the mixed-attribute measurement model) in different ways. In fact, research suggests that certain subsets of these constituents will make more efficient and/or effective judgments and decisions because of the characteristics that the Progress Report identifies as sources of "avoidable complexity".

Nelson (2003) suggests that additional rules, like exceptions to general principles, "may increase or decrease task complexity, depending on the circumstances" (p. 94). He notes that Wood's (1986) seminal decomposition of task complexity includes three elements: component complexity, coordinative complexity, and dynamic complexity. When Wood's (1986) framework is applied to the financial report preparer or auditor context, component complexity increases with the number of facts to be interpreted, exception

² See Barth and Schipper (2008) for an overview of issues related to financial-reporting transparency (i.e., a related concept that likely is negatively correlated with financial-reporting complexity).

rules to be applied, precedents and examples to be considered, and decisions to be made. Coordinative complexity increases when, in arriving at a financial reporting decision, the foregoing components must be combined in novel, complex, or unspecified ways. Dynamic complexity increases when the necessary components and/or the algorithm necessary to coordinate the components changes over time or between contexts. Taken together, Wood's (1986) model suggests that some "forms of avoidable task complexity" specifically mentioned in the report (e.g., exceptions to general principles) could lead to lower levels of coordinative complexity, thereby yielding lower levels of overall task complexity.³

An important implication of Wood's (1986) model is that an accurate characterization of task complexity in any setting requires explicit definition of (1) the specific task for which we wish to measure complexity, and (2) the knowledge and capabilities of the people performing the task. Prior research conducted with accounting professionals confirms this observation. In general, this research suggests that accounting professionals who possess more task-related knowledge or ability are better able to cope with task complexity (Bonner and Lewis, 1990; Libby and Tan, 1994; Asare and McDaniel, 1996; Tan and Kao, 1999; Tan et al. 2002).

With respect to the Progress Report, better definition of the tasks and people for which we wish to capture task complexity would allow regulators to develop a measure to differentiate between better of worse systems of financial reporting components and coordination rules. Developing a comprehensive task-complexity-capturing measurement system is important for systematically identifying the causes of complexity in applied settings, and for providing appropriate remedies. For example, the field of computer engineering has been grappling, for decades, with developing theory-based measures that quantify and communicate the complexity of computer code (e.g., Waguespack and Badlani, 1987; Zuse and Bollman, 1990; Darcy et al., 2005).

³ A similar decomposition and analysis can be performed for the non-preparer constituents (e.g., investors), however, the specific components and coordinative links would reflect the judgment and decision context of a financial statement user.

V. Academic Research Summary: Accounting Choice

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The academic accounting choice literature is extensive.⁴ It dates back to the 1960s and approximately 10% of the papers published in the 1990s in three of the major academic accounting journals directly address accounting choice issues.⁵ The academic definition of accounting choice is broad and includes issues of implementation, timing, display, transaction structuring, production decisions, investment decisions, and the level of disclosure, among others (Francis, 2001). In contrast, the Progress Report takes a relatively narrow view of accounting choice:

"Alternative accounting policies refer to optionality in GAAP. The following discussion addresses formally-promulgated options in GAAP, but does not address choices available to preparers at more of a practice or implementation level." (p 21)

The Progress Report provides examples of GAAP alternatives, including, but not limited to: successful efforts or full cost accounting methods for oil and gas producers; application of hedge accounting; the option to measure certain financial assets and liabilities at fair value; and the timing of the recognition of gains/losses associated with defined benefit pension and other post-retirement plans (pp 21-22).⁶ It would be helpful if the Committee would further explicate their definition of alternative accounting policies. For example, the Committee considers the choice of time over which to recognize gains/losses for defined benefit pension and other post-retirement plans as an example of

⁴ I refer interested readers to comprehensive surveys of prior literature, including: Lev and Ohlson, 1982; Bernard, 1989; and Fields, Lys, Vincent, 2001.

⁵ The three academic accounting journals are the *Accounting Review*, the *Journal of Accounting and Economics*, and the *Journal of Accounting Research*.

⁶ The page numbers referenced herein refer to the February 14, 2008 Progress Report.

optionality whereas the choices of depreciation method and of amortization period are not examples of optionality.⁷

Academic accounting research addresses several of the examples of alternative accounting policies provided by the Progress Report including, for example, studies of the full cost versus successful efforts choice for oil and gas firms (e.g., Lys, 1984; Malmquist, 1990). Nevertheless, the research generally focuses more on accounting implementation and disclosure issues requiring managers' exercise of judgment and discretion, rather than on the actual selection of alternative accounting treatments, as defined by the Committee. For example, two recent studies on accounting for defined benefit pension plans examine managers' choices of long-term rates of return on plan assets, rates of predicted compensation growth, and discount rates. Neither study addresses the choice of amortization period for gains and losses, however, which is one of the examples of optionality provided in the Progress Report (Picconi, 2006; Bergstresser et al., 2006).

