American Accounting Association's Financial Accounting Standards Committee Response to Joint Working Group of Standard Setters Invitation to Comment on Recommendations on Accounting for Financial Instruments and Similar Items

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The Financial Accounting Standards Committee of the American Accounting Association (hereafter the Committee) is charged with responding to requests for input from standards setters on issues related to financial reporting. The Committee is pleased to respond to the Joint Working Group of Standard Setters (JWG) invitation to comment on "Recommendations on accounting for financial instruments and similar items" (hereafter the Proposal). The comments in this letter reflect the views of the individuals on the Committee and not those of the American Accounting Association.

Our response addresses four specific issues about the Proposal: scope, elimination of hedge accounting, transfers of financial instruments, and performance measurement including fair value interest. The Proposal differs substantially from the FASB's December 1999 Preliminary Views regarding these issues. The Committee previously stated its overall views on fair value accounting for financial instruments in our comment letter on the Preliminary Views. In particular, we support the development of a fair value accounting system for financial instruments and similar items whenever it is practical to estimate fair value. Estimation practicality is discussed in the following section.

1. Scope

The Committee is concerned by the restricted set of financial instruments that are proposed to be fair valued in the Proposal. Our concern is motivated in part (but not entirely) by the proposed elimination of hedge accounting. As discussed in Section 2, the elimination of special accounting for financial instruments that are economic hedges will result in economically non-representative income volatility in the absence of fair value accounting for hedged items. Broader fair value accounting for hedged items reduces this problem.

The Committee believes that the only valid conceptual basis for excluding financial instruments from fair valuation is that estimation of fair values is not practical in the sense that fair values are likely to be less accurate measures of value than are amortized costs. In fact, we would include within the scope of this project any financial instrument-like contract that is amenable to fair valuation including insurance contracts, leases, servicing rights, and firm commitments. We would also include intangible assets that are associated with financial instruments (e.g., core deposit intangibles) whenever fair values are more reliably observable for the bundle of the financial instrument and the associated intangible than for the financial instrument alone. We

expect this to be the case when there is an active market for the bundle but not for the financial instrument alone.

A specific example of financial instruments that we would include within the scope of this project using our sole criterion of "practicality" discussed above is insurance contracts. We recognize that insurance contracts involve some significant measurement issues that are different from the measurement issues associated with other financial instruments. However, we do not believe these differences make their fair valuation any less practical and so do not justify their exclusion from the scope of this project. Rather, we believe that any specific measurement guidance that is required for insurance contracts should be provided in a separate project that takes as given and refines as necessary the fair valuation approach developed in this project.

2. Elimination of Hedge Accounting

The JWG proposes eliminating "special accounting for financial instruments that are entered into as part of risk management activities" (paragraph 153). In this document, we refer to such "special accounting" as hedge accounting. The Committee opposes the JWG's position for financial instruments that hedge: 1) financial instruments and similar items that are not fair valued under the Proposal, 2) non-financial instruments, and 3) anticipated transactions (hereafter non-financial exposures).[1] In the discussion below, we assume that hedging instruments are financial instruments that are fair valued under the Proposal but that hedged non-financial exposures are not directly fair valued. Under this assumption, hedge accounting would require that gains and losses on hedging instruments be deferred in some fashion until the corresponding income or cash flow effects of the hedged non-financial exposures are recognized. We make no assumptions about the many complex details involved in developing a hedge accounting system, such as whether the deferral of gains and losses should be limited to the effective portion of the hedge, how to assess hedge effectiveness, and where to report deferred gains and losses.[2] We emphasize, however, that the resolution of such details might alter some Committee members' views as to the relative desirability of maintaining hedge accounting. In particular, some members believe that hedge accounting should be allowed only for the effective portion of overall effective hedges.

The Committee recognizes that hedge accounting has advantages and disadvantages given fair value accounting for financial instruments. In the following sections, we describe these

[1] The Committee recognizes that allowing special accounting for "cash flow hedges" such as hedges of forecasted transactions would involve a considerable deviation from the fair value approach of the Proposal. As discussed below, there can be sound economic reasons for (especially non-financial) firms to hedge cash flow volatility on non-financial assets or forecasted transactions, and so we support hedge accounting for such hedges.

[2] Although the Committee does not take a position on the specific nature of the accounting for such hedges, we note that there are at least three possible forms of hedge accounting consistent with our definition of hedge accounting. First, deferred gains and losses on the hedging instrument could be recorded in an owners' equity account such as other comprehensive income consistent with cash flow hedge accounting in the U.S. under SFAS No. 133. Second, deferred gains and losses on the hedging instrument could be recorded as adjustments to the basis of hedged items. Third, deferred gains and losses on the hedging instrument could be recorded as separate liabilities and assets, respectively. A significant disadvantage of the third approach is that these liabilities and assets do not by themselves meet the conceptual definitions of liabilities and assets. Under each of these forms of hedge accounting, deferred gains and losses ultimately could be recorded in income in various ways.

advantages and disadvantages, and conclude that the advantages of hedge accounting outweigh the disadvantages.

Advantages of hedge accounting: The main advantage of hedge accounting is that changes in the value of the hedging instrument and the hedged item are "matched" on the income statement. This matching reduces the volatility of earnings, as discussed below in the section titled, "Does elimination of hedge accounting increase earnings volatility?" The Committee views a reduction in accounting volatility as an advantage because the purpose of hedging (typically) is to reduce the volatility of earnings (or cash flows). Thus, an accounting system that reports higher volatility earnings for firms that hedge does not present a representationally faithful view of the firm's risk management activities. Note that the Committee does not view the lesser volatility associated with hedge accounting as an advantage *per se*. The lesser volatility is an advantage only to the extent that it better reflects the underlying economics of hedges.

