INCOME STATEMENT DISCLOSURE: HOW FAIR VALUE WOULD WORK

Abstract *This extensive extract from the proposed rules on how to disclose financial instruments and similar items in the income statement of banks and other financial institutions develops the thinking of the joint working group set up to prepare global standards in this field. The extract covers the critical issue of disclosure in the income statements of such organisations. As such it is the most comprehensive summation of the arguments involved yet produced.*

Keywords *Income, Financial reporting, Banking industry, Standards, Currency*

6. Income Statement Presentation

6.1 The income statement presentation requirements are reasoned from two fundamental conclusions of the JWG:

(a) Changes in the fair value of financial instruments, after adjustment for receipts and payments, represent income that should be recognised in the income statement in the reporting periods in which they arise[1].

(b) Fair value income from financial instruments should be disaggregated on a basis that facilitates analysis of the income statement effects of the significant financial risks assumed by an enterprise during a reporting period. The JWG believes that this income statement information complements disclosures about the enterprise's financial risk positions (required by Draft Standard paragraphs 170-180) and its financial risk management objectives and policies (required by Draft Standard paragraphs 156-163).

The bases for these conclusions are set out in the following paragraphs.

Fair Value Changes as Income

6.2 There are several dimensions to the assessment of the usefulness of income determined on a fair value basis for financial instruments:

(a) First, there are conceptual and practical considerations relating to (i) the economic (capital maintenance) properties of fair value income and (ii) the cause and effect relationships (of recognising income in the period that the events that gave rise to income took place).

(b) Second, there are practical considerations relating to whether fair value income (i) can help users in predicting the ability of the enterprise to generate cash and cash equivalents in the future, and (ii) can facilitate the stewardship or accountability of management for the resources entrusted to it[2].

Each of these areas of consideration is addressed under separate headings in the immediately following paragraphs.

The Concept of Fair Value Income

6.3 The economic concept of income is founded on the maintenance of an enterprise's capital. Specifically, income is defined as the amount that can be distributed to equity owners of an enterprise while maintaining its capital, after adjustment for owners' contributions and withdrawals. Accounting conceptual frameworks generally accept that this should be the objective for income determination. For example, the IASC Framework states that:

> . . . only inflows of assets in excess of amounts needed to maintain capital may be regarded as profit and therefore as a return on capital. (paragraph 105)

6.4 From a capital market perspective, an increase in the fair value of a financial asset is income in the important sense that it represents the amount that can be distributed to owners while maintaining the

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value of the capital invested in the financial asset to earn the current market rate of return[3]. In other words, on a fair value basis capital is maintained in terms of the present value of the market's expectation of future cash flows to be generated by the asset discounted at the current available market rate of return adjusted for commensurate risk.

6.5 For example, suppose Company A bought a zero coupon bond of 10,000 due in three years, for which it pays its fair value of 7,938 (which is its present value at an effective annual yield of eight percent). At the end of one year, this bond would have increased in value to 8,573 if future rates of return for a two-year bond were expected to be eight percent. Suppose the market rate of interest for bonds of this risk changed at the end of year one to ten percent. If Company A recognised a profit of 635 (i.e. 8,573 minus 7,938), it would not have maintained its capital in terms of its ability to earn the current market rate of return because, at 8,573, its investment can expect to earn only eight percent. Rational investors would not accept an eight percent rate of return at the end of year one when ten percent is available in the marketplace. To maintain its capital in terms of its capacity to earn the rate of return currently available in the marketplace, Company A would have to write down its investment to the present value of the expected future cash flows at ten percent (which is 8,264) – i.e. to its fair value. Its income for the period could be represented as interest income of 635 (at eight percent, which was the market rate prevailing during the year) less a loss of 309 (8,573 minus 8,264) due to the increase in the market rate of interest at the end of the year.

6.6 Historical cost income for financial instruments does not have this capital maintenance property, because income on a historical cost basis is recognised when it is realised, rather than when economic events change market prices. Thus the cost of a financial asset may be relied upon to represent the present value of expected cash flows at the rate of return for commensurate risk demanded in the capital marketplace *only* at the moment when it was acquired or issued.

Reflecting the Effects of Events in the Periods they Occur

6.7 The practical result of recognising income on the basis of fair value rather than cost is that the fair value consequences of events are reflected when those events take place. Recognising the income statement effects of changes in economic conditions when they occur, rather than when they happen to be realised, enables analysis of economic causes (changes in market rates of interest, for example) and their income statement effects.

Basis for Prediction

6.8 A fundamental purpose of financial accounting information is to aid in evaluating the ability of an enterprise to earn income and generate cash flows in the future. For example, the IASC Framework states:

> The economic decisions that are taken by users of financial statements require an evaluation of the ability of an enterprise to generate cash and cash equivalents and of the timing and certainty of their generation. (paragraph 15).

6.9 Sub-paragraph 1.8(b) of this Basis for Conclusions notes the usefulness of fair value measures of financial instruments for predictive purposes. Some contend that, while fair value balance-sheet figures have predictive value, income on a fair value basis has little or no usefulness for predictive purposes. They believe that gains and losses resulting from changes in the fair value of financial instruments are likely to be volatile and non-recurring results of unexpected, and often temporary, fluctuations in market conditions. They conclude that such gains and losses can provide no basis for predictions of future income and cash flows. Some express the concern that such gains and losses may actually serve to inhibit the ability of users to evaluate the sustainable earnings of an enterprise, which is considered to be a primary objective of financial analysis.