In the academic researcher's view, the presence or absence of accounting choice generally lies along a continuum and is not identifiable by a sharp demarcation. As an extreme example, accounting standard setters could attempt to eliminate all choice by specifying rules such as estimated uncollectible accounts are 3% of average accounts receivable and all marketable securities are to be classified as available for sale. Such rule-based standards would eliminate choice, arguably reduce complexity, and enhance comparability, but at the expense of representational faithfulness of the underlying economic substance. It is difficult to imagine that such a system of rigid rules could provide for all facts and circumstances. Furthermore, new economic transactions and

⁷ The Progress Report distinguishes between alternative accounting policies (permitted accounting choices) and "competing models" (required application of different accounting models for the same transaction depending on the accounting item involved). (p 32) Although the form of the distinction is clear, the substance is not clear.

⁸ Examples of the former include revenue recognition decisions (e.g., Altamuro et al., 2005) and the timing and amount of asset write-offs (e.g., Francis et al., 1996). As noted above, the Committee classifies these issues as **competing models** (p 32).

⁹ Picconi reports evidence of managers' disclosing value relevant (for future security prices) information by their choice of rates. Bergstresser et al. report evidence consistent with managers' opportunistic choice of rates.

structures (e.g., securitizations, debt-equity hybrids) continuously develop that do not fit within the existing rules. Finally, a move to more rule-based standards is in direct opposition to regulators' stated preference for a more objectives-oriented approach. Accounting choice may thus exist because it is impossible or infeasible to eliminate it.

At the other end of the continuum, standard setters could provide almost complete discretion with the general charge to report all transactions consistent with the underlying economics. Neither of these extremes is practicable and even advocates of free market solutions over regulation for economic problems, conclude that with respect to financial disclosure, "no one knows the optimal amount of standardization" (Easterbrook and Fischel, 1991, p 304).

It would also be helpful if the Committee would articulate further the problem to which the proposed elimination of alternative accounting policies is the solution. The Committee's stated goals are to increase the usefulness of accounting information and to reduce its complexity—the Committee considers alternative accounting policies to be contributors to avoidable complexity (p 22). However, there is an unaddressed trade-off between accounting for identical activities differently (as claimed by the Committee, p 22) and accounting for different activities identically by limiting accounting choice. Regardless, accounting research provides evidence consistent with managers making "real" or economic decisions to manage their reported financial statements such as deferring R & D expenditures (e.g., Roychowdhury, 2006; Graham et al., 2005). Eliminating optionality would not address such activities, nor would its elimination address accounting implementation issues noted above.

Much of the relevant academic research analyzes accounting choice from one of three perspectives: opportunistic behavior by managers; efficient contracting; and communication of financial information.¹⁰ Managerial opportunism is based on the claim that managers make accounting choices to advance their self-interest at the expense of the firm's suppliers of capital. A large proportion of empirical accounting research

¹⁰ Examples include Holthausen (1990); Holthausen and Leftwich (1983); and Watts and Zimmerman (1990).

examining accounting choice focuses on assessing whether managers' accounting choices are consistent with opportunistic behavior. Many of these studies report evidence that managers make accounting choices consistent with increasing managerial compensation. Nevertheless, there is little, if any, evidence whether managers' actions are successful in increasing their compensation through the choice of accounting method; that is, whether the purported opportunistic behavior really benefits the manager or disadvantages others. Most of the studies fail to consider other incentives with which the accounting choices are consistent, such as decreasing the probability that the firm will violate debt covenants—there are likely to be tradeoffs of incentives among compensation, debt covenants, tax, capital structure, and regulatory concerns. In other words, the research results on managerial opportunism are neither consistent nor conclusive.

There is also extensive academic research on accounting choice based on predictions of the efficient contracting hypothesis. The contracting, or economic consequences, view of accounting choice analyzes managers' incentives to make accounting choices based on the impact of such choices on contracts, both explicit and implicit, that rely on accounting numbers. Examples of such contracts include debt covenants, executive compensation, and government regulations (e.g., capital requirements for financial institutions). Research results have generally been consistent with the hypothesis. Again, most of this research focuses on judgments and implementation decisions rather than the choice between accounting standards *per se*.

Underlying the contracting hypothesis is the concept that the writers of the contract anticipate opportunistic behavior and provide for it in the contract. For example, managers' actions to avoid debt covenant violations through accounting choice may result in equity value maximization, and perhaps personal utility maximization through

¹¹ For example, Hand and Skantz (1998) find that the choice of recording gains in equity carve-outs as income or a direct increase in shareholders' equity is associated with multiple incentives, including contracting (debt covenants), opportunism (compensation), and information signaling.

¹² For example, DeAngelo et al. (1994) find that managers make accounting choices consistent with reducing the probability of violating accounting-based debt covenants.

job security, but these choices could be made at the expense of the debt holders, unless the contracts provide for such possibilities.¹³

The third perspective on which academic research into accounting choice is based is the information hypothesis – that is, managers make accounting choices in order to communicate their own, often superior, information about the firm. This last perspective is difficult to test and is mainly supported by the analytical literature. Under this perspective, accounting choice provides managers with a larger set of alternatives with which to communicate their information about the firm, resulting in better information dissemination. Financial research supports the positive impact of more public information on market liquidity and on mitigating the adverse selection problem due to asymmetric information between insiders and outsiders (Verrecchia, 2001). Based on the academic research to date, an important question to consider is whether elimination of optionality provides direct benefits to the users of accounting information. In other words, if one assumes, consistent with much of the analytic literature, that there are benefits to accounting choice, it is not clear what the benefits (or reduced costs) are of eliminating accounting choice.