Bernard, Merton, and Palepu (1995) note that the effect of fair value accounting on earnings volatility depends on the completeness of fair value accounting throughout the balance sheet. They also argue, similar to our previous comment, that total aggregated earnings will not accurately reflect the volatility of the firm's net economic exposure under partial implementation of fair value accounting as envisioned in the Proposal.

Disadvantages of hedge accounting: The main disadvantage of hedge accounting is that hedge gains and losses must be initially reported somewhere other than in net income. If these gains (losses) are deferred as adjustments to the basis of the hedged item or as separate liabilities (assets) rather than in owners' equity, then hedge accounting effectively yields a mixed attribute model for non-financial exposures. Non-hedged non-financial exposures are typically carried at cost or amortized cost. In contrast, hedged non-financial exposures would effectively be carried at an approximation to fair value, because the deferred gains (losses) on the hedging instrument are recorded either directly or indirectly as offsetting losses (gains) on the hedged item. Thus, the net amount reported on the balance sheet for the hedged items and the deferred gains and losses approximates the fair value of the hedged item.[3] Another disadvantage of hedge accounting is that there is discretion involved in deciding what is or is not a hedging instrument.

Summary: Our opposition to the proposal to eliminate hedge accounting is based on our belief that reported earnings volatility that results from hedge accounting is economically descriptive and an advantage that outweighs the balance sheet disadvantages of hedge accounting. It is worth noting that the Committee's views are consistent with public opposition to fair value accounting. In response to the 1996 FASB exposure draft on fair value accounting, 61% mentioned increased earnings volatility as a result; only 44% of the responses mentioned increased balance sheet volatility.[4] Our concerns with the elimination of hedge accounting are also consistent with (though generally narrower than) the concerns raised in the dissents of the French and German delegations to the Proposal.

[3] Obviously, the net amount reported on the balance sheet will not generally be equal to the fair value of the hedged item. For example, the two will not be equal when the hedge is not entered into coincident with the origination of the underlying asset or liability, or when the hedge is taken off before the asset is sold (liability is repaid).
[4] See Schrand and Smithson, 1999.

Our objection to the elimination of hedge accounting is related to the scope issues discussed in Section 1 above. If all hedged items were reported at fair value, then the income statement would reflect changes in the fair values of both hedging instruments and hedged items, and the Committee would support the elimination of hedge accounting for hedges of financial instruments recorded at fair value. However, the Proposal envisions fair value accounting only for a subset of financial instruments. We object to the elimination of hedge accounting for hedging instruments that effectively hedge exposures that are not fair valued.

Our objection to the elimination of hedge accounting does not imply that we believe firms should be allowed to "hide" deferred gains and losses on the balance sheet. The Committee believes that information about changes in the fair value of hedging instruments is relevant and should be disclosed. However, the Committee does not believe changes in the fair value of hedges should be included in income until the matching change in the fair value of the hedged item is recognized.

In the next two sections, we describe empirical evidence that collectively supports our opposition to the elimination of hedge accounting. First, we describe empirical evidence that fair value accounting increases earnings volatility in a way that is inconsistent with the impact of the hedge on the firm's risk. Second, we discuss empirical evidence that demonstrates economic costs associated with earnings volatility.

Does elimination of hedge accounting increase earnings volatility?

Francis (1990) provides the most direct evidence about the impact of fair value accounting on earnings volatility. Using data collected from 76 commercial banks, Francis simulates earnings over time for each bank with and without hedge accounting. She assumes banks hedge 100% of their one-year, five-year, and over five-year gap, but hedge accounting is permitted only for hedges of one-year gap. She shows that earnings are significantly more volatile when gains and losses on hedges are recognized immediately (no hedge accounting) rather than deferred (hedge accounting). Over 90% of the banks have more volatile earnings for four different measures of earnings. The results remain when she assumes hedge ratios as low as 50% of banks' gap positions.

Barth, Landsman, and Wahlen (1995) find that fair value accounting for financial instruments in the absence of hedge accounting would significantly increase the volatility of banks' capital and reported earnings, and so raise the probability that they violate capital requirements. The study is based on annual samples with between 26 and 137 banks over the 20-year period from 1971 to 1990. The authors create partial fair value financial statements using the fair values of investment securities provided in regulatory reports. While the mean unrealized securities gain is only $0.005 per share for the overall sample, the variance of securities gains and losses is substantial. Reflecting this result, the authors estimate that there are 151 bank-year observations (7.6% of the sample) in which the bank would have violated regulatory capital requirements under fair value accounting but not under historical cost accounting for investment securities. In contrast, only 13 bank-year observations violate capital requirements under historical cost accounting but not fair value accounting. Moreover, the effect on annual income volatility is

sizeable, with the variance of net income increasing by 38% on average. A caveat to these results is that managers might have chosen to buy and sell different securities during this time period had fair value accounting been in place.

In summary, the research discussed above strongly suggests that fair value accounting for financial instruments in the absence of hedge accounting increases earnings volatility. Moreover, it is likely that the increased income volatility is economically non-descriptive. It is important to note, however, that the Francis (1990) paper is the only paper (we are aware of) that documents that hedge accounting produces accounting earnings volatility that more accurately reflects the risk reduction effects of the underlying hedge transaction. In her paper, hedging increases reported earnings volatility in the absence of hedge accounting despite a certain decrease in economic exposure that is manufactured by the author through the design of the simulation. In contrast, the Barth, Landsman, and Wahlen (1995) study cannot ensure that the underlying transactions that resulted in greater earnings volatility under fair value accounting had reduced the firm's economic exposure.

Is accounting volatility costly?

Many empirical papers document a positive association between earnings (or cash flow) variability and a firm's cost of capital, or variables related to the cost of capital. These results imply that volatility is an important firm characteristic that equity and debt market participants assess. Thus, the Committee believes that standard setters should be concerned if financial statements do not accurately reflect the economics of hedging transactions and create accounting volatility that does not reflect the volatility of firms' net economic exposures. Financial statements that are not economically descriptive create costs in the sense that financial statement users are forced to gather additional information in order to understand the results of the firm's activities.