6.10 This concern would seem to presume that the objective of reporting income should be to facilitate forecasts of future income and cash flow streams based on simple projections of past periods' reported income. The JWG does not accept this objective as being either desirable or feasible. Certainly, reliable forecasts of the future income statement effects of a financial instrument are unlikely to be possible from simple extrapolations of past gains and losses. The potential implications of past gains and losses for the future are likely to be less direct. Investors and analysts can be expected to want to evaluate past gains and losses in assessing the potential variability of future returns, as well as in assessing future income expectations. As an example, past gain and loss experience on loans is an important input in evaluating future expected cash flows to result from loan assets and the variability (risk) of those cash flows.

6.11 More specifically, the market's expectations for future income to result from an enterprise's investment in a fixed-coupon loan portfolio may

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be deduced from its fair value and the current market rate of return for loan assets of commensurate risk. This return is subject to significant variability, depending on the potential for changes in the general level of interest rates and in the range of potential default experience. Estimation of this variability would be based in significant part on past experience with interest rates and loan defaults, taking into account current conditions. Models have been developed to utilise statistical data on past experience to aid in this analysis.

6.12 Some have claimed that income determined on a fair value basis is inferior to that determined on the cost basis for predicting future income and cash flows of, in particular, fixed-coupon, loan-type financial instruments. Certainly, the amortised cost basis can enable a reliable prediction of future historical cost interest to result from such instruments, if they are held to maturity and do not default. This predictability results because interest on the amortised cost basis is calculated as the average annual rate inherent in the difference between the acquisition cost and the future contracted cash flows. It is simply "predicting" an accounting allocation that is determined solely by a past transaction. One can easily project future income if it is simply the result of amortising a past cost. Fair value-based income provides a richer basis for prediction, because it reflects the effects of changes in conditions and events occurring during the reporting period. Recognising income effects of changes in economic conditions and events when they occur is essential to analyses of causes and effects that are at the basis of informed predictions.

Accountability for Income Performance

6.13 Recognising gains and losses as income when they occur also facilitates accountability and assessment of management performance because it attributes gains and losses to management in place when such gains and losses occur rather than possibly to a different management team who may realise them later. Fair value income effectively holds management accountable for the income statement effects of its decisions to hold and owe financial assets and liabilities.

Concerns with Respect to Recognising All Fair Value Gains and Losses Immediately in the Income Statement

6.14 The JWG considered the following areas of concern that have been raised with respect to recognising all gains and losses arising from measuring financial assets and liabilities at fair value in the income statement in the periods in which they arise.

Relationship to Accounting for Non-financial Operating Activities

6.15 Some believe that recognising unrealised gains and losses resulting from changes in the fair value of financial instruments in the income statement is inconsistent with the well accepted income recognition principles for accounting for non-financial operating activities. Revenues of a manufacturing activity, for example, are generally not recognised until they are realised as a result of sales transactions. They argue that, until such time, if any, that the accounting standards for manufacturing and other revenue-generating activities are changed to recognise unrealised gains and losses, unrealised gains and losses arising on financial instruments should not be recognised within the income statement. Rather, unrealised gains and losses resulting from changes in the fair value of financial instruments should be presented outside the income statement, to be recognised in the income statement when they are realised.

6.16 The JWG does not accept this view for the following reasons:

(a) Non-financial assets held for use in productive revenue-generating activities give rise to different accounting considerations than those appropriate to financial assets and liabilities (see discussion in paragraphs 2.16-2.19). Further, the JWG does not believe that standards that improve the presentation of income from financial instruments should be precluded until such time, if any, that it might be determined that similar accounting should be adopted for productive revenue-generating activities.

(b) The recognition of unrealised gains and losses on financial instruments is well accepted when the financial instruments are intended for trading purposes. The JWG believes that it is inconsistent to recognise unrealised gains and losses on potentially identical financial instruments within or outside the income statement depending on management's intentions to hold or trade those instruments.

Presenting Some or All Financial Instrument Gains and Losses outside the Income Statement

6.17 Some believe that certain gains and losses arising upon the fair valuation of financial instruments are of such a different quality or significance that they should be presented outside the income statement

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(that is, be presented in a separate section of the statement of equity, or in another performance statement). Furthermore, some have expressed concern about the consequences of abruptly changing long established income recognition conventions. They advocate presenting gains and losses that are not consistent with conventional income reporting outside the income statement, with full disclosure so that users can decide for themselves on their relevance to the income of an enterprise in a reporting period.

6.18 The JWG has two general reservations with respect to this recommendation:

(a) It is concerned that presenting some financial instrument gains and losses outside the income statement would obscure the economic significance of fair value income, and thereby diminish its usefulness as a basis for prediction and accountability.

(b) It is far from clear what the "conventional" cost or mixed income model for financial instruments is, and what it represents. The objective of transparency could be met by highlighting particular gains and losses on financial instruments *within* a single income statement without the complexity, and the potential for confusion, of placing some gains and losses in a separate equity section or performance statement:

6.19 Despite these general reservations, the JWG agrees that it is important to consider practical issues relating to certain types of gains and losses. It considered the following possibilities for the presentation of gains and losses outside the income statement:

(a) All unrealised gains and losses.

(b) Certain unrealised gains and losses.

(c) Gains and losses on financial instruments designated as hedges of existing unrecognised and expected future risk positions.

All Unrealised Gains and Losses

6.20 The conventional cost-realisation model generally does not recognise income until it has been confirmed by realisation as a result of sale or settlement. Some advocate that it would be helpful for users familiar with this model if all unrealised gains and losses on financial instruments were presented outside the income statement. The difficulty with the resulting presentation of income is that realisation is not an event that results in any increase or decrease in the economic value of a financial instrument to the enterprise. The JWG is concerned that recognition of only realised gains and losses in the income statement would perpetuate the shortcomings of the cost basis of accounting for financial instruments. Gains and losses would not be recognised in the income statement in the period that the underlying causal events occurred.