One of the key considerations in the decision to eliminate GAAP alternatives should be the cost-benefit trade-offs from such an action and academic researchers have provided little evidence as to the cost-benefit trade-offs from accounting choice. One of the main reasons for this dearth of evidence is that it is difficult, if not impossible, to rank order accounting choices on any salient dimension (Demski, 1973). For example, there was a great deal of concern expressed about the effects of the elimination of the pooling accounting alternative for business combinations, including anecdotal evidence that some business combinations were abandoned if pooling accounting was not attainable. What cannot be assessed is whether these business combinations were appropriately abandoned

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¹³ Malmquist (1990) examines the choice of full cost and successful efforts accounting and finds no evidence of opportunistic behavior, leading him to conclude (by default) that his results are consistent with efficient contracting.

However, another analytical study finds mixed results as to the desirability of giving managers accounting choice—accounting choice was preferred when the interactions were between current managers and current shareholders, but accounting choice disadvantaged future shareholders relative to current shareholders (Dye and Verrecchia, 1995).

from an economic perspective, regardless of the accounting treatment. Furthermore, there has been no formal evidence of any negative economic consequences or asset misallocations resulting from the elimination of pooling. Similarly, there have been claims that the requirement to expense compensatory stock options would have negative valuation implications for the high technology industry. Thus far, I am aware of no academic studies providing evidence consistent with this claim. On the other hand, Lys (1984) reports that full cost firms experienced unexpected share price declines on the day of the announcement of the elimination of full cost accounting. Lys can only speculate as to why there was a price decline because there were no direct cash flow consequences of the accounting choice. Amir and Ziv (1997) find that managers use the permitted discretion in the timing of the adoption of SFAS 106, *Employers' Accounting for Postretirement Benefits Other Than Pensions*, to convey private information and that the firms enjoyed a positive stock market reaction. In sum, there is no consistent empirical research supporting either claims of negative consequences from reductions in accounting choices or consistent with the claimed benefits of accounting choice.

In summary, the main potential benefits from accounting choice are: 1) providing managers more flexibility in communicating their private information about the firm, thus reducing adverse selection; 2) providing more flexibility for the writing of economically efficient, accounting-based contracts; 3) providing managers greater opportunity to represent faithfully the economic substance of the transaction or business, thus providing more informative financial data; and 4) potentially mitigating managers' use of costly real economic actions to achieve goals that could otherwise be achieved through accounting choice. The potential costs from accounting choice include: 1) providing opportunistic managers with more ways to achieve their goals; and 2) potentially increasing the complexity of financial reporting. To date, there is little or no research quantifying the trade-offs between these costs and benefits.

Based on the academic research on accounting choice, we can draw two conclusions. First, the potential costs of alternative accounting policies due to managerial opportunism will not necessarily be mitigated by eliminating accounting alternatives. There is

substantial empirical and analytical accounting research supporting the importance of incentives in determining the nature and content of the outcome of the financial reporting process. Because these incentives take many forms, can be addressed with many methods, and can be contradictory, the influence of such incentives may well dominate the process of providing financial statements and override any attempts to limit discretion by eliminating accounting choice.¹⁵ Nonetheless, the elimination of accounting choice would reduce benefits in other ways, as discussed above.

Second, although there is no definitive empirical work to date on the cost-benefit trade-offs for accounting choice, the analytical arguments supporting benefits are well accepted. Therefore, eliminating choices will result in costs to the users of financial reports. Furthermore, there is no direct support for the claim that managers who allegedly make opportunistic accounting choices (e.g., to increase their compensation) actually achieve their goals. Similarly, there is no consistent evidence that accounting choices have share price or firm valuation implications. In sum, there is more evidence supporting the benefits of accounting choice than there is evidence as to its costs, although there has been little effective analysis of the magnitude of the trade-offs.

¹⁵ In the debate about principles-based versus rules-based standards, Nelson (2003) provides evidence that managers achieve their private objectives with both types of standards, only the method is different.

VI. Academic Research Summary: Restatement Materiality Considerations

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The CIFiR's Developed Proposals 3-1, 3-2, and 3-3 are largely aimed at establishing the materiality threshold for restating financial reports with subsequently discovered errors. The proposals suggest that an underlying concern is that financial reports are currently corrected for errors that are not significant to investors. The Developed Proposals focus on creating a materiality standard that fundamentally relies on the concept of the total mix of information available to a reasonable investor.

A clear understanding of what is material to a reasonable investor is complicated by several factors. First, as noted in proposal 3-1, evaluation of materiality depends on the "total mix of information available". That is, materiality has many dimensions, and there is a difference of opinion about which are most relevant. Second, market responses to important materiality dimensions differ across years, suggesting that the opinions of the reasonable investors may change (Scholz, 2008). Third, one very important measure, the dollar impact of restatements on financial statements, has not been thoroughly studied in the academic literature.

This essay first discusses the reasons for the paucity of research using quantitative measures of materiality, and the limited results that do exist. Next, it discusses other measures of materiality.