Before discussing the empirical papers that document a positive association between volatility and a firm's cost of capital, it is worth noting that some papers examine the costs of earnings volatility, and others examine the costs of cash flow volatility. None attempt to distinguish the incremental cost of earnings volatility over cash flow volatility, or attempt to determine the costs of earnings volatility that does not represent volatility in fair value changes. Moreover, another caveat to this research is that the theoretical justification for the association between volatility and a firm's cost of capital is limited. Trueman and Titman (1988) show that earnings volatility increases estimation errors by claimants about underlying cash flows, which increases the assessment of default probability, which increases the cost of capital. Barry and Brown (1985) also theorize a relation between discount rates and volatility because volatility is associated with estimation risk.

1. Michelson, Jordan-Wagner, and Wootton (1995) report differences in mean annualized stock returns and betas for firms classified as smoothers and non-smoothers. Firms are classified as smoothers if the coefficient of variation in a one period change in "income" is less than the coefficient of variation in the same period change in sales. Various measures of income are employed. The sample firms are among the S&P 500. Returns

and betas are calculated over the ten-year period from 1982-1991. For this sample, the authors conclude that smooth income is associated with lower annualized returns and lower market risk. The authors also document a positive association between smooth income and firm size.

2. Bitner and Dolan (1996) document a positive association between Tobin's q as a measure of firm value and the smoothness of a firm's earnings (net income), controlling for earnings growth, gross profit margins, leverage, asset size, and industry membership. In addition, the paper investigates whether the market valuation is affected by concurrent changes in R&D (as a proxy for discretionary spending) or income associated with changes in the application of other accounting principles (as a proxy for earnings management). The purpose of this investigation is to determine whether the market distinguishes between earnings that are naturally smooth and those that are managed to be smooth. Artificial smoothing resulting from accounting changes is associated with a negative impact on q value. All tests are done using both net income and operating income. The sample includes 218 firms, mostly in manufacturing industries. The authors suggest that the market valuations of smoothness imply that the market views volatile earnings as a signal of systematic risk.

3. Stevens and Jose (1992) find a significant positive association between the stability of a firm's dividends (around an underlying growth trend) and its firm value, again using Tobin's q as a measure of firm value. This association holds only when the firm has stable earnings to match the dividend policy.

4. Beaver, Kettler, and Scholes (1970) report that earnings volatility is positively associated with beta.

5. O'Brien and Bhushan (1990) find that market assessments of unsystematic (diversifiable) risk are negatively associated with analyst following (and lower analyst following is associated with a higher cost of capital).

6. Minton and Schrand (1999) and Gebhardt, Lee, and Swaminathan (1999) examine the associations between cash flow and earnings variability, respectively, and a variety of proxies for a firm's cost of capital such as bid/ask spreads, bond ratings, and *ex ante* measures of risk premia. Both papers find that higher variability is associated with higher costs.

The empirical evidence just presented suggests that standard setters should be concerned about creating accounting volatility that does not reflect the volatility of firms' net economic exposures. Volatility is an important firm characteristic that equity and debt market participants should be able to accurately assess using the financial statements. In addition, firms oppose increased volatility on the practical grounds that it can create real costs due to the existence of incomplete contracts that rely on accounting numbers. Such contracts include explicit compensation and debt contracts or implicit regulatory contracts. One may question whether standard setters should be concerned about the effects of increased accounting volatility on existing contracts because these contracts could be rewritten after new rules are proposed making

the documented “costs” a temporary phenomenon. However, the Committee believes that the elimination of hedge accounting would result in contracting parties having to adjust economically nondescriptive accounting numbers on an ongoing basis to recreate hedge accounting, and that this would be a needlessly inefficient outcome.

Following is a summary of empirical evidence, based on event studies, that documents negative stock price reactions to accounting volatility-increasing events, even when these events do not reflect a change in economic exposure. The results of these studies suggest that equity investors believe the increased accounting volatility imposes real costs on the firm, explaining the lower stock price valuation.

1. Collins, Rozeff, and Dhaliwal (1981) document cross-sectional variation in negative abnormal returns related to the adoption of SFAS No. 19 for oil and gas producing companies. The expected effect of SFAS No. 19 on the financial statements for firms using full cost accounting was reduced retained earnings, increased debt-to-equity ratios, and increased earnings variability. The authors conclude that the stock market reaction was worse when the firm had in place more contracts that rely on accounting numbers.

2. Lys (1984) documents market reactions to announcements that changed the probability of adoption of SFAS No. 19. Abnormal returns of full cost firms that were potentially facing a required switch to successful efforts accounting, and thus increased accounting volatility, were significantly negative on the date of the announcement of the exposure draft. A zero investment portfolio composed of long positions in successful efforts firms and short positions in full cost firms had a positive abnormal return on the date the exposure draft was made public. The greater a firm's default risk (debt-to-equity ratio) at the time of the exposure draft, the more negative were the abnormal returns. The greater the expected magnitude of the reduction in a firm's equity resulting from the switch to successful efforts accounting, the more negative were the abnormal returns.

   In contrast, Frost and Bernard (1989) do not document any adverse economic consequences from required write-downs related to the SEC’s rule on full cost accounting in the oil and gas industry. The sample firms have GAAP-based debt covenants which were potentially affected by the rule. The mandated accounting change reduced slack or caused technical violation of debt covenants for approximately 40% of the debt agreements in the sample. For the two technical violations, lenders provided waivers. In other instances, private loan agreements were periodically revised (on average, every 18 months). These are *ex post* observations for the sample agreements; in expectation, the economic impact of technical violation was unclear.