6.21 The JWG recognises that there could be information value in distinguishing realised and unrealised gains and losses, particularly if they trigger tax consequences or indicate something of management's investment strategies. However, these would not seem to be sufficient reasons for excluding unrealised gains and losses from the income statement. Consideration of disclosing the amounts of realised and unrealised gains and losses recognised in the income statement is discussed in paragraph 6.44.

6.22 Presentation of unrealised gains and losses outside the income statement has also been advocated on the grounds of alleviating the potential for unrepresentative volatility in reported income. The JWG believes that the volatility of changes in the fair value of financial instruments is unrepresentative only if fair value estimates are not reliable, that is, do not reasonably reflect market-equivalent value at a measurement date. (Considerations relating to presenting unrealised gains and losses resulting from subjective fair value estimates are addressed in paragraph 6.25.) Otherwise, where reliability is not a consideration, how is one to judge whether a change in fair value is unrepresentative, for example, whether a change in a quoted market price is not representative of the real economics of the situation? What decision basis can be used for second guessing the market and judging which gains and losses are real and will be sustained, and which are not? The JWG believes that recognition on the basis of realisation of gains and losses is a less appropriate basis, because it replaces the market's unbiased measure of the effects of economic events with management's timing of realisation, which timing has no necessary relationship to any income earning activity or events.

6.23 The JWG understands that the concerns of many about the potential volatility of fair value income are concerns about risk – concerns that unrealised gains recognised in the income statement in one period may reverse to become losses in future periods. A possible response to this concern may be for an enterprise to set aside an amount to be held as capital as a buffer against risk, rather than modifying the recognition of income for financial instruments. Various models for quantifying the market risk of financial instruments now exist, and a number of regulators of financial institutions are

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actively considering whether certain of these models may be helpful in determining minimum capital requirements for these institutions.

Certain Unrealised Gains and Losses

6.24 Few now believe that *all* unrealised gains and losses on financial instruments should be excluded from the income statement. Most enterprises would recognise unrealised gains and losses on trading activities in the income statement, but they would exclude unrealised gains and losses on financial instruments that are intended to be held for the long term. The JWG accepts that it may be useful to distinguish the income statement results of trading and non-trading financial activities, especially where the two activities are managed with different strategies by different managers in separate segments. It does not believe, however, that this warrants different measurement bases or presenting unrealised gains and losses of non-trading activities outside the income statement.

Distinguish Gains and Losses Where Fair Value Estimates Are Highly Subjective

6.25 Some advocate that unrealised gains and losses on financial instruments should be separately presented outside the income statement where fair value is subject to significant estimation variability, until they are realised or until the estimation uncertainty has been resolved. Some believe that unrealised gains and losses that are subject to significant measurement uncertainty should be amortised to the income statement over some period of time, as are, generally, "experience gains and losses" arising on estimates of defined employee benefit plan obligations in employer financial statements. The JWG believes that issues of reliability are appropriately addressed in relation to measurement on the balance sheet, and that there need be no additional tests for the income statement recognition of gains and losses.

Gains and Losses on Financial Instruments Held for Hedging Purposes

6.26 Many believe that gains and losses on financial instruments held as hedges of items that are not recognised or measured at fair value on the balance sheet, or as hedges of future transactions, should be deferred on the balance sheet or separately presented outside the income statement, possibly to be transferred to the income statement as the hedged items are presented in the income statement. The JWG has given separate, extended consideration to these issues (see paragraphs 7.17-7.20 of this Basis for Conclusions).

Exemption of Certain Foreign Currency Translation Gains and Losses

6.27 The Draft Standard, paragraph 136, makes one exception to the requirement for the recognition of all gains and losses on financial instruments in the income statement when they arise. Accounting standards and accepted practices in most of the world require that gains and losses arising on translating assets and liabilities of certain foreign operations from their functional currencies to the reporting currency be presented outside the income statement. The exclusion of these gains and losses from the income statement is premissed on the assumption that an enterprise is exposed to foreign currency risk in respect of changes in exchange rates with the functional currencies of the foreign operations, rather than with the reporting currency of the enterprise.

6.28 Despite certain reservations on this point, the JWG has concluded that an exemption is necessary pending a comprehensive reconsideration of accounting for the translation of the assets and liabilities of foreign operations. The JWG's conclusion is based on its understanding that an amendment to foreign currency translation standards to require all translation gains and losses on financial instruments to be recognised in the income statement would necessitate a fundamental revision of these standards, and that this, in turn, would require reconsideration of underlying principles for foreign currency translation that go beyond accounting for financial instruments.

6.29 The Draft Standard would require enterprises to disclose the amount of any net exchange gain or loss on financial instruments that has been presented outside the income statement, so that the effect of this exception will be transparent.

Disaggregation of Fair Value Income

The Need for Fair Value Income Disaggregation

6.30 The first question is whether there is any need for disaggregating changes in the fair value of financial instruments at all. The JWG believes that a one-line presentation of changes in fair value of financial instruments is not sufficient – and that the information value of the reported fair value income of an enterprise can be much enhanced by reporting the significant types of revenue, expense, gains and losses that make up that income.

6.31 Having arrived at this conclusion, the JWG then considered whether particular income presentation information should be required by the Draft Standard, or whether this might be left to the discretion of reporting enterprises. The JWG concluded that the Draft Standard should

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specify certain items to be presented and, in some cases, the methods for their determination, so as to improve the relevance and comparability of fair value income information.

JWG Approach

6.32 There are many possibilities for presenting items within an income statement. These include reporting by activity centres or functions, by types of financial instruments, by types of financial risks, by realised and unrealised income, by distinguishing expected from unexpected income, unusual from non-recurring income, and sustainable from non-sustainable income. The classification possibilities overlap in some respects, and a number of them present difficulties because their bases for distinction are necessarily highly subjective.