Net Income Effects on Materiality

Until recently, quantitative effects on restated accounts, in particular net income, have not been available from either of the widely used restatement database sources, the GAO studies, or Audit Analytics. ¹⁶ Thus, researchers interested in quantitative materiality have had to collect and calculate income effects from companies' SEC filings, an extremely

¹⁶ Audit Analytics recently unveiled a database of net income effects for 2005-2007 companies trading on the NYSE, AMEX and Nasdaq National Market. They are working to extend this data back in time, as well as forward. Availability of this data will obviously allow much more materiality research, but it will take time for a body of work in this area to emerge.

challenging and time-consuming activity.¹⁷ Thus, it is not surprising that most researchers have been unable or unwilling to compile comprehensive quantitative datasets for the thousands of restatements announced in recent years.

Some researchers have analyzed hand-collected quantitative data for sub-sets of restating companies in some years. Palmrose and Scholz (2004) collected and analyzed data for about 500 restatements announced from 1995 to 1999. More recently, Plumlee and Yohn (2008a and 2008b) have collected data for about 1,300 restatements announced by companies trading on major exchanges from 2003 to 2006.

From 1995 to 1999, restating companies adjusted their net income by an average percentage of -19%. The average change in net income scaled by assets was -2.4%. By 2003, Plumlee and Yohn report that average change of net income scaled by assets is -.03%. The size of the difference in this average between the two periods suggests a reduction in average income effects sometime between 1999 and 2003. Plumlee and Yohn (2008a) document small further declines in 2004 and 2005, although the effect appears to increase again slightly in 2006. This data should be interpreted with some care because both studies include only companies trading on the major exchanges, but in the later period, this represents a much smaller proportion of all restatements (Scholz, 2008).

Market reaction studies using these data indicate that larger decreases in net income (adjusted for company size) are associated with more negative market reactions to restatement announcements in both periods (Palmrose et. al., 2004; Plumlee and Yohn, 2008b). Palmrose et al. (2004) also finds that when restatement effects are not quantified

¹⁸ Average changes in net income for sample quintiles and the related return for the quintile (in parentheses) are: -20.5% (-17%), -3.2% (-15%), -.8% (-8%), .2% (-2%) 12.5% (-4%)

¹⁷ Information about changes in affected account balances are not standardized, so each restatement observation must be considered individually. Further, the many restatements affecting both complete year(s) and subsequent quarters require accessing separate amended filings and summing the affected periods. To further complicate the process, a few companies do not provide both originally reported and restated amounts in the same document, so both original and amended forms must be used to calculate changes.

¹⁹ Note that 2004 and 2005 are years of ICFR implementation for accelerated filers and 2005 is also the year about 20% of restatements are to correct lease accounting.

in the original announcement, the market reaction is more negative. This result is likely due to the effects of uncertainty, and it has implications for proposals to limit restatements for quantitative effects only. On the other hand, larger decreases do not appear to trigger more litigation, after controlling for other restatement characteristics (Palmrose and Scholz, 2004).

Scholz (2008) documents the widely held suspicion that overall market reactions are greatly reduced in recent years, beginning in 2001. Given the consistent relation between larger income effects more negative market reactions, it is reasonable to speculate that the smaller income effects play a role in the average change in the reaction to restatement announcements.

Nonetheless, much is unknown about the relation between returns and the dollar change in reported income. For example, the market reaction seems to have shifted in 2001, so the common perception, that the change is mainly due to effects of SOX, passed in July of 2002, does not appear to be entirely accurate. In addition, while the number of overall number of restatements doubled from 2000 to 2001, companies with market returns available for study increased only from about 150 to 250. Further, in 2001, over 60% of restatements involved either fraud or core earnings accounts. These facts do not seem consistent with another common perception, i.e., that the reaction shift occurred because market participants were overwhelmed with large numbers of inconsequential restatements. Unfortunately, there have been no studies focusing deeply on this period, to provide more information about other drivers of the shift in market reactions. It is likely, however, that economic conditions associated with the deflation of the technology bubble played a role.

Finally, there is much speculation that an effect of SAB 99 (December 1999), *Materiality*, was to decrease the net income effect of restatements. While there are no thorough studies of this question, simple comparisons of net income effects do not show

²⁰ The CRSP database, from which returns are obtained for these studies, only follows companies trading on the NYSE, AMEX and NASDAQ National Market exchanges.

a shift from restatements announced 1997-1999 to those announced in 2000, the year immediately after issuance (Scholz, 2008). Of course, this analysis cannot speak to possible changes in interpretation in later years.

Other Materiality Measures

Prior research reports several qualitative factors as apparently material to investors. Not surprisingly, restatements involving fraud are typically associated with returns that are more negative and more litigation (Palmrose and Scholz, 2004; Palmrose et. al., 2004; Scholz, 2008). The CIFiR developed proposals tend to characterize of restatements as resulting from errors, but clearly, intent to deceive is an important factor in the mix of information material to users.

A limitation of the available empirical evidence is that the quantitative effects of restatements on specific accounts (e.g. revenues) have not been studied, only income effects. This limitation is likely to remain, due to the difficulty of obtaining such data. This limitation notwithstanding, evidence suggests that the type of account restated might matter to investors. For example, research finds that restatements of revenue are more salient to financial statement users than other accounts (Palmrose and Scholz, 2004; Gleason et al., 2008; Scholz, 2008). There is also evidence that some core expense accounts are associated with negative market reactions and litigation (Palmrose et al., 2004; Scholz, 2008). Nonetheless, neither revenue nor core expense accounts are consistently associated with market reactions after controlling for other restatement characteristics (Palmrose et. al., 2004; Plumlee and Yohn, 2008b).