3. Cornett, Rezaee, and Tehranian (1996) show a negative market reaction to the announcement of the fair value accounting standards for banks that is more negative for banks near their capital requirements. The results suggest that accounting requirements that increase earnings volatility and thus increase the likelihood of violating bank capital requirements create real economic costs, unless regulators adjust for the accounting treatments.

4. Salatka (1989) shows significantly negative abnormal returns for multinational firms surrounding the event dates leading up to the adoption of SFAS No. 8. This standard was the FASB's first codification of rules for accounting for foreign currency translation and was expected to create "volatility in both quarterly and annual net income." The most significant negative returns occur on the date of the exposure draft release.

Specifically related to the effects of fair value accounting:

5. Barth, Landsman, and Wahlen (1995) examine whether increases in regulatory risk associated with higher earnings variability are reflected in share prices. As noted previously, this study finds that fair value accounting would lead to more volatile earnings for banks relative to historical cost accounting and that banks would violate capital requirements more frequently. The study reports that the share prices of the sample banks reflect earnings volatility measured using historical cost accounting but not using fair value accounting. Similarly, the study reports that share prices do not reflect capital violations that would have occurred if fair value accounting were in place, but do reflect violations based on historical cost accounting. We, like the authors, claim that these results should be interpreted with caution (p. 580). Instead of implying that fair value accounting would not affect share prices, this study – conducted during a period in which the accounting regime was historical cost accounting – may simply imply that, in such a regime, fair value "volatility" and fair value capital requirement violations were not costly.

6. Bernard, Merton, and Palepu (1995) provide more direct evidence that accounting-induced earnings volatility can impose regulatory costs. They focus on the evaluation of fair value accounting in the context of bank regulation and document that Danish banks with more volatile earnings hold higher capital. This outcome could be viewed as positive in the sense that regulators were able to use earnings to identify troubled banks, but only if higher volatility implies a greater likelihood of default. This outcome can also be viewed as negative in the sense that banks must carry larger capital "cushions" resulting in a deadweight loss.

Perhaps the most compelling evidence that firms view earnings volatility as costly is the fact that firms engage in costly activities to avoid volatility.[5] There is an abundance of literature that shows that earnings are "smoothed." Smoothing activities include not only earnings management and accounting method choices, but also transaction choices such as sales of assets or derivatives use. Cross-sectional analyses show that smoothing behavior, which is assumed to be costly, is most likely to occur when the benefits of reducing volatility are the greatest. The benefits are greatest when higher earnings variability leads to a real cost for the firm or its managers. We will not cite the numerous papers that make these points as it is a fairly non-controversial conclusion in the literature that firms smooth earnings to avoid costs.

[5] The Wharton/CIBC surveys of derivatives use by U.S. nonfinancial firms indicates that approximately 40% of firms that use derivatives report that they use derivatives to manage earnings volatility. In addition, insurers including Reliance National and AIG, investigated offering "earnings insurance" (Risk Magazine, May 1999).

3. Transfers of Financial Instruments

The Committee has three areas of concern regarding the proposed accounting for transfers of financial instruments. The first area of concern pertains to the critical role that the Proposal places on transferees' practical ability to sell or repledge transferred assets (paragraph 55) and the role of liquid markets for replacement assets in determining whether that ability exists (paragraph 56(a)). The second area of concern pertains to the conclusion that repurchase agreements and other transfers that require or may yield the return of the assets to the transferor, but for which the transferee has the practical ability to sell or repledge the assets, constitute "executory contracts" that the transferor should account for net on its balance sheet (paragraphs 214-216 and 262 (b)). The third area of concern pertains to the requirement that transferors recognize liabilities equal to the maximum amount of guarantees (in paragraphs 64 (a) and (c)). We discuss each of these concerns in detail below.

Should transferees' practical ability to sell or repledge assets and, relatedly, the existence of liquid markets for replacement assets affect the transferor's accounting for transfers of financial assets?

The Committee believes that the JWG intends that the question of whether or not control over transferred financial assets has been assumed by the transferee should govern whether such transfers should be accounted for as sales or as secured borrowings. This intent is reflected in paragraphs 55 and 56(a) of the Proposal which contain the following three distinct ideas: 1) the transferor should recognize only the specific financial assets it controls, 2) the transferor must have given up control over the transferred financial assets if the transferee has the practical ability to sell or repledge those assets, and 3) the existence of a liquid market in replacement assets implies that the transferee has the practical ability to sell or repledge the assets.

The Committee has related disagreements with the first and third ideas. With regard to the first idea, the Committee believes that the transfer of control over financial instruments does not necessarily imply that the risk and return of those instruments has been transferred. When transfer of control and transfer of risk and return do not go together, we believe that transfer of risk and return should govern the accounting. With regard to the third idea, the Committee believes that the existence of a liquid market in replacement assets primarily implies that the transferee's ability to sell or repledge the assets is inconsequential to (i.e., does not affect the risk or return retained by) the transferor. In particular, the transferor is indifferent about whether the original assets or economically identical replacement assets are returned.

Our disagreements are most clearly illustrated in their application to short-term (e.g., one-day) repurchase agreements in securities with liquid replacement markets (e.g., U.S. Treasury and government-sponsored entity securities), by far the most common types of repurchase agreements in the U.S. Under the Proposal, such agreements would be accounted for as sales (i.e., net) because the existence of liquid markets in replacement assets implies that the transferee has the effective ability to sell or pledge the transferred financial assets. In our view, such agreements should be accounted for as secured borrowings (i.e., gross), because the transferor

receives the value and risk of economically identical securities when the repurchase agreement terminates, regardless of whether the transferee does or does not sell or pledge the securities.