6.33 In order to identify and assess possibilities, the JWG:

(a) looked to existing financial income presentation standards, and how they have been evolving to meet perceived user needs and expectations in the light of developments in capital markets, and in financial risk management and investment practices;

(b) examined the implications of the fair value model itself and the extent to which the income statement presentation standards can be reasoned from fair value concepts and principles that can be discerned from the rational information needs of financial capital markets; and

(c) considered practical issues of computation involved in determining fair value income breakdowns.

Existing Standards

6.34 Accounting standards typically require the disclosure of certain revenue and expense items, and the distinction of income or loss from unusual, "extraordinary", and discontinued operations. However, beyond this, income statement presentation standards have generally avoided being narrowly prescriptive and have permitted considerable flexibility of presentation.

6.35 Most accounting standards require disclosure of interest revenue and interest expense (determined on a historical cost "effective interest" basis) and other income from investments, and some disclosures about losses from loan assets that are considered to be impaired. In addition, several standards require some information on the income statement effects of financial instruments used in designated hedging relationships.

6.36 In recent years, some standards have been developed for disclosure of certain of an enterprise's financial risk exposures at the reporting date, and its financial risk management purposes, policies and strategies, including policies for hedging major types of anticipated future transactions. These disclosures have resulted from concerns of users to better understand an enterprise's exposure to financial risks, how they are managed, and the performance of an enterprise in managing these financial risks. Today's standards for disclosure of financial risks and the income statement effects provide an incomplete picture, however. For example, IAS 32 and IAS 39 require information related to interest and credit risk exposures, but nothing on foreign currency, commodity and other market risks.

Implications of the Fair Value Model and Financial Markets

6.37 One of the major advantages of fair value income for financial instruments is that it directly reflects gains and losses from assuming particular financial risks (including interest rate risk, credit risk, risks of changes in commodity and equity instrument prices, and currency exchange risks) when the underlying market conditions change. The JWG believes that it follows from this that a primary objective of the income statement presentation for financial instruments should be to provide information about the gains and losses for each of the significant financial risks that is inherent in an enterprise's financial activities.

Computational Issues

6.38 The disaggregation of fair value income on a basis that facilitates analysis of each significant financial risk inherent in an enterprise's financial activities gives rise to a number of issues that have not previously been addressed in accounting literature. These issues arise because the fair value model for financial instruments is reasoned in part from concepts outside conventional accounting – in particular, from finance and capital markets pricing theories and practices. Furthermore, there are questions relating to whether it is possible to reasonably allocate fair value income effects by types of risk where these effects are the joint result of changes in underlying conditions. For example, calculations of gains and losses resulting from changes in basic interest rates and credit risk are affected by the order in which the calculations are performed when changes in underlying conditions

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are interdependent or occur more or less simultaneously during a reporting period.

6.39 Based on its work, the JWG does not believe that these problems are insurmountable. It observes, for example, that enterprises commonly manage basic interest, credit, foreign exchange, and specific commodity and equity price risks separately, and may, therefore, be expected to have reasonable bases for assessing the income statement results of assuming these risks. However, the JWG believes it is important not to place too great a burden on enterprises by requiring detailed breakdowns of gains and losses by specific types of risk at this time, pending further study of alternatives, and a period to enable field testing and experience with the application of less detailed requirements.

6.40 The Draft Standard tries to strike a reasonable balance in prescribing items of income and bases of calculation where they can be derived from accepted accounting or finance concepts or capital market practices, and allowing an enterprise some flexibility to choose approaches that are consistent with the ways in which it is managing risks where no one approach is demonstrably superior.

6.41 The Draft Standard also provides for approximations and simplifying assumptions with respect to certain calculations (notably in respect of interest and foreign exchange calculations). At the same time it encourages enterprises to develop more sophisticated methodologies and presentations that are consistent with the required standards.

Other Possible Bases of Income Statement Presentation

6.42 The JWG considered a number of other possible bases of income statement presentation, and reached the general conclusions in paragraphs 6.43-6.45, below.

Trading and Non-trading Classification

6.43 The JWG considered whether enterprises should be required to distinguish between financial income (and financial assets and liabilities) of its trading and long-term financial investment and financing activities. It concluded not to put in place any specific requirements in this regard. However, it notes that such activities could require separate disclosure under segment disclosure standards in some jurisdictions if they are managed as separate business segments. It may also be necessary to provide some separate information on trading and long-term investment portfolios if they are subject to different management objectives and policies (see Draft Standard, paragraphs 156-159).

Unrealised Gains and Losses

6.44 The JWG accepts that the disclosure of unrealised gains and losses on financial instruments may be useful supplementary information. It concluded that this disclosure should not be required, but left optional, because it is not fundamental to the analysis of fair value income.

Operating, Financing, Investing Classification

6.45 The JWG considered whether the Draft Standard should set out requirements or guidance for the presentation of items of financial income under "operating", "financing", "investing" or other headings within the income statement. Some believe, for example, that all revenue, expense, gains and losses from financial instruments should be presented outside the "operating income" section of the income statement, at least for an organisation that is not a financial institution. The JWG believes it is not appropriate at this time for it to dictate how an enterprise should present items of financial instrument income within the income statement[4].

Interest Revenue and Expense

6.46 Accounting standards in most jurisdictions require disclosure of interest income or revenue and interest expense. Interest is considered to represent a distinct source of revenue and expense. The JWG agrees that interest revenue and expense should be separately disclosed.

6.47 While the general concept of interest is well recognised, the term is not precisely defined in accounting standards or supporting literature. In order to determine "interest" on a consistent and relevant basis a clear definition is needed. The development of the definition provided in the Draft Standard required that two fundamental issues be addressed: (i) What are the appropriate elements to be included in an interest rate? (ii) What should be considered to be interest-bearing financial instruments on which interest should be determined?