There is no evidence that restating only non-core earnings accounts and reclassifications elicit a discernable negative market reaction. Nor is there evidence that restating non-core earnings in addition to revenue or on-going operating expense causes a more negative reaction. That is, the number of accounting issues or account groups affected by a restatement is typically not associated with the market reaction. Because these results are

²¹ Core expenses are on-going operating expenses, non-core expenses are non-operating or one-time or special items.

statistical generalities, specific examples of revenue restatements that do not trigger a reaction or non-core earnings restatements with severe consequences are not difficult to find.

Several of the CIFiR proposals address the length of the misstated period. They suggest either not restating some older periods or not adjusting interim periods in some situations. The income effects studies discussed above do not address the distribution of dollar effects across different periods of a misstatement, so available evidence cannot speak directly to how a current investor would assess older misstatements. Nonetheless, it does appear that restatements involving longer periods have a less negative market reaction, all else equal. In later years, this is partly due to lease restatements and restatements by accelerated filers adopting SOX 404 ICFR standards. Both of these groups tended to restate long-standing errors and both had less negative market reactions, on average. Moreover, the association between longer restated periods and less negative reactions is not due entirely to restatements caused by improper lease accounting or SOX 404.

The evidence discussed in the preceding paragraph is consistent with several scenarios. From a quantitative perspective, it may be that misstatements that are not large in any one period can persist without detection for longer periods, and investors are reacting to a relatively small amount in any given period. It may also be that the reversing nature of accruals in GAAP accounting causes errors to reverse over longer periods and investors react to a smaller net effect over a longer period. Of course, there may be other explanations for this association as well.

Minimal research investigates issues associated with the restatement of interim versus annual financial statements. However, Palmrose et al. (2004) find that the market reaction does not differ for restatements involving annual compared to interim-only financial statements.

In sum, while there is some evidence to help discern what a reasonable investor finds material, the picture is not clear, particularly when considering quantitative measures. Consistent evidence supports the notion that a larger income effect is worse, but evidence regarding how that effect is distributed over time and how it interacts in the mix with non-quantitative measures is incomplete. The recent availability of new sources of data will allow more thorough studies, but some time will be required for those to be completed and assessed.

VII. Academic Research Summary: Professional Judgment Framework

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Motivated by concerns such as "(i)nvestors' lack of confidence in the use of judgment" and "(p)reparers' and auditors' concern regarding whether reasonable judgments are respected" (p. 63) the Committee proposes a framework for making and evaluating professional judgments. The framework's principal objective is identification of standard processes for making professional judgments, which the Committee believes will provide a financial reporting environment that promotes preparers' and auditors' use of judgment and encourage regulators to evaluate judgment practices consistently. My comments on this framework fall into four general areas: 1) the important impact of economic incentives and motives on professional judgments, 2) the current professional judgment framework found in the auditing standards, 3) the nature of expertise, and 4) the implications of viewing judgments with hindsight.

In most professional judgment settings, a range of acceptable opinions or solutions exists. For example, the Committee observes that determining the appropriate reporting for derivatives "...could be a complex judgment to make, and one on which experienced accounting professionals can have legitimate differing, yet acceptable, opinions." (p. 63). In evaluating the appropriateness of professional judgment, it is critical to recognize that decision makers rarely make important judgments in a setting devoid of economic motivations and incentives. For example, preparers face strong economic motivations to meet earnings expectations and maintain earnings growth trends. Auditors must meet their professional obligations to maintain objectivity and independence yet retain quality clients who are necessary for their firms' economic viability. This confluence of legitimate differences in individual judgments with economic motivations has been the subject of research in psychology, which finds that decision makers use ambiguity in facts to justify a desired conclusion. This research leads us to conclude that when preparers and auditors face judgments where there is a range of acceptable conclusions their judgments tend to be biased in favor of their economic self-interest.

The bias in professional judgments as a result of economic motivation has actually been found across a wide variety of settings and decision makers. Research into the judgments of auditors has found that they are more likely to make decisions that favor their clients when they have an economic incentive to favor the client, and the ability to justify the client-favored treatment. Managers have been shown to make decisions like formulating accounting estimates that allow them to meet earning forecasts. Finally, analysts with incentives to maintain client relations choose not to adjust for bias in management forecasts of earnings in order to maintain those relationships.

While the Committee understandably advocates accounting standards that allow investors to perceive the underlying economic conditions of a firm, there exists strong evidence that the latitude inherent in professional judgment is highly susceptible to biases due to the inevitable economic pressures such as those faced by preparers, auditors, and analysts in their competitive environments. It is reasonable to expect that these economic conditions will continue to exist even in the presence of the most well designed judgment framework. The guidance in the report regarding the proposed professional judgment framework neglects this critical dimension.

The Committee envisions the proposed framework as a way to help preparers select appropriate accounting standards particularly in "gray" areas of GAAP, assist in implementation, and evaluate the sufficiency of the evidence used to support conclusions. It recommends development of a framework that specifies a process by which preparers or auditors with the appropriate levels of knowledge, experience, and objectivity form opinions. The Committee explicitly encourages "the SEC and the PCAOB to issue policy statements that describe a framework for the exercise of professional judgment..." (p. 66). Many elements of the proposed framework correspond to elements found in the auditing standards currently promulgated by the PCAOB. These standards have evolved over the years to serve as a framework for auditors in determining appropriate audit opinions across a broad set of circumstances. The current audit standards include guidance regarding gathering and evaluation of evidence and the level of required expertise and supervision. Similar to the role of the proposed framework, compliance

with the auditing standards is typically asserted as auditors' defense in litigation and regulatory actions.