We note that secured borrowing accounting for short-term repurchase agreements is consistent with current accounting practice in the U.S., but inconsistent with the accounting treatment in the Proposal. We emphasize that we prefer this current accounting because it captures the value and risk retained by the transferor while the accounting in the Proposal does not. We do not prefer it simply because it is the current accounting.

We also note that our concern is not with the income recognition effects of sale accounting, given that most financial instruments are fair valued under the Proposal. Our concern is that the balance sheet will not accurately reflect both the assets that the firm controls and the obligations that the firm has incurred.

Do repurchase agreements and other transfers that require or may yield the return of the assets to the transferor but for which the transferee has the practical ability to sell or repledge the assets constitute "executory contracts" that the transferor should account for net on the balance sheet?

The Committee believes that repurchase agreements and other transfers that require or may yield the return of the assets to the transferor but for which the transferee has the practical ability to sell or repledge the assets (hereafter repurchase agreements) are not executory contracts in any meaningful sense. Execution of repurchase agreements generally does not involve substantial future effort by either the transferor or the transferee. Rather, execution of repurchase agreements simply requires the passage of time and the return of pieces of financial paper. Accordingly, the Committee believes that most repurchase agreements should be accounted for as secured borrowings (i.e., gross on transferors' balance sheets).

The Committee bases its conclusion that most repurchase agreements should be accounted for as secured borrowings on the view that most repurchase agreements are, in economic substance, credit risk reducing alternatives to unsecured borrowing and lending, such as federal funds transactions by financial institutions. The term of repurchase agreements is usually a small fraction of the life of the transferred assets (one day is common). Agreements with longer terms often insulate the transferee from the risk of the assets through manufactured interest and dividend clauses or pass-throughs of gains and losses.

The Committee recognizes that longer-term repurchase agreements that expose the transferee to the risk and return of the transferred financial assets for a significant portion of their life do exist, however. We believe that such repurchase agreements should be accounted for as partial sales and partial secured borrowings consistent with a financial components approach.

The Committee recognizes that forward contracts to purchase securities, which yield the same exposure for the transferor as do repurchase agreements, are accounted for differently (i.e., net) from the gross accounting we propose. While the Committee does not want to open up the issue of the net accounting for derivatives in this comment letter, we believe that such forward

contracts are arguably better described through gross accounting, and so we place relatively little weight on forwards contracts as comparable transactions. In contrast, we believe that repurchase agreements are most commonly used as a practical alternative to unsecured borrowing and lending, and so view unsecured borrowing and lending as the most relevant comparable transaction.

How should transferors account for guarantees?

Transfers of financial instruments in which the transferor retains risks that are disproportionate to the fair value that is retained through guarantees and other means pose significant threats to accounting based on a financial components perspective, especially when judgment is required to estimate the fair value of the retained and transferred components. The Committee views the Proposal's requirement that the transferor recognize a liability for (at least) the maximum amount of guarantees in paragraphs 64 (a) and (c) as an attempt to mitigate this very real threat by overlaying a risk transfer perspective on a financial components perspective. The Committee agrees that both perspectives provide insight into the economics underlying guarantees. We are concerned, however, that blending these perspectives may not portray either perspective clearly.

The Committee is also concerned that there are many means by which transferors can retain disproportionate risks, e.g., the retention of risky residual interests, and that the JWG proposes accounting for guarantees that is more stringent than the accounting for these other means. While the Committee is not aware of any statistics regarding the extent of the use of guarantees versus other means, our reading of securitization footnotes suggests that guarantees are unimportant compared to the retention of risky residual interests.

The Committee suggests that transfers of financial instruments that involve significant risk transfer – even if disproportionate risk is retained by the transferor – be accounted for using a financial components perspective, as this perspective is consistent with fair value accounting and thus most likely to yield comparable accounting for similar transactions.[6] In contrast, for transfers of financial instruments that do not involve significant risk transfer, whether because of guarantees or through other means, we favor the requirement of secured borrowing accounting.[7]

The Committee believes the JWG should provide information about disproportionate risk retention by the transferor through risk-related disclosures such as (but not confined to) those proposed in paragraphs 188 and 189. The JWG should consider two issues related to our suggestion for accounting treatment and disclosure. First, as noted above, a financial components approach can introduce significant accounting risk in the financial statements, since judgment is often required to estimate the fair values of risky retained components. It is likely that this

[6] For example, the G4+1 has recently proposed something akin to fair value accounting for leases. Leases often involve residual value guarantees that raise much the same economic issues as the guarantees considered in the Proposal. We believe that lease residual value guarantees should be accounted for comparably to guarantees in transfers of financial assets.

[7] At least two analogs exist in U.S. GAAP to our suggested approach of applying secured borrowing accounting when there is no significant risk transfer. 1) Under SFAS No. 28, no gain on sale is recognized in sale-leaseback transactions where the leaseback is for more than 90% of the asset. 2) Under SFAS No. 113, reinsurance accounting is not allowed when there is no reasonable possibility of significant loss by the reinsurer.

estimation error increases with the risk retained. Second, this approach requires a definition of "disproportionate" as a criterion for requiring additional disclosure. The Committee does not view creating such a definition as a major problem.

4. Performance Reporting and Fair Value Interest

The Proposal requires that all changes in the fair value of financial instruments be reported in the income statement (except those related to certain foreign exchange transactions). Within the income statement, the Proposal requires disaggregation of certain items as designated in paragraphs 137-152. Interest income and expense are to be measured on a fair value basis.

In our response, we address two issues related to reporting of changes in fair value of financial instruments: 1) the proposed categories on the income statement, and 2) use of the fair value basis for the recognition of interest income and expense.

Proposed categories on the income statement

The Committee generally supports the proposal that fair value changes be reported in net income, with the exception of our objection to the elimination of special accounting for financial instruments that are entered into as part of risk management activities. We also compliment the JWG for providing *specific* guidance about disaggregation of items related to fair value accounting for financial instruments.