Elements of an Interest Rate

6.48 Paragraphs 347-354 of the Application Supplement discuss the relationship between discount rates and projected cash flows in present value determinations. They compare the discount rate adjustment and cash flow adjustment approaches. The Draft Standard does not prescribe whether or when either basis (or a basis that has elements of both) should be used in a present value model for estimating fair value.

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Properly applied, they will arrive at the same estimate of fair value. The two approaches, however, will result in very different determinations of interest revenue and interest expense.

6.49 The JWG believes that one concept of interest revenue and expense should be specified in the Draft Standard to facilitate comparability. The Draft Standard specifies a definition of interest revenue and expense that is generally consistent with the discount rate adjustment approach. This approach is also consistent with how interest is defined in practice, and in the marketplace, where interest rates are usually quoted in terms of rates that equate contracted cash flows with fair values.

What Are "Interest-bearing Financial Instruments"?

6.50 Traditionally, interest revenue and expense have been determined and disclosed with respect to all forms of loans, and bond and mortgage securities, that is, where cash has been loaned in return for a contractual promise to pay. However, there is no clear definition of interest-bearing financial instruments in authoritative accounting literature. There are some significant questions with respect, for example, to whether some or all forms of derivative financial instruments should be considered to be interest bearing. These questions have not been given significant consideration in accounting literature to date.

Derivative Financial Instruments

6.51 On the one hand, derivative financial instruments may be considered to be interest bearing, because they comprise contractual rights and obligations to deliver or exchange financial instruments in future periods, and their fair values can be expected to be affected by the time value of money. It may be claimed, then, that an interest revenue or expense figure will be incomplete if it does not include the time-value-of-money income effect on the fair value balances of derivatives during a reporting period.

6.52 On the other hand, "interest" (time value of money) effects in respect of certain types of derivatives would seem to have a rather indirect and complex relationship to their fair values. For example, the time value of money effects on the fair value of an option that can be exercised at any time during its life will depend in some part on the value of its volatility and the ability of the holder to delay payment of the exercise price, rather than being a direct function of the market interest rate accruing on its fair value. It may also be questioned whether a derivative should be considered to be interest bearing if its underlying variable is not based on interest rates, particularly if it is based on a variable that is tied to some measure of an equity or similar return.

6.53 The JWG has not been able to resolve these questions to its satisfaction. The JWG considered whether interest should be required to be determined on the fair value balances of all derivatives, except those based on equity instruments, without specifying the basis for determination – or whether enterprises might be allowed to determine for themselves whether derivatives should be included and, if so, on what basis. It was concerned that these alternatives could be too burdensome and lead to inconsistencies between enterprises. It concluded that, pending further study of defensible conceptual and practical bases for inclusion of some or all derivatives as interest-bearing financial instruments, all derivatives should be excluded from the definition of interest-bearing financial instruments. The JWG believes that, while the resulting definition of interest-bearing financial instruments is not complete, (a) it will capture the large proportion of the interest generating base for the large majority of enterprises, and (b) it avoids the additional complexities and potential for differences in calculating interest.

6.54 The fair value of certain derivative financial instruments, such as interest rate swaps and forward contracts, is a direct function of changes in interest rates. For the reasons noted above, no interest is to be accrued on these fair value balances under the Draft Standard definition of interest-bearing financial instruments. Rather, the full income effect of changes in the fair value of such derivative financial instruments (that is, derivative financial instruments with underlying variables that are based on interest rates or credit risk) is to be presented together with the amount of the net gain or loss arising from interest-bearing financial instruments (see sub-paragraph 137(e)).

Income Statement Information on Impaired Loans

6.55 Some believe that impaired loan assets are not interest-bearing financial instruments, and that the discount accrual effect should be considered to be part of the net gain or loss on impaired loans in a reporting period. The JWG believes that whether a financial instrument is interest-bearing should be determined by the nature of the financial instrument contract, not by its performing or impaired status. Further, the JWG believes that useful information is provided in determining gains and losses on impaired loans after the determination of interest accruing on those loans.

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The Draft Standard would require separate disclosure of interest revenue on impaired loans, as well as the net gain or loss on impaired loans after interest, so as to enable users to determine the net income statement effect of impaired loans in the reporting period.

Trading Portfolios

6.56 Some believe that interest-bearing financial instruments that are held in a trading portfolio should be excluded in determining interest. They note that many enterprises have separate trading and long-term portfolios of financial assets, which are typically managed by different departments on different bases with different objectives. Some believe that the distinction of interest revenue and interest expense is not relevant to the management of a trading portfolio, and that its distinction would require complex computations and costly record keeping for little benefit. Others believe that an enterprise should be accountable for the income statement effects of changes in basic interest rates whether or not an interest-bearing asset or liability is designated by management for trading purposes. They also note that an enterprise must determine interest on an interest-bearing instrument on an appropriate basis in order to be able to compute gains and losses that have resulted from changes in interest rates, that is, to be able to evaluate the income statement results of taking basic interest rate risks. The JWG agrees with this latter view – that interest revenue and expense should be defined to include interest on all interest-bearing instruments including those designated as trading.

6.57 The JWG recognises concerns that the bookkeeping costs to calculate interest on interest-bearing financial instruments that are turning over on a short-term basis could be onerous. Accordingly, the Application Supplement provides for approximate calculations based, for example, on average fair value quarterly balances. The JWG believes that such calculations should generally be practicable and enable determinations that will be sufficiently reliable for financial reporting purposes (see paragraphs 386-389).