Several additional decision elements in the auditing standards are not considered directly by the Committee. In the audit context, risk arises from a variety of sources including the inherent risk that a particular account might be misstated or the risk of failing to detect errors that exist in financial statements. These risks, along with the materiality of financial statement items, determine the amount of effort an auditor directs toward particular audit areas. Concepts similar to risk and materiality would prove useful in guiding preparers in professional judgments such as their selection and application of GAAP. The auditing standards also directly address evaluation of estimates, which could prove useful to preparers. It may be constructive for the Committee to consider the current audit standards as a model framework for the judgments made by preparers.

One of the difficulties preparers face is a limited experience with application of accounting standards for reasons such as the recency of their promulgation or changes in the company's business environment to which a standard now applies. A broad set of research shows that individuals considered experts can match the underlying principles to the facts of situations and have an easier time transferring their knowledge across decision settings. In addition, research shows that experience does not directly lead to expertise. For example, individuals with the same level of general experience are likely to have different specific experiences and training, leading to different levels of knowledge and expertise. It has also been demonstrated that effective learning requires feedback specific to the performance of the task, not simply observing outcomes. Therefore, while preparers have experience with selecting and applying accounting standards, those experiences may not generalize across standards. In addition, they are unlikely to have seen application of new standards, which means it will be difficult to learn how to apply them due to the absence of the feedback required for learning. These limitations are inherent in individuals. The mere availability of a decision framework will not provide preparers with the specific experiences necessary for them to gain the knowledge necessary to select and apply new accounting standards. Help for preparers might be

found in provision of numerous detailed examples that carry authoritative weight and accompany the issuance of new accounting standards. Regulators may be reluctant to provide such examples for fear that they become *de facto* standards, which would diverge from the principles-based approach advocated by regulators.

The Committee correctly points out the important distinction between the roles and perspectives of those who make judgments and those who evaluate them. In that spirit, the Committee suggests that hindsight "should only be used based on the facts reasonably available at the time the annual or interim financial statements were issued." Advocating hindsight may be imprudent even when it is based on readily available facts. Third parties such as jurors have been shown to exhibit what is known as "hindsight bias", which refers to individuals' tendency to overestimate the extent to which they would have foreseen an outcome. That is, even based on the known facts, the *ex post* assessment of the likelihood of the outcome is overestimated. In jury settings, defense lawyers can employ techniques to somewhat mitigate hindsight bias. However, regulatory settings may not have knowledgeable advocates available until the process is well underway, imposing an unnecessary cost on preparers and auditors.

In summary, the concerns expressed by the Committee reflect the challenges faced by preparers and auditors in making judgments that may be second-guessed by regulators. Implicit in the current auditing standards is a framework that could serve as a model for one developed specifically for preparers. Economic incentives and motivations provide strong challenges to the ability of any professional judgment framework to result in judgments that will not result in disputed conclusions. Other issues such as the difficulty in becoming an expert in an area where there neither sufficient knowledge nor opportunity to gain the specific experience necessary suggest a broader set of issues may need to be considered by the Committee as it contemplates its call for a professional judgment framework.

VIII. Academic Research Summary: Transition, Education and Assurance Issues Related to XBRL

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Overview

In developed proposal 4.1, the Committee on Improvements to Financial Reporting (CIFiR) recommends that the SEC phase in the use of XBRL by requiring the 500 largest companies to furnish XBRL Related Documents (the files required for presentation of tagged financial statement information). Companies would be required to add XBRL tags to all items in the financial statements individually, but would be allowed to block tag each footnote as a whole. The CIFiR makes no explicit recommendation regarding assurance over XBRL Related Documents, but the fact that such documents are to be furnished rather than filed indicates that no assurance is recommended initially. Based on current practice, the majority of companies would initially use a "bolt on" approach where the XBRL tags are added after the financial statements have been prepared and audited.

Transition for Preparers

If, as predicted, preparers begin with a "bolt on" approach, the most significant decision will be whether to use the taxonomy as is, or to develop any extension tags. Part of this decision will be predicated on the quality and specificity of the XBRL Taxonomies and part will depend upon specific company considerations. While the "bolt on" approach would have limited impact on the preparer's financial statement preparation process, the movement towards introducing tagging earlier into the process could have consequences for both the preparer's internal process as well as the ability to provide more information to the market place in the future. The adoption and integration of new technologies, especially those with potential to impact knowledge sharing across the organization is difficult and requires the involvement of many levels within the organization (Newell et

al., 2000). In addition, the full benefits are not achieved unless both the organization and the technology are appropriately adapted during implementation (Lassila, 1999).

Impact on Users of Financial Information

Accounting research shows that both the presentation of financial information and the experience level of users of that information impact decision making. Hodges et al. (2004) find that using search-facilitating technologies like XBRL facilitates nonprofessional, computer literate use of financial information. They also find that XBRL increases both the transparency and the impact of management's financial choices. Hutton et al. (2007) find that the use of more transparent reporting methods also reduces the likelihood that managers engage in earnings management.