Income statement disaggregation is a question that the G4+1 addressed in its performance reporting project.[8] We interpret the proposals in paragraphs 137-152 as adopting much the same approach as did the G4+1, which is to disaggregate operating, investing, and financing components of earnings. In our comment letter on the G4+1 project, the Committee described this approach as *ad hoc* and argued in favor of an approach based on earnings sustainability (or persistence), a notion that is of primary importance to financial statement users interested in predicting the amount, timing and uncertainty of future cash flows. The Committee believes income items that differ in terms of sustainability (or persistence) should be disaggregated on the income statement and that information should be disclosed regarding the level and uncertainty of this sustainability. While we expect that such an approach would result in income statement categories that are similar to (though not the same as) those proposed in paragraphs 137-152, we believe sustainability provides a strong conceptual basis for income statement disaggregation.

We repeat here a summary of empirical research from our comment letter to the G4+1 that relates specifically to the sustainability of fair value changes.

1. Ahmed and Takeda (1995) find that the change in unrealized securities gains and losses (as calculated and reported under SFAS 115) has explanatory power for security returns

[8] Much of the discussion in Section 4 reiterates the Committee's views on the G4+1 performance reporting project as they were expressed in our comment letter to the G4+1.

for a sample of banks. This result contrasts with the results reported in Barth (1994). However, Ahmed and Takeda's evidence suggests that Barth's results are likely to be confounded by not including a variable to capture the changes in the values of other assets/liabilities from interest rate changes.

2. Petroni and Wahlen (1997) also find that the change in unrealized securities gains and losses has explanatory power for security returns for a sample of property-liability insurers. However, further analysis indicates that the results hold for equity investments and U.S. Treasury investments, but not for other types of investment securities such as municipal and corporate bonds. The authors suggest that reported unrealized gains and losses for these latter securities are not value-relevant because the securities are less actively traded and, hence, the measurement of unrealized gains and losses is less reliable.

3. Barth, Beaver, and Landsman (BBL, 1996) test the relation between balance sheet "levels" of fair values for financial instruments and market values of equity and the relation between first differences in the market values of financial instruments and returns. The results indicate that changes in fair values (unrealized gains and losses on loans) have explanatory power, and the explanatory power is higher for healthy banks (greater persistence). However, this study covers a period before the disclosures were required, and other research finds weaker results for the levels analysis (Eccher, Ramesh and Thiagarajan, 1996) or sensitivity of results to additional control variables such as ROE and growth in book value (Nelson, 1996). Finally, BBL analyzes banks for which unrealized gains and losses on financial instruments are likely different from the unrealized gains and losses on the more passive investment portfolios held by non-financial firms.

4. Warfield and Linsmeier (1992) find that the multiplier the capital market places on realized securities gains and losses is smaller than the multiplier on the remainder of income from continuing operations. If the market for these securities is efficient, this period's realized gains and losses have no predictability for future securities gains and losses. In addition, the authors provide evidence that the multiplier on the realized gains and losses component is insignificant in the fourth quarter and interpret this as consistent with tax planning incentives for sales likely being greatest in that period. This paper is an example of a number of studies that have disaggregated realized gains and losses on marketable securities from income from continuing operations. The majority of these studies focus on banks where securities gains and losses are likely to be material.

The amortized cost versus fair value approach to interest

The Committee is not aware of any empirical research that is specifically related to the relative desirability of the amortized cost and fair value approaches to measuring interest income and expense. However, as more fully discussed in our comment letter on performance reporting, empirical evidence suggests that it is important to separately report items that have different sustainability (or persistence) and a different certainty of sustainability. By sustainable, we mean

that an item persists over time on average. A sustainable item could be uncertain, meaning that there is time-series variation around the average.

Conceptually, the periodic returns to financial instruments can be separated into three components with distinct time-series properties related to sustainability and certainty of sustainability. Our conclusions about the sustainability and certainty of the various components of the periodic return depend to some extent on the assumption that changes in interest rates are mean zero through time but random. This assumption is consistent with empirical evidence.

The first two components we define are, in sum, equal to fair value interest. We divide fair value interest into two parts: the amortized cost interest portion and the difference between fair value interest and amortized cost interest. It is useful to distinguish these two components of fair value interest because amortized cost interest is both persistent and certain while the remaining portion of fair value interest (the difference between fair value interest and amortized cost interest) is persistent but uncertain. The persistence of the second component – the difference between fair value interest and amortized cost interest – reflects the fact that prior unexpected changes in interest rates and the resulting unexpected changes in fair values affect fair value interest calculations throughout the remaining lives of financial instruments. For example, an unexpected gain on a financial asset due to a decrease in interest rates in the current period yields decreased fair value interest revenue on the asset persistently in subsequent periods, in expectation. The third component of the periodic returns to financial instruments is the unexpected change in the fair value during the period. Unexpected changes in the fair value of financial instruments are transitory (not persistent) and uncertain.

As demonstrated in the following example, the amortized cost interest method of accounting separately reports the first component (amortized cost interest) but combines the second and third components (the difference between fair value interest and amortized cost interest and the unrealized gain or loss). The fair value interest approach combines the first and second components (fair value interest) and separately reports the third component. Either approach can be justified depending on whether one thinks it is more important to combine income statement items with similar certainty (the amortized cost interest approach) or to combine items with similar persistence (the fair value interest approach). Alternatively, all three components could be reported separately on the income statement. We discuss our views about the relative strengths and weaknesses of each of these approaches after the example.

At the end of year 0 the firm purchases a financial asset that pays cash of $100 at the end of each of the next 3 years. There is no cash flow uncertainty, only interest rate uncertainty. The yield curve is flat and changes in the interest rate are mean zero and random. This assumption eliminates significant implementation issues related to sloping yield curves. Interest changes occur only at the end of each year. This assumption abstracts from various implementation issues that are discussed in the next section. Interest rates are 10% at the end of year 0 and change to 12% at the end of year 1, yielding an unexpected loss on the asset during that year.