Determining Interest Revenue and Interest Expense within a Fair Value Model

The Historical Cost Method

6.58 Some believe that interest on interest-bearing financial instruments measured at fair value should continue to be determined on the historical cost "effective interest" basis. They point out that this basis is familiar to users. It may also be claimed that this method has important information value because it reflects the contracted interest rate inherent in an interest-bearing financial instrument. Further, some express concern that requiring a "fair value" determination of interest would be confusing.

6.59 While the historical cost "effective interest" basis is well accepted, it is within the context of the historical cost rather than fair value measurement model. It is not an appropriate basis for determining interest revenue and interest expense within the fair value model. Using the historical cost "effective interest" method to determine interest when the interest-bearing assets and liabilities are measured at fair value would result in misrepresenting the current economic interest return/cost and is not compatible with fair value measurement. The effect would be to distort the reported amounts of gains and losses resulting from changes in market interest rates. This, in turn, would seriously detract from the information value of fair value income figures for prediction and accountability purposes. The basis for the JWG's conclusion may be illustrated by a simple example:

Suppose an enterprise pays 1,000 for a three-year bond with fixed coupon payments to yield an average annual 10 percent rate of return. Its contracted cash flows would therefore be as follows:

	Year ends			
	0	1	2	3
Contracted future cash flows		100	100	1,100
Fair value (present value at 10%)	1,000			

6.60 Suppose that at the end of year 1, the interest rate on two-year money changes to 8 percent, so that the bond now has a fair value (present value of contracted cash flows discounted at 8 percent) of 1,035.67. Thus there would be a reported gain of 35.67. For simplicity, assume that the yield curve is flat, and that the market rate of interest at the end of year 2 is still 8 percent. The disaggregation of income on this loan using the historical cost effective interest method would be as follows:

	Years		
	1	2	3
Historical cost interest income (at 10%)	100.0	100.0	100.0
Gains (losses)	35.67	(17.15)	(18.52)
Aggregate income return	135.67	82.85	81.48

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6.61 The above calculation makes it appear as though the enterprise has incurred losses on a fair value basis in years 2 and 3, offsetting the gain in year 1. If these losses were expected at the end of year 1, should there not have been an impairment write down offsetting the gain? This strange looking result is the product of continuing to show historical cost interest income at 10 percent of historical cost balances in years 2 and 3, when the current economic interest rate determined on a fair value basis is 8 percent. If there has been no change in the 8 percent rate through years 2 and 3, there should be no gain or loss reported on a fair value basis in those years.

6.62 The disaggregation of income with interest measured on a fair value basis in this situation would be as follows:

	Years		
	1	2	3
Fair value interest income	100.0 (10%)	82.85 (8%)	81.48 (8%)
Gains	35.67	0	0
Aggregate income return	135.67	82.85	81.48

6.63 Some are also critical of the historical cost effective interest method because it is based on the assumption that there is no yield curve, or that the yield curve is flat – because the method reflects the average rate for each period. Thus, it may be said that the historical cost effective interest method misstates even historical cost interest on a period by period basis over the term of a loan.

6.64 Some may wish to provide supplementary information on the historical cost effective interest rates (which some refer to as the "contracted rates"), and perhaps the amortised cost of interest-bearing instruments at the end of the reporting period. Some may also wish to disclose historical cost interest revenue and expense, particularly where such historical cost determinations comprise the basis for determining interest rate coverage or compliance with provisions of bond indentures, etc. The JWG accepts that such disclosures may be useful in some situations. However, the above example demonstrates that historical cost based calculations should not be used in disaggregating fair value change figures.

The Computation of Fair Value Interest

6.65 At any point in time market interest rates are represented by a term structure, or "yield curve", that indicates the current spot rates of interest for increasing terms. The interest rates along the yield curve change as economic conditions, government policies and market expectations as to future conditions (in particular inflation) change. Usually, but not always, the yield curve will be upward sloping, that is, rates increase as term is lengthened so that the market demands a higher rate of interest, the longer the term of a loan. There are fundamental questions with respect to whether or how the yield curve should be factored into the determination of interest revenue and expense. These questions have not been addressed by accounting standard setters to date, and there is little accounting literature on the subject. The JWG has given consideration to finance theories of interest in identifying and assessing alternatives for the determination of fair value interest.

6.66 Some may favour the "liquidity preference" interpretation. It presumes that the yield curve represents the greater risk of longer-term loans, and that the market generally requires a higher rate of interest to commit money for a long term than it does for a short term. Under the liquidity preference assumption the interest revenue and expense for a period would be based on the prevailing rate for the final year of an interest-bearing financial asset or liability, and the rate would be expected to reduce (assuming a rising yield curve) as the remaining term to its maturity reduces. This method might be favoured because it may be reasoned that it factually represents the effects of changes in rates along the yield curve. If rates along the yield curve do not change during a period, no gain or loss will be reported. A criticism of this method is that the market prices financial instruments on the expectation that interest rates will change, which is the "market expectations" assumption.

6.67 Some may favour the "market expectations" interpretation, which presumes that the yield curve reflects expected future period interest rates. To illustrate, it would be assumed that the existing two-year and three-year rates at the beginning of year one will be the one-year and two-year rates at the end of year one. A primary reason for a rising yield curve within the market expectations assumption may be that the market expects that the rate of inflation will increase over future periods. The effect of using this assumption is that interest revenue and expense for a period would be based on the short-term rate prevailing during the reporting period, regardless of whether the remaining term of an interest-bearing financial asset or liability is one or 20 years. Some may not believe that this result is a reasonable reflection of the effect of the term of a loan on its interest rate. However, forward interest contracts and interest swaps are priced and traded in the marketplace on the basis of the market expectations assumption.