Archival research indicates that information affects users' decisions more when it is recognized than when it is disclosed only in the footnotes (Barth et al., 2001; Holthausen and Watts, 2001). In a behavioral study, Maines and McDaniel (2000) find that the format of financial information affects nonprofessional investors' decisions. Nelson and Taylor (2007) suggest that financial information is more useful to users when they are required to reformat or reconcile it than when it is provided directly. The implications of this research are relevant because XBRL will allow users to access information more easily and as separate items rather than as complete financial statements.

Assurance

As noted, the current CIFiR recommendation does not speak to assurance. Consequently, care needs to be taken to insure that users understand that XBRL related documents are unaudited. In a study of firms using the internet to link audited to unaudited information, Hodge (2001), finds that users tend to blend the audited with the unaudited information.

Assurance over XBRL Related Documents is an important issue that will likely be considered in the future. Boritz and No (2007) discuss the time and detail needed to provide assurance when the tags are added after the financial statements have been audited. In addition, research into providing data level assurance should prove helpful

when tags are added earlier in the financial reporting process (Boritz and No, 2003; Nicolaou et al., 2003). Another stream of academic research examines issues related to continuous auditing (Alles et al., 2002; Rezaee et al., 2002), which is relevant if XBRL allows preparers to provide financial statements more often than quarterly.

Education and Awareness

The movement toward XBRL Related Documents as part of an SEC filing (or furnishing) will require an extensive educational and awareness effort. In a fall 2007 survey Grant Thornton LLP found that just over 50% of CFOs indicated they were even aware of XBRL. In a survey of manufacturer CEOs, Grant Thornton found that only 17 percent felt prepared for XBRL. A survey of manufacturer CFOs indicated that just 17 percent felt prepared to adopt XBRL by 2008 if mandated by the SEC, while over 45 percent believe it would take them until at least 2010.

Anecdotal evidence indicates that accounting academics also lack familiarity with XBRL and few are currently including any type of coverage in their classes. Research (Hodges et al., 2007) also indicates that users are unlikely to use the technology without sufficient awareness and education.

IX. Academic Research Summary: Educational Implications of the Report of the SEC Advisory Committee on Improvements to Financial Reporting

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The Report of the SEC Advisory Committee on Improvements to Financial Reporting (CIFiR) provides very few direct and explicit recommendations related to accounting education. Nonetheless, numerous policy and practice recommendations of the Committee, if implemented, would have significant implications for accounting curriculum content and pedagogy. Most important among the Committee's recommendations are those pertaining to the reduction of rules complexity, and the international convergence not only of rules, but also of a new conceptual framework for accounting. Educational implications (or "indirect effects") of those recommendations are the focus of our comments that follow.

To frame our comments, we first describe the current education model. While the recommendations of the CIFiR advocate a simplification of GAAP, it is important to recognize that many faculty today teach only "simplified rules". This is not only because of a lack of time to broach the multi-levels of complexity found in standards, interpretations, bulletins, and discussions of emerging issues, but also because educators' primary responsibility is to provide students with a broad education as a foundation for career success, not vocational training. It is the profession's responsibility, through CPE and on-the-job-training, to build on this foundation and bring their employees to the operational level of detailed knowledge necessary to fulfill their role in society.

Nonetheless, it has become more difficult over time to teach even basic accounting concepts, with representative examples and applications of rules. Accounting faculty struggle to explain and justifying specific rules in a rational manner given the lack of a coherent conceptual framework. The existing conceptual framework is old and dated, the

complexity of the transactions and underlying instruments has changed, and, perhaps most critical, standard setters have not adhered to a consistent set of guiding principles or concepts when establishing the rules, interpretations, and industry exceptions that drive professional practice today.

Ideally, faculty educate students in the logical thought process that marks the accounting profession as both an art and a science. Faculty should be able to explain to students how to analyze the economic substance of a business event consistent with the basic definitions of an asset, liability, revenue, or expense and then proceed to rationally determine the proper handling of the item. However, so many exceptions are made in rules setting, that a solid conceptual foundation no longer appears to exist. Instead, it seems that everything has become an exception. Some faculty instruct students in how to conduct professional research, but too often this is an exercise in how to find the sentence in some source of authoritative guidance that defines the exception.

Evidence that the profession no longer recognizes a consistent conceptual framework is apparent in new initiatives to redefine assets, liabilities, and equities and to achieve convergence internationally. Educators as well as practicing professionals critically need an international effort resulting in a well-documented and clearly explained guiding conceptual framework. Faculty cannot educate students in the logical thought process that identifies the profession without such a framework. To default to memorization of rules and endless exceptions, or to the use of technology to search for those exceptions, is inconsistent with the mission of higher education.

Developing a new, internally consistent, and internationally accepted conceptual framework will be a challenge, but a challenge that cannot be postponed. Accounting educators are well positioned to help in this undertaking. Educators are extensively trained and practiced in the rigorous analyses and logical explanations of complex phenomenon. The formation of a joint American Accounting Association–European Accounting Association committee to work with similar professional and educational bodies would facilitate the advancement of this critically important agenda.