In the example, interest rates increase to 12% in year 1, but then remain at 12% in year 2. Thus, we have effectively removed the effects of the uncertainty of the second component (the difference between fair value and amortized cost interest) from year 2 in order to focus on its

persistence. While it is clear that fair value interest is uncertain, it may be less obvious that it is persistent. The stable rate assumption from year 1 to year 2 is consistent with the assumption of mean zero interest rate changes and allows us to make statements about time-series concepts (e.g., persistence) using a finite-period example.

The following table summarizes the facts in the example, reports interest calculations under the amortized cost and fair value approaches, and reports the unexpected change in the asset's fair value.

	Year			
	0	**1**	**2**	**3**
Facts:				
Cash receipts at end of year	0	100	100	100
Interest rate at end of year	10%	12%	12%	--
[a] End of year amortized cost value	248.69	173.55	90.91	0
[b] End of year fair value	248.69	169.01	89.29	0
Interest calculations:				
[c] Amortized cost interest revenue = [a] in prior year*10%	0	24.87	17.36	9.09
[d] Fair value interest revenue = [b] in prior year*interest rate during year	0	24.87	20.28	10.71
[e] Difference = [d] – [c]	0	0	2.92	1.62
Calculation of "unexpected" return:				
[f] Expected fair value of asset at end of year based on interest rate from prior year		173.55	89.29	0
[g] Unexpected change in fair value of asset = [b] - [f]		(4.54)	0	0

The three components of the financial instrument's periodic return that have distinct time-series properties as described above are item [c] (amortized cost interest), item [e] (the difference between fair value and amortized cost interest) and item [g] (the unexpected change in fair value). Note that the sum of items [c] and [e] is, by definition, fair value interest. The fair value interest approach reports interest revenue equal to [c] + [e] and gains and losses equal to [g]. The amortized cost interest approach yields interest revenue equal to [c] and gains and losses equal to [e] + [g]. The total income recognized in each period under either approach is [c] + [e] + [g]. The only difference between the two approaches is that the difference between fair value interest and amortized cost interest (item [e]) is aggregated with amortized cost interest (item [c]) in interest revenue under the fair value interest approach, while this difference (item [e]) is aggregated with the unexpected change in fair value (item [g]) and reported in gains or losses under the amortized cost approach. Thus, the fair value interest approach segregates income statement items on the basis of their persistence while the amortized cost interest approach segregates items on the basis of their certainty.

The justification for the fair value interest approach is that the two components of interest are similarly persistent. Note that the first component of fair value interest – amortized cost interest (item [c]) – decreases over time since the asset is paying down over the three-year period ($100 per year in the example). For example, from year 2 to year 3, amortized cost interest persists at a rate of 52.4% ($9.09/$17.36). Total fair value interest is similarly persistent. From year 2 to year 3, when rates are assumed stable to demonstrate the similarities in persistence, the persistence rate of fair value interest (item [d]) is 52.8% ($10.71/$20.28). Intuitively, the change in the fair value of the instrument during year 1, when rates changed from 10% to 12%, carries forward in the calculation of fair value interest for year 2.

The justification for the amortized cost approach, which reports only amortized cost interest separately and sums the difference between fair value interest and amortized cost interest (item [e]) with the unexpected change in fair value (item [g]), is that both aggregated items ([e] and [g]) are uncertain. Both depend on the uncertain realization of interest rate changes which are mean zero in expectation, but which vary around the mean.

The Committee is not unanimous regarding the relative merits of the amortized cost interest and fair value interest approaches. Some members prefer the amortized cost approach because amortized cost interest, which is completely certain at origination of the financial instrument, is segregated from the uncertain components of the financial instrument's periodic return. Another advantage of amortized cost interest is that interest recorded over the life of the instrument equals interest received or paid in cash either as coupon payments or as an origination premium or discount. This cash flow information is not otherwise available in the financial statements. Note that this advantage of the amortized cost interest approach is consistent with claims made by the dissenting French and German delegates. The drawback of the amortized cost approach is that gains and losses include a component with no persistence (the unexpected change in fair value) and a persistent component (the difference between fair value and amortized cost interest). Moreover, the persistent component is negatively correlated with the non-persistent components from prior years.

Some members of the Committee prefer fair value interest because interest revenue or expense includes all persistent income components (amortized cost interest and the difference between fair value interest and amortized cost interest), and the non-persistent component of the periodic return is segregated in gains and losses. Another advantage of the fair value interest approach is that it provides measures of interest revenue and expense that are better matched when the ages of the firm's interest-earning assets and interest-bearing liabilities differ, improving comparability of the results from these assets and liabilities. A drawback of this approach is that fair value interest includes both a completely predictable component (amortized cost interest) and an uncertain component (the difference between fair value and amortized cost interest). In addition, information about total interest-related cash flows is lost.

The Committee views reporting under a fair value interest approach with disclosure of amortized cost interest and financial instrument balances as a reasonable compromise. This approach recognizes the critical importance of distinguishing items with different persistence on the income statement for firm valuation, and also provides the relevant cash flow information that

would be lost under the fair value interest approach. To be informative, the supplemental disclosures must include the amortized cost balances of the instruments.[9] Such disclosures are not required in the JWG Proposal. Another acceptable, but somewhat cumbersome, alternative is to report all three components of a financial instrument's periodic return ([c], [e], and [g]) separately on the income statement.