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6.68 Alternatively, it might be expected that, at different times, the yield curve reflects different mixes of these two effects, or some other effects. Thus some may believe that fair value interest should be determined on a basis that yields results between those resulting from the liquidity preference and market expectations assumptions.

6.69 The Draft Standard would require that fair value interest be determined on the current yield to maturity method – with the exception that it allows an enterprise to elect to use the market expectations basis if the chief operating decision maker relies primarily on this basis for assessing the performance of its significant interest-bearing financial instruments and it is consistent with the enterprise's basis for managing interest rate risk.

6.70 The current yield to maturity basis is the fair value equivalent of the historical cost effective interest method. This method largely overcomes the major problem with the historical cost method illustrated in paragraphs 6.58-6.64 above. However, as with the historical cost method, it ignores the effects of a rising or falling yield curve. As a consequence, as the term to maturity of an interest-bearing financial instrument reduces, the current yield to maturity can be expected to change (as it reflects a different average rate for the reduced term) even if there has been no change in the rates along the yield curve. Nevertheless, this method is a substantial improvement over the historical cost method within a fair value measurement system, and the JWG believes that it will provide a reasonable determination of fair value interest revenue and expense in most circumstances.

6.71 However, the JWG concluded that some flexibility should be permitted at this stage of the development of fair value interest determinations. It concluded that the market expectations basis should be permitted on the conditions set out in the Draft Standard because it is the only method that can claim to be fully consistent with the objective of measuring fair value and its income effects against market expectations.

Computational Issues

6.72 The JWG is concerned that the determination of fair value interest, and gains and losses relating to changes in market interest rates, should not be unduly complex and costly to determine on an ongoing basis. The Application Supplement provides for approximations based on accruing interest on average quarterly fair value balances of groups of similar interest-bearing financial instruments, adjusted where major transactions or changes in market rates have taken place near the beginning or end of a quarter. The JWG believes that the effectiveness and practicality of such approximate calculations can only be thoroughly evaluated on the basis of experience and field tests.

The Information Value and Difficulties of Determining Interest on a Fair Value Basis

6.73 Some are not convinced that interest determined on a fair value basis is of sufficient conceptual and practical merit to warrant it being required by the Draft Standard. Some believe that "fair value interest" is of doubtful relevance. Some argue that the uncertainties and unresolved issues relating to its basis of determination (discussed in paragraphs 6.65-6.72) and to defining "interest-bearing financial instruments" (discussed in paragraphs 6.50-6.57) may nullify any usefulness that it might have. Further, some believe that the complexity and cost of the computations necessary to determine fair value interest with an acceptable degree of precision are likely to exceed possible benefits.

6.74 The determination of interest on a fair value basis is, as noted earlier, a new concept for financial reporting that has not been seriously examined or tested before. The JWG has considered the conceptual and practical difficulties and uncertainties relating to its determination. The Draft Standard provides that a degree of flexibility and approximation be permitted in its calculation, pending further study and experience.

6.75 The JWG is concerned that, if no requirement for the presentation of fair value interest is put in place, a significant source of information about interest and gains and losses would be missing, and there would be no basis from which to develop knowledge and experience on its usefulness and on the conceptual and practical calculation issues. It concludes that, although imperfect, the interest revenue and expense determinations required in the Draft Standard should provide a basis for analysis that is superior to (a) no requirement (which could result in no information, or information on possibly widely different bases), or (b) historical cost interest (which, as demonstrated in paragraphs 6.58-6.64, is not appropriate within a fair value model). Many enterprises and investors believe it important to manage fair value interest rate risk, and in order to do so they must develop reasonable bases for determining the gain or loss effects of changes in interest rates in order to be able to assess the effectiveness of their management efforts.

6.76 The JWG believes that fair value interest is important and that it is also important that the JWG's proposals for its computation, and possibly other alternatives, be extensively field tested to enable a full assessment of its usefulness and practicality.

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Application of Fair Value Interest Determinations in Some Countries

6.77 In some countries there may be no readily observable basic ("risk-free") interest rate, because government bonds may carry a significant credit risk. Some enterprises in these countries may have better credit standings than the government, and thus be able to command a lower borrowing rate than can the government. In such a case, government borrowing rates may not provide a useful, stable benchmark. Nevertheless, interest still comprises the elements set out in the Draft Standard definition of "interest revenue (expense)" – that is, the basic interest rate, a credit rate premium, and any premiums for liquidity risk and risks of adverse variability of expected cash flows apart from credit risk. Fair value interest is still determined by equating the contracted cash flows of an interest-bearing financial asset or liability with its fair value. The problem is that there may be no observable market rate of basic interest for enterprises reporting in that currency. Sub-paragraph 346(a) of the Application Supplement provides that in such a case observable market interest rates for the highest rated corporate bonds issued in the currency may be used as the benchmark rate.

Disclosure of the Fair Value Effects of Changes in the Issuer's Credit Risk on Financial Liabilities

6.78 The amounts required to be disclosed by the Draft Standard (sub-paragraph 137(d) and paragraph 138) combine the income effects of (a) changes in the credit risk of an enterprise's financial liabilities with (b) changes in market credit risk spreads. Some believe that the disclosure should be in respect of (a) alone because it is only these effects that are relevant to users (see paragraphs 4.50-4.62). However, the JWG believes that the determination of (a) alone would be unduly burdensome and open to additional measurement variability. It believes that the amounts to be disclosed by the Draft Standard, along with the required supporting qualitative information (paragraphs 141-142), provides sufficient basic information.