Other Comments Regarding Specific Concerns Noted by the Committee:

Complexity – The committee states, "Undergraduate and graduate education in accounting have traditionally emphasized the mechanics of double entry bookkeeping, which favors the use of detailed rules rather than the full understanding of relevant principles. The same approach is evident in the CPA exam, as well as continuing professional education requirements."

We both agree and disagree with elements of the Committee's observations. From our discussion above, it should be clear that the current state of accounting education is not congruent with the desires of the academic community. Many, if not most, of the academic community have made great strides over the last two decades to divorce themselves from what the Committee refers to as the "traditional emphasis on the mechanics of double entry bookkeeping...(and) detailed rules..." All leading accounting education programs, as well as a vast majority of all programs, currently emphasize "concepts over rules", but a conceptual framework that is inadequate for the times hampers those efforts. Only a minority of accounting education programs continue to measure quality by their students' achievement on the CPA exam. Very few programs offer CPA review courses for credit and AACSB Accounting Accreditation Standards (written by educators for educators) certainly place minimal emphasis on CPA exam pass rates.

International Convergence - The imminent convergence of international and U.S. accounting and auditing standards offers both a challenge and an opportunity for educators.

A rigorous, well-articulated conceptual foundation upon which to frame discussions of accounting, auditing, and taxation is a significant advantage. The cost to educators in assisting in this Herculean effort, and the transitional costs of re-framing accounting, auditing, and taxation course materials to optimally leverage the new conceptual framework is significant also. However, the academic community would welcome the opportunity to incur these costs in order to enhance our profession.

In the interim, operational issues abound. With multiple inconsistent and exception-ridden concept statements and standards, there is a risk that textbooks and faculty will emphasize rules (given the limitations of the current conceptual framework). Pressure is already mounting from some members of the practice community to teach "international rules"...so they (CPA firms, audit managers, etc.) do not have to take on the entire burden. If, in a false sense of trying to be "responsive" to the practice community, faculty allocate more time and attention to "teaching the rules" the future state of education will return to what the Committee referred to as the "traditional model" and the profession will have lost the gains of the last two decades.

The Committee should be made aware of the problems faculty must address in order to resolve the problems noted to this point. How should educators integrate the two sets of standards and two sets of exception-ridden concept based statements into the normal required accounting curriculum? (Note that IFRS labors under another type of exception - a growing number of exceptions unique to specific countries.) Should international standards be integrated with US GAAP in multiple undergraduate and graduate classes on a compare and contrast basis? Is a standalone class preferable and what content should be incorporated? What advice do we have for textbook writers, and are there adequate incentives for them to invest heavily in these uncharted waters on a timely basis? What can be done to provide incentives for creative case development or curriculum innovation at the national or the institutional level? When will the CPA examination start to incorporate international issues, and what should be examined? While programs should not focus curriculum on the content of the CPA exam, why are accounting educators not contributing to the dialog regarding what is appropriate for examination? Would it not be better to have educators involved in what is on the CPA exam, than have educators tailoring curriculum to what others chose to examine?

A big picture issue that the academic profession must address is "defining the role of higher education in accounting". It has been nearly two decades since we have last addressed this matter collectively under the aegis of the Accounting Education Change Commission. Since then, in an effort to be responsive to the practicing community, educators have changed incrementally here and there, adding on this room to the "house", another, and another...while the (conceptual) foundation has crumbled. The academic community needs to address again whether this strange looking structure without foundation (our current curricula) serves the current and future needs of our students and society. We suggest the appointment of a Blue Ribbon American Accounting Association committee to lead a community-wide dialog to identify the knowledge and skill set collegiate accounting education should seek to provide. The committee should also identify appropriate pedagogy to develop the identified knowledge and skill set.

Activity-based Accounting Concepts and Rules - The Committee emphasizes that GAAP should focus on activities rather than industries, and the implication is that classroom time should also be focused on activities rather than industries. The current state of accounting education is today by-and-large consonant with this sentiment. For example, revenue-recognition and matching concepts are taught by focusing on activities that generate revenue or create an expense from a general, operating perspective, not from the viewpoint of a particular industry. Similarly, teaching students how to audit revenue and expense transactions focuses on operating activities as the basis for transactions, not on specific industries.

Conceptual Approach 2.B - The committee states, "Further, the Committee is considering a recommendation related to the education of students, as well as continuing education of users, preparers, and auditors, etc. The recommendation would encourage understanding of the economic substance and business purposes of transactions, in contrast to mechanical compliance with rules without sufficient context."

As previously noted, most educators are receptive to this approach. Past and potentially pending impediments to progress in this regard have also been noted above. One area of concern, however, is the content and delivery of continuing education. One may find that the continuing education environment becomes even more rule driven and "current problem" focused than the classroom where the accounting student earned his or her

degree. Delivery of the content may be by a practitioner specifically for a practitioner, resulting in a rule driven, "what is the answer" focus that conflicts with what we are attempting to accomplish in the accounting classroom.

Standards Codification - If a new conceptual framework is forthcoming and the issues of complexity and convergence are resolved, the codification and continuous updating of the codification of current standards would be of great benefit to educators. Students could be effectively taught how to conduct professional research and exercise professional analytical thinking to develop logical extensions consistent with a principles-based mandate.

The codification initiative will yield lesser dividends if it simply allows quicker electronic searches of exception-ridden rules and interpretations, especially so if the codification is incomplete and not continuously updated.

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