The need for guidance regarding the calculation of fair value interest

The Committee is concerned that the Proposal does not provide sufficient guidance for calculating interest under the fair value interest approach, especially regarding "refinements" for large non-ratable interest rate changes (paragraph 388). As illustrated in the example below, the Proposal's guidance (or lack of guidance) can lead to various interpretations about the appropriate calculation of interest under the fair value approach. The Committee believes that more specific implementation guidance is necessary to achieve reporting consistency across entities.[10]

The example also illustrates that a comparison of fair value interest to average financial instrument fair values will not always yield interpretable effective interest rates. Accordingly, disclosure of average interest rates and/or average fair values could be useful. A complete set of such disclosures would yield the analysis of net interest income disclosures required for U.S. banks.

The example is based on a simple straight coupon debt instrument with the following characteristics:

Issue date = 1/1/01
Face value ("FV") = $100
Coupon = 10%, paid semi-annually (payment, "PMT", = $5 at the end of each six month period)
Maturity = 10 years (20 semi-annual periods or "N")
Discount rate (semi-annual) = 20% (so the periodic interest rate, "I", = 10)

We provide a detailed calculation of the present value of this bond at the issue date to clarify the notation we will use throughout this discussion. At issue date, the present value (PV) of this bond is $57.43, which is the present value of the face value (FV) and a semi-annual annuity of $5 (PMT), discounted to its present value over 20 semi-annual periods (N) at a semi-annual discount rate of 10% (I). Our notation for the calculation of the present value is PV(FV = 100, PMT = 5, N = 20, I = 10).

[9] In addition, amortized cost balances and amortized cost interest are often important for non-valuation purposes, such as assessing managerial stewardship (e.g., management's ability to time investment and financing).

[10] We originally thought it might be useful for the JWG to investigate the accounting for interest by mutual funds that have long used a fair value accounting model. We found, however, that the AICPA industry guide "Audits of Investment Companies" (2000) contains no guidance regarding the calculation of interest. The guide states that it is the total periodic returns to financial instruments that are relevant to the fund's net asset value and results of operations, suggesting that mutual fund investors do not care about distinguishing the components of the total returns to financial instruments. As discussed above, the Committee strongly supports the JWG's provision of such guidance.

Assume that at the end of the first six-month period, the value of the bond increases to $71.19, reflecting an effective rate of 16%. Thus, the fair value of the bond increases by $13.76 during the six-month period.

To compute fair value basis interest expense for the first six-month period, the firm would in theory have to monitor the fair value of the instrument and update the calculation continuously (paragraph 386). However, paragraph 386 also indicates that firms can use averages for practical reasons. Specifically, firms can multiply the average fair value during the period by the beginning-of-period interest rate if that rate does not change much during the period. Paragraph 388 states that these calculations may need to be refined, however, if the rate changes are large and do not occur ratably throughout the period.

The following scenarios based on this example illustrate various interpretations of acceptable calculations of fair value interest expense under the Proposal. In the first scenario, interest rates change ratably over the period. In the second scenario, interest rates change at the end of the period, and in the third scenario interest rates change at the beginning of the period. In scenario 1, the averaging suggested in paragraph 386 is acceptable while scenarios 2 and 3 highlight the need for additional guidance when averaging is not appropriate and "refinements" are needed.

1) The effective rate decreases from 20% to 16% ratably during the period.

Average fair value	=	(57.43 + 71.19) = 64.31
Interest expense	=	average fair value * average rate
	=	64.31 * {(20% + 16%)/2} = 5.79

In this simple case, interest expense divided by the average book value of debt is, by construction, 9% for the six-month period, which represents the firm's average cost of borrowing during the period. The change in the fair value of the bond ($13.76) and the coupon payment of $5 are allocated between interest expense ($5.79) and a loss ($12.97).

Note that while the loss appears to be a "plug" above, it could also be calculated directly. Had interest rates not changed, the value of the bond would have been $58.18 (PV(FV = 100, PMT = 5, N = 19, I = 10)). Instead, the value of the bond is $71.19, and a direct calculation of the gain yields $13.01. This amount is approximately equal to the $12.97 "plug" amount calculated above, with the difference attributable to the simple averaging used in the calculations.

2) The effective rate decreases from 20% to 16% at the end of the period.

Interest expense	=	beginning fair value * beginning rate
	=	57.43 * (20%/2) = 5.74

The balance sheet would show beginning and ending debt balances of $57.43 and $71.19, respectively, for an average balance of $64.31. Interest expense would be $5.74 for an "effective interest rate" of 8.93% (semi-annual) or 17.86% annual rate, which is considerably lower than the interest rate of 20% that applied during the entire period.

The loss is ($5 + $13.76) – $5.74 = $13.02, which as noted above can be derived by subtracting the beginning fair value of the debt of $57.43 from the ending fair value of $71.19.

3) The effective rate decreases from 20% to 16% at the beginning of the period.

There are various alternatives for "refining" the calculation in this case that we believe would be acceptable under paragraph 388. We present two alternatives, the second of which is clearly preferable in our view.

Alternative 1:
Interest expense = beginning fair value * ending rate
= 57.43 * (16%/2) = 4.59

In this case, interest expense would be $4.59 and the "effective rate" would be 7.14% (semi-annual) or 14.28% annually. These rates clearly do not reflect the firm's cost of debt either historically or going forward. However, the Committee believes that the above calculation represents an acceptable "refinement" given the current guidance in the Proposal.

Alternative 2:
Interest expense = "appropriate" fair value * ending rate

We define the appropriate fair value for the entire period as the fair value of a 10-year bond discounted at 16%. Thus, fair value is:

= {PV(FV = 100, PMT = 5, N = 20, I = 8)} = 70.55
and interest expense is:
= 70.55 * 0.08 = 5.64.

The balance sheet would show $57.43 and $71.19 for an average debt balance of 64.31. Interest expense would be $5.64 for an "effective rate" of 8.77% (semi-annual) or 17.54% annual rate. One could argue that, based on the limited implementation guidance provided in the proposal, the loss should be $13.02 and the additional $0.10 should be "other".

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