Net Gain or Loss Resulting from Changes in Interest Rates

6.79 The Draft Standard (sub-paragraph 137(e)) would require disclosure of a gain or loss that will largely reflect the effect of changes in market interest rates (that is, the net gain or loss arising from changes in basic interest rates and from changes in the credit risk premiums of financial assets). This gain or loss includes the total income effect of derivative financial instruments with underlying variables that are based on interest rates or credit risk. This amount will therefore include an (usually small) interest revenue or expense element because, as explained in paragraphs 6.51-6.54, the JWG does not believe it practicable at this time to require interest to be determined on derivative financial instruments.

6.80 The Draft Standard (paragraphs 143-144) would require only disclosure of narrative information identifying the significant factors that contributed to this net gain or loss. The JWG believes that it would be desirable for there to be separate disclosure of the income effect of changes in credit quality and basic interest rates. However, it believes that these amounts should not be required at this time because it is concerned that there are unresolved questions relating to their cost-effective calculation. It believes that the usefulness and practicality of extending the disclosures provided for in the Draft Standard may be best addressed after a period of experience with these disclosures.

Net Gain or Loss on Impaired Loans

6.81 Some advocate requiring more detailed information about gains and losses on impaired loans. This might include the nature and amount of impairment losses and, separately, reversal of losses, recognised in the reporting period, for each significant class of financial assets. The JWG believes that such additional disclosures may provide useful information, but they are not essential to a basic understanding of an enterprise's income results in most situations. There may be merit in developing requirements for enterprises with extensive lending activities to provide additional information.

Foreign Currency Denominated Financial Instruments

6.82 The only income disclosure required in respect of foreign currency-denominated financial instruments is the net gain or loss on those instruments due to changes in exchange rates in the reporting period (with separate disclosure of any amount presented outside the income statement) (see paragraph 148). Some believe that there should also be disclosure of the income effects of foreign currency-denominated financial instruments on the amounts reported for interest revenue and expense, gains and losses on interest-bearing financial instruments, and gains and losses on other financial instruments. They point out that the disclosure of the net gain or loss on foreign currency-denominated financial instruments resulting from changes in exchange rates has limited information value in itself, because this amount is likely to have a high degree of interdependency with these other income statement effects. For example, an enterprise may

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achieve a higher interest return on a foreign currency-denominated bond investment than could be achieved on a domestic bond of equivalent risk, but incur a significant exchange loss on that bond. The JWG agrees that this additional information would be useful. However, it concluded that it would be difficult and costly for enterprises to calculate and provide it, and that disclosure of information about foreign currency risk positions (required by paragraph 171 of the Draft Standard) would provide improved bases for assessing these risks and their income implications. It believes that the possibility of expanding required disclosures of the income effects of foreign currency denominated financial instruments may warrant consideration in future based on experience with the required disclosures and inputs from financial statement users.

6.83 Moreover, a fully informative basis for analysis would require that the net gain or loss due to changes in exchange rates be presented for each currency in which the enterprise has significant transactions or exposure. For similar reasons to those noted above, the JWG concluded that this extent of detail should not be required, but that it is sufficient to require only the net gain or loss in a period for all currencies taken together, along with some information about the primary currencies involved.

6.84 Some have advocated determining interest revenue and expense of foreign currency-denominated interest-bearing instruments on the basis of the market rates of interest in the reporting currency jurisdiction, on the grounds that forward exchange contract prices imply the expectation that any interest differential between the reporting currency and the foreign currency will be offset by an exchange gain or loss. In other words, a foreign currency exchange gain or loss is expected if it is implicit in the forward exchange rate at the beginning of a reporting period, since the forward rate reflects the current spot rate adjusted for the difference between interest rates in the domestic and foreign jurisdictions. The argument is that it follows from this that an expected gain or loss implicit in the forward rate should be treated as an adjustment of the interest return on an interest-bearing instrument denominated in a foreign currency. The JWG believes that the fuller presentation is to reflect fair value interest return on the basis of the prevailing rates of interest in the foreign jurisdiction, and disclose the foreign currency gain or loss.

Statement of Cash Flows

6.85 The JWG concluded that no changes are necessary to existing standards for the presentation of the statement of cash flows to accommodate a fair value model for financial instruments.

6.86 The JWG notes, however, that some have raised questions with respect to the appropriate allocation of cash receipts and payments on interest-bearing financial instruments between principal and interest for the purposes of distinguishing cash flows from operating, investing and financing activities in the statement of cash flows. Standards in most jurisdictions provide no guidance on making this allocation. The JWG believes that any guidance to be provided on this matter should give consideration to the context of the fair value representation of interest and principal. It further suggests that consideration be given to revising standards for the presentation of the statement of cash flows to require that the full amount of such receipts and payments be presented as investing or financing activities as appropriate, with no allocation of an interest portion to operating activities. However, the JWG recognises that such a change would require consideration of principles for the presentation of cash flows that are beyond those necessary to accommodate the implementation of the Draft Standard on accounting for financial instruments.

Notes

1. The Draft Standard makes one exception, for foreign currency exchange gains and losses arising in translating financial instruments from functional currencies to the reporting currency. The reasons for this exception are discussed in paragraphs 6.27-6.29.
2. These are the fundamental purposes commonly cited in accounting conceptual frameworks (see, for example, IASC Framework, paragraphs 14-16).
3. It is important to distinguish the measurement of income (as the amount that can be distributed while maintaining the *wealth* of an enterprise) from considerations relating to whether the additional resources represented by that income should be distributed to shareholders or retained as additional capital of the enterprise. See further discussion of this point in paragraph 6.23.
4. A number of accounting standard setters have been considering issues of reporting financial performance. See G4+1 Position Paper: *Reporting Financial Performance*, August 1999. The IASC has established a Steering Committee to consider the issues.

Copies of the full document: "Financial instruments and similar items" can be obtained at £25.00 post-free within the UK from: ASB Publications, P.O. Box 939, Central Milton Keynes MK9 2HT. Tel: +44 (0)1908 230344.